



**Satisfying the
changing needs
of our customers
Enabling the
transition to a lower
carbon future**



Group Snapshot

Centrica plc is a leading international energy services and solutions provider focused on satisfying the changing needs of our customers and enabling the transition to a lower carbon future.

The world of energy is changing rapidly and Centrica is now equipped to help customers transition to a lower carbon future, with capabilities and technologies to allow them to reduce their emissions. Therefore, we announced in July 2019 our intention to complete the shift towards the customer, by exiting oil and gas production.

The Company's two customer-facing divisions, Centrica Consumer and Centrica Business, are focused on their strengths of energy supply and its optimisation, and on services and solutions, with a continued strong focus on delivering high levels of customer service. Centrica is well placed to deliver for our customers, our shareholders and for society. We aim to be a good corporate citizen and an employer of choice.

Technology is increasingly important in the delivery of energy and services to our customers. We are developing innovative products, offers and solutions, underpinned by investment in technology.

We are targeting significant cost efficiency savings by 2022 to position Centrica as the lowest cost provider in its markets, consistent with our chosen brand positioning and propositions. Alongside our distinctive positions and capabilities, this will be a key enabler as we target delivering growth in adjusted earnings, cash flow and the dividend over the medium term.



Explore online

Visit our website to find out more:
centrica.com/ar19



Unless otherwise stated, all references to the Company shall mean Centrica plc; references to the Group shall mean Centrica plc and all of its subsidiary entities; and references to operating profit or loss, taxation, cash flow, earnings and earnings per share throughout the Strategic Report are adjusted figures, reconciled to their statutory equivalents in the Group Financial Review on pages 29 to 33. See also notes 2, 4 and 10 to the Financial Statements on pages 122, 125 to 128 and 138, for further details of these adjusted performance measures. In addition see pages 223 to 224 for an explanation and reconciliation of other adjusted performance measures used within this document.

Everything we do is focused on satisfying the needs of our customers.



Centrica Consumer

Centrica Consumer is focused on three areas, Energy Supply, In-Home Servicing and Home Solutions.

20



Centrica Business

Centrica Business is focused on three areas, Energy Supply, Energy Optimisation and Business Services & Solutions.

24



Upstream

Our Upstream division consists of our Exploration & Production (E&P) and Nuclear power generation businesses.

27



Strategic Report

- 2 Centrica at a Glance
- 4 Chairman's Statement
- 6 Group Chief Executive's Statement
- 12 Our Strategy
- 14 Our Business Model
- 16 Stakeholder Engagement
- 18 Key Performance Indicators
- 20 Divisional Review:
 - Centrica Consumer
 - Centrica Business
 - Upstream
- 29 Group Financial Review
- 34 Our Principal Risks and Uncertainties
- 46 A Pathway to Net Zero
- 48 Delivering our Responsible Business Ambitions
 - Non-Financial Reporting Statement

Governance

- 55 Directors' and Corporate Governance Report
- 69 Committee Reports
- 82 Remuneration Report
- 100 Directors' and Corporate Governance Report – Other Statutory Information

Financial Statements

- 104 Independent Auditor's Report
- 114 Group Income Statement
- 115 Group Statement of Comprehensive Income
- 116 Group Statement of Changes in Equity
- 117 Group Balance Sheet
- 118 Group Cash Flow Statement
- 119 Notes to the Financial Statements
- 196 Company Financial Statements
- 198 Notes to the Company Financial Statements
- 208 Gas and Liquids Reserves (Unaudited)
- 209 Five Year Summary (Unaudited)
- 210 Ofgem Consolidated Segmental Statement

Other Information

- 222 Shareholder Information
- 223 Additional Information
 - Explanatory Notes (Unaudited)
- 225 Responsible Business
 - Performance Measures
- IBC Glossary

Centrica at a Glance

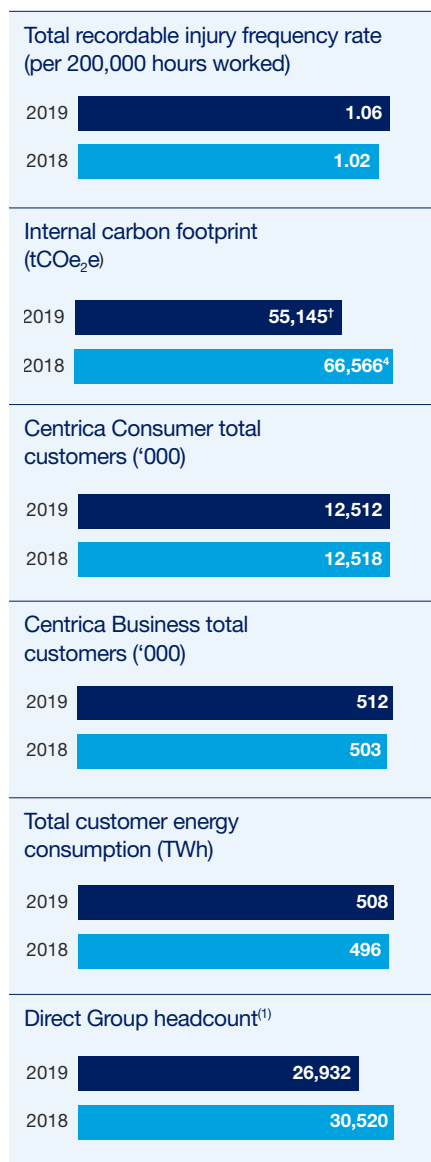
Our purpose

We are an energy services and solutions company, focused on satisfying the changing needs of our customers, enabling the transition to a lower carbon future.

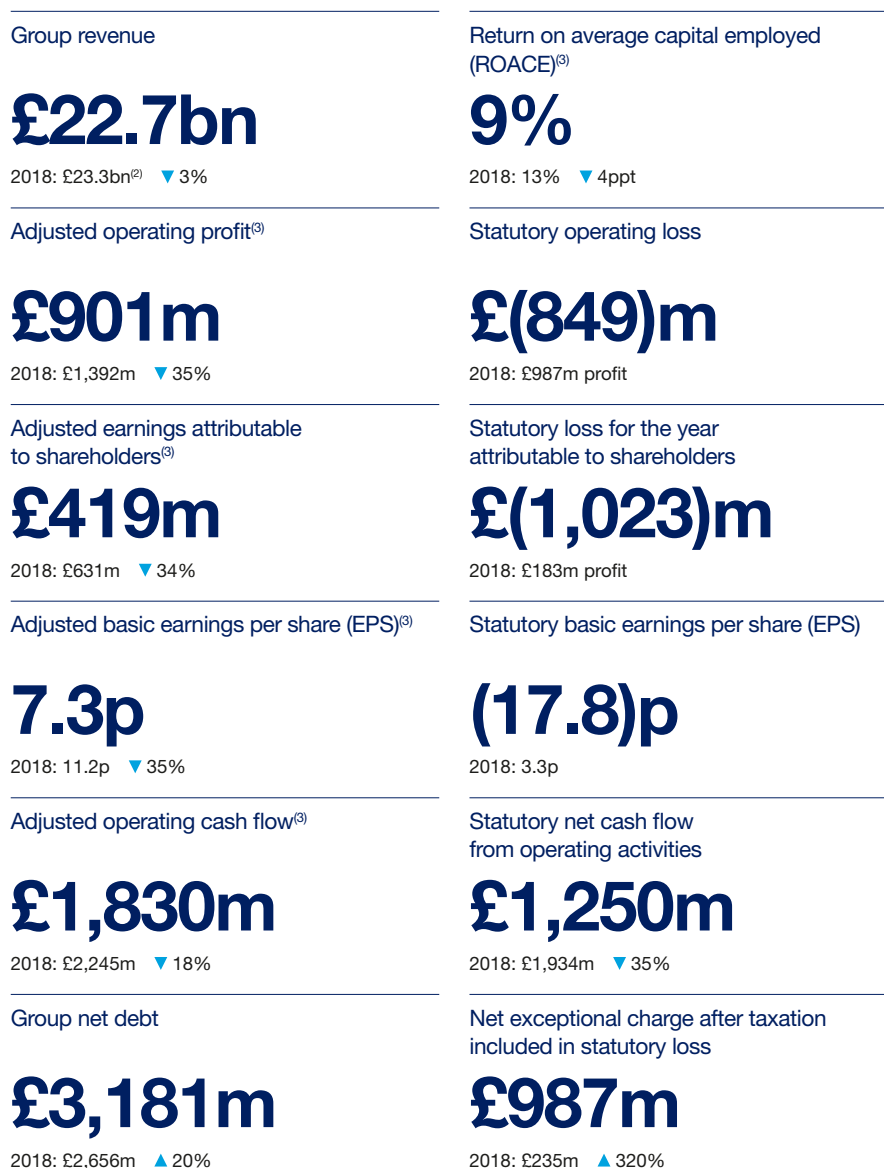
- › '21st Century Energy Services and Solutions company'
- › Delivering long-term shareholder value through returns and cash flow growth
- › Trusted corporate citizen
- › Employer of choice

Group highlights

Group Operational Performance



Group Financial Summary (Year ended 31 December 2019)



(1) Direct Group headcount excludes contractors, agency and outsourced staff.

(2) Restated for presentation of energy derivatives. See note 1 to the Financial Statements.

(3) See notes 2, 4 and 10 to the Financial Statements for definition and reconciliation of these measures.


(4) Restated mainly due to organisational changes which included divestments.

† We engaged PricewaterhouseCoopers (PwC) to undertake a limited assurance engagement over 6 metrics highlighted with the symbol '†' throughout the Annual Report and Accounts 2019. See page 225 or centrica.com/assurance for more details.


➔ **Read more about our Key Performance Indicators**
Pages 18 to 19

The Group has redefined its operating segments during the year to reflect the way in which the business is now organised. Operating segments are now defined as Centrica Consumer, Centrica Business and Upstream.

The revised operating segments incorporate similar products and services, as well as the major factors that influence the performance of these products and services, such as regulatory environments within Centrica Consumer, and access to commodity markets and trading counterparties within Centrica Business, across different geographical locations in which the Group operates. Further information on the operating segments of the Group is shown at note 4 on page 125.



Centrica Consumer



UK Home

Supplying competitive and reliable energy to residential customers in the UK, and providing innovative services and solutions that help to keep their homes warm and working.

Ireland

Supplying competitive and reliable energy and energy services to residential and business customers across Ireland.

North America Home

Supplying competitive and reliable energy and providing home services to customers in North America.

Centrica Home Solutions

Providing smart home products and end-to-end solutions centred around energy for households in the UK & Ireland, including offers around Home Energy Management and Electric Vehicle Integration.

➔ **Read more about Centrica Consumer on Pages 20 to 23**




Centrica Business



UK Business

Supplying energy and services to a diverse range of business customers in the UK, using a variety of products tailored to meet their differing needs and help them more effectively manage their energy consumption and costs.

North America Business

Supplying competitive and reliable electricity and natural gas and energy services to retail and wholesale customers across North America.

Centrica Business Solutions

Providing end-to-end design, installation, maintenance and service solutions including optimisation and covering a wide and expanding range of energy technologies helping our customers transition to a lower carbon future.

Energy Marketing & Trading

Providing risk management and wholesale market access for the Group, building on strong cross-commodity trading capabilities and a global presence in LNG.

➔ **Read more about Centrica Business on Pages 24 to 26**




Upstream



Spirit Energy

Producing around 50 million BOE (barrels of oil equivalent) a year, focused on the North Sea (the UK, the Netherlands, Norway and Denmark). We intend to exit our interests in Spirit Energy by the end of 2020.

Centrica Storage

Operating the Rough gas field in the UK North Sea, which has been converted from a storage asset to a producing asset before decommissioning.

Nuclear

Generating power from our 20% interest in eight nuclear power stations in the UK.



➔ **Read more about Upstream on Pages 27 to 28**

Chairman's Statement

“ It is no coincidence that the primary focus of businesses that are successful in adapting to change lies in responding promptly to the demands of their markets and, specifically, serving the needs of their customers. Centrica is increasingly well positioned to help people in their homes and businesses to do what they need to tackle the climate change challenge and contribute to a lower carbon future.”

Charles Berry
Chairman



In my statement last year, I described taking on the Chairmanship of Centrica as a special privilege, given my interest in the Company from my long career in the energy industry. I recognise that Centrica has faced very challenging external circumstances in recent years and that this has been reflected in the shareholder experience. I also realise that I have stepped into the chair at a time of extraordinary and unprecedented structural change in the energy industry, with the global challenge of climate change facing us. But that is one of the reasons I am confident about Centrica's future and in the underlying strength of our business.

The external environment is constantly evolving and businesses must be prepared to respond. It is no coincidence that the primary focus of businesses that are successful in adapting to change lies in responding promptly to the demands of their markets and, specifically, serving the needs of their customers. Centrica is increasingly well positioned to help people in their homes and businesses to do what they need to tackle this challenge and contribute to a lower carbon future.

For homes, we have strong trusted brands in the UK, Ireland and North America serving approximately 12 million households. In the UK, British Gas has nearly 8,000 highly trusted engineers and technicians, a unique asset we can leverage to help our customers fulfil their energy needs. Their role is also becoming about much more than servicing boilers, vital though that remains. We now have the platform which enables us to provide customers with a range of new offers, such as installing electric vehicle charge points or giving them more control over the energy systems in their homes.

In serving businesses we have a strong position, supplying energy to nearly 1.2 million customer sites in the UK and North America. And Centrica Business Solutions offers services and solutions which play directly into the demand side of the energy transition. By offering a range of sustainable energy solutions in addition to energy supply – from monitoring and analysis of consumption patterns to on-site solar and combined heat and power generation – we can help our industrial customers become more cost efficient while lowering their carbon footprint. We also assist in providing flexibility services which enable electricity grids to be more efficient and reduce the requirement for centralised power generation.

In our customer-facing businesses, we are building upon our legacy and establishing a strong platform for the long term. Our long-term purpose is to provide energy and services to satisfy the changing needs of our customers and enable the transition to a lower carbon future. We have the potential to achieve that. But, in order to make sure that there will be a long term, we must secure the short term.

Creating momentum in 2019

After I took over the chairmanship, faced with some very challenging external circumstances, we took the opportunity at our March Board meeting, as a refreshed team, to stand back and review the business and probe areas where we felt there were particular challenges. The Board as a whole worked through those in discussion with the executive team, culminating in our strategic update in July.

In this we re-affirmed our strategic direction back towards the customer and our desire to exit nuclear – at the right time and in the right way. We announced our intention to sell our stake in the Exploration & Production business, Spirit Energy. This has nothing to do with the quality of Spirit as a business. But our journey is back towards the customer. If we want to embrace our strengths and the challenges of climate change with credibility and rigour, as well as contributing in areas where we can make a real difference, we need to focus on the customer and leave behind exploration and production activities. We also announced ongoing efficiencies, with an ambition to be right at the efficiency frontier. This is key to securing the future in the face of intense competition.

The final step, and I am very aware of the impact on shareholders of this decision, was to reduce the dividend per share from 12p to 5p. We did this reluctantly. But given the external environment and where the Company is going it was vital to make that reset, to achieve a position where we feel the Company will be sustainable and robust in the future.

Our people

So, as we continue to reposition the Company, I believe we are beginning to demonstrate the potential for a recovery in our fortunes. But I recognise that the short term remains painful and I'm very aware of the impact that has on our colleagues. Many of those affected by the ongoing reduction in roles have been with us for a long time and have helped to create the brand and develop the Company. That's why as Chairman I wanted the Board to get closer to our people.

In September we held a Board meeting in Stockport, where our UK home services operation is based, for the first time. It was fantastic for us to listen to our colleagues talking about what they have achieved and what they care about despite the changes they are facing.

I also visited our contact centre in Greater Manchester and listened to our team there looking after vulnerable customers. I continue to marvel at the skill and the professionalism with which they interact on sensitive issues, such as household income, and find ways to support our customers and advise them on government grants and other help available. When I was there, colleagues had just been told that they would be affected by changes in the business. But you wouldn't have noticed it from the way they spoke and interacted with customers on the phone.

These are the things that make the brand. These are things that we do which many of our smaller competitors do not. Simply put, in any business, it always comes down to people in the end. What makes the real difference is people. A brand is only as good as the service that people deliver when they're associated with that name.

Stakeholder engagement

All organisations today must place a much greater emphasis on their purpose, what they stand for and their impact on all stakeholders, including shareholders. A responsible company must think about its impact on the environment, on its employees and on wider society.

There is an increasing focus from fund managers on environmental, social and governance performance. In these areas we are consistently among the top quartile of UK

companies. We have been identified as a world leader for strategic action and disclosure on climate change by CDP, an international NGO reporting to investors, achieving a place on its prestigious 'A List', based on our reporting on this area in 2019.

We are also continuing to actively engage with politicians and regulators in all jurisdictions where we do business, on important policy issues that will shape the new energy sector. However, policy makers and regulators also need to play their part by ensuring a competitive environment that provides an adequate return on the substantial investments that will be needed to meet important societal needs, including the challenge of decarbonisation.

Board changes

There were several Board changes during 2019. Margherita Della Valle stepped down after eight years as a Non-Executive Director and I would like to thank her for all she has done. Sarwjit Sambhi was appointed Chief Executive, Centrica Consumer and joined the Board in March. Pam Kaur joined the Board as a Non-Executive Director in February and Kevin O'Byrne joined the Board and became Chairman of the Audit Committee in May. Heidi Mottram also joined as a Non-Executive Director in January 2020. It has been a pleasure getting to know my new fellow Board members and working with them. We appreciate their refreshing input.

Our Chief Executive Iain Conn will be stepping down in the course of 2020 after over five years at the helm. It has been a very tough role to undertake at a particularly challenging time for the Company and I would like to thank him for everything he has done. He has led the re-positioning of the Company back towards the customer and our core strengths, and towards making a major contribution to a lower carbon future. This has not been easy and required significant changes to the portfolio, reduction in costs and the size of the team, as well as strong attention to cash flow and our debt levels. During this time we have seen material improvements in safety performance and customer outcomes. There have been heavy external shocks during his tenure, many that could not have been anticipated, and he has navigated the Company through them bravely and we appreciate that highly. As we address 2020, we are in a much stronger position from which to build for the future.

Looking forward

Looking ahead, we believe our medium-term prospects remain bright and the potential long-term growth opportunities are significant. Our immediate focus on maximising our distinctive strengths in energy supply and optimisation, and on services and solutions centred around energy, is we believe correct. Embracing the challenges of climate change, and being at the forefront in tackling it, is the right thing to do. The course is set. Now we must deliver on our promises and seek to make this Company one that our employees and customers can be proud of. I would like to conclude by thanking all my colleagues and co-workers at Centrica for their dedication and hard work in challenging circumstances. They are our greatest asset.

Charles Berry

Chairman

12 February 2020

Group Chief Executive's Statement

“ We remain dedicated to satisfying the changing needs of our customers, but increasingly those needs are around the challenge of addressing the threat of climate change, and in 2019 we were therefore ready to make a commitment to enable our customers to transition to a lower carbon future.”

Iain Conn
Group Chief Executive



2019 presented a challenging operating environment for Centrica, with the implementation of the UK default tariff cap and very low UK natural gas prices.

These circumstances put significant pressure on our business and although underlying performance in our customer-facing divisions improved, including enabling us to deliver better customer outcomes and growth in account numbers, we were not able to mitigate the full impact of external factors or the lower performance volumes delivered from our Exploration & Production and Nuclear businesses. We did deliver operating cash flow and net debt within our target range and cost efficiencies were above target. Adjusted operating profit was down 35% to £901 million and adjusted operating cash flow was down 18% to £1,830 million. We also recognised £1,103 million of net pre-tax exceptional charges in 2019, mainly relating to impairments of our Exploration and Production and Nuclear assets, reflecting the current low commodity price environment and restructuring costs associated with our Group-wide cost efficiency programme.

After adjusting for external factors, including the UK default tariff cap and lower commodity prices, underlying operating profit was only marginally down relative to 2018 and the contribution of the customer-facing divisions was materially up. However, the impact of the external factors on our forecast cash flows, and the subsequent decision to cut the dividend following the Strategic Update we conducted in H1 2019, resulted in a very poor shareholder experience in 2019, something I greatly regret.

2019 context

2019 was also an extremely difficult year for the Centrica team, with a significant number of colleagues leaving the Company as we continued with our transformation, simplification and efficiency programmes. Despite these pressures, the Centrica team performed admirably, with improvements in net promoter scores, reduced customer complaints, the introduction of attractive new propositions, and the development of new capabilities as we shift the Company towards enabling a lower carbon future for our customers. Consumer accounts grew by 722,000 over the year, and by 451,000 in the UK, with continuing growth in services and solutions relationships and a further stabilisation of account losses in energy supply. Many other metrics were excellent, including continued top-quartile performance in process safety, and the actions we have underway have created significant momentum into 2020. Unfortunately, with so much change to the organisation and with the fall in our share price, our employee engagement scores were materially impacted. Improving these engagement scores will be a focus for the Executive team in 2020.

Having summarised the year, let me now return to some of the major events, milestones and deliverables which characterised 2019.

Strategic update

As we entered 2019, we knew we faced a very challenging set of circumstances, made worse by the fall in wholesale gas and power prices towards the end of 2018. We responded in two ways – first, initiating an acceleration of our transformation activity and cost efficiency programmes and, second, from March through to June, the Board conducted a Strategic Update including a review of our portfolio, performance and strategic choices. In July we presented our conclusions to shareholders. We announced that we would be completing our shift back towards the customer, exiting oil and gas production as well as the already announced intention to sell our stake in nuclear power generation. We had signalled since 2015 a lower emphasis on oil and gas production and, as we deliver this final shift, Centrica will finally become a leading international energy services and solutions provider, focused on our distinctive strengths of energy supply and its optimisation, and services and solutions centred around energy. This includes growing opportunities in home energy management, mobility solutions and system optimisation, ensuring the Company will be well positioned for the future and able to satisfy the changing needs of our customers, with an emphasis on helping them transition to a lower carbon future.

The Board's assessment of our business and the changed external circumstances in which it currently operates, and the requirement to meet additional obligations to our pension schemes, also resulted in us taking the very difficult decision to reduce the level of the dividend to 5 pence per share. We believe this was essential in order to create a sustainable basis in which we can balance distributions to shareholders with the amount that we need to invest into the business, and continue to support our other obligations, including to our pension funds and servicing our debt. With the Company having reduced its net debt by around 40% since the start of 2015 and with our planned exits from exploration, production and nuclear reducing our exposure to natural gas prices, we believe that the smaller company will be resilient to the environment in which we are operating while able to maintain strong investment grade credit metrics.

Whilst I am convinced that the difficult decisions we took were the right ones, and absolutely necessary to complete the re-positioning of the Company for the future, I recognise that the shareholder experience over a number of years has been very poor. Although in 2018 we were in the top quartile of total shareholder return in the FTSE 100 as we regained momentum relative to 2017, in 2019 we were near the bottom on this measure. However, our performance was much improved during the second half of the year compared to the first half, with adjusted earnings per share of 7.3p for the year as a whole, relative to 2.4p in the first half, driven by strong momentum in our customer-facing divisions. We expect to benefit from this momentum into 2020.

External environment

Turning to the external environment, we are now beginning to see some of the adverse consequences of the temporary UK default tariff that we had predicted, including job losses, company failures, and other suppliers exiting the market. The price cap has reduced margins and put huge pressure on costs for many participants. Despite the high level of competition, very few UK energy suppliers are making money and, for those who are, pre-tax margins make it difficult to invest in the skills or technology required for the future. We are responding by broadening the propositions we offer to move away from just energy supply, while reducing our costs still further to allow us to price as competitively as possible. We remain committed to working with the government and the regulator to help determine the right conditions for the temporary cap to be lifted.

Natural gas prices have fallen further, and are currently under \$2/mmbtu in North America and under 30p/therm in the UK, below our own 'low case' scenario. Forward prices for 2020 remain weak and, while our proposed exit from exploration, production and nuclear will reduce our exposure to commodity volatility, these low prices continue to have a significant impact on Centrica.

Operational progress

Despite the very difficult context I have outlined, 2019 was a year where we made good progress in our core objective – to satisfy the changing needs of our customers. Focusing on improving our operational effectiveness has made us more cost-efficient and able to offer better value for money to our customers. We have continued to build the capabilities that we believe our customers will want and need in the future and exited areas where our offering was relatively undifferentiated. Overall Consumer account holdings were up 722,000 in 2019, the first full year of growth in my time with Centrica, and Business customer accounts were broadly stable. Brand net promoter scores (NPS) improved in UK Home from +9 to +12, in UK Business from -12 to +1, in North America Business from +28 to +32 and remained high in the other business units.

I am pleased to say that customer relationships and customer numbers are beginning to move in the right direction. I recognise that we have lost a significant number of energy supply customers in the UK in recent years, although a large proportion of the reductions we saw in 2017 and 2018 stemmed from a deliberate choice on our part to exit from certain channels that were loss-making. In 2019 the rate of UK energy supply net losses was less than half the rate of losses in 2018, and less than a quarter the rate of losses in 2017 against a backdrop of continued high levels of price competition and market switching. This reflects our efforts on both cost efficiency and proposition development. We will continue to focus on improving in both these areas and delighting our customers as a result.

722,000

Consumer accounts grew by 722,000 over the year

+12

Brand net promoter scores (NPS) improved in UK Home from +9 to +12

We are also redesigning our core operations in the UK, reorganising around customer end-to-end journeys rather than traditional industry processes. The trend for customers to increasingly want to deal with us digitally will continue; for example, the proportion of transactions completed online in UK Home has increased to 55% compared to 50% at the end of 2018. We are consolidating our call centres in the UK as a result and focusing our efforts on improving our digital journeys. In North America and Ireland we are pursuing a similar agenda.

We continue to unlock new opportunities for future growth. We are developing a set of capabilities to deliver propositions beyond those of energy supply and boiler servicing, from demand response for businesses to bundled energy supply and home energy management solutions for residential customers. This includes remote diagnostics, smart energy control and electric vehicle integration. We are set to provide electric vehicle charging installation points and related services in the UK for Ford, VW Citygate and NCP.

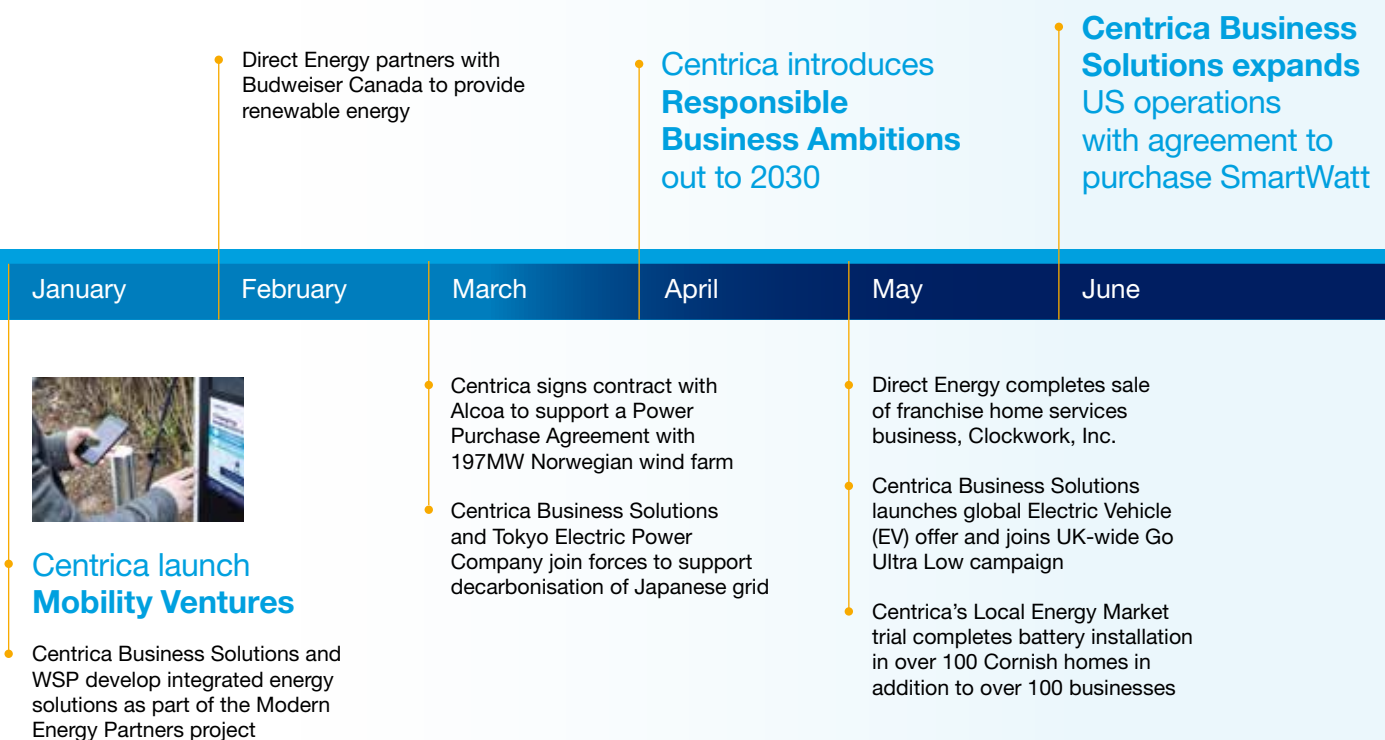
We are shifting the centre of gravity of our relationships with our customers away from commoditised energy supply towards a new suite of propositions that we know many will value. Many of these differentiated propositions do not require us to offer energy supply to the same customer, and as a result we are able to expand into new markets in Continental Europe and countries such as Mexico, while cross-selling to existing energy customers in the UK, Ireland, Canada and the United States. North America remains the biggest energy market in the world and the fastest-growing market for energy services and solutions. We have added significant new capabilities to Centrica Business Solutions, including in energy efficiency, lighting retrofits, HVAC, building automation, and water conservation through the acquisition of the North American energy services and solutions company SmartWatt.

In addition to sourcing and optimising energy supply for our customers, our Energy Marketing & Trading business has grown its customer-facing route-to-market services in Europe and delivered excellent optimisation results. In February we signed a landmark LNG agreement under which Tokyo Gas and Centrica will jointly purchase 2.6 million tonnes per annum, delivered ex-ship, from the Mozambique LNG Project. We will jointly market and optimise this gas between our respective home markets of Japan and Europe.

In our asset businesses, Spirit Energy production was 45.8 million barrels of oil equivalent (mboe), our operated Morecambe Bay delivered excellent plant availability and production efficiency, but there were shortfalls in non-operated fields in Norway. We have also been working with our joint venture partner, Stadtwerke München, in preparing Spirit Energy for a joint sales process which is now underway. Centrica's Rough gas asset delivered 6.5mboe of production, and continued to demonstrate strong performance in process safety. The Nuclear business had a very challenging year, with reactors at two sites, Hunterston and Dungeness, shut down for most of the year for regulatory inspections. As a result, our share of electricity generated from the Nuclear fleet was 10.2 TWh, down from 11.8 TWh in 2018. We are awaiting regulatory approvals to bring the reactors back online.

[Read more about our Divisional Review on Page 20](#)

Key events in 2019



Transformation and efficiency

Operationally, we have made a lot of progress in 2019 and delivered encouraging results in many areas. However, we still have much work to do as we adapt to very changed circumstances. We must finish the job of becoming the most competitive provider, particularly in the UK energy supply market, and not give our customers a reason to leave us. This requires becoming structurally even more efficient. In some cases we are dealing with legacy systems and processes that need to change in order to get there but there is also significant progress we can make in simplifying and improving customer journeys, and streamlining our internal processes. In 2019 we delivered £315 million of cost efficiencies, ahead of our target, with the associated exceptional restructuring costs to deliver these savings also £356 million. Cumulative efficiencies delivered since 2015 are now £1.26 billion per annum on a like-for-like basis. This has allowed us to offset inflation, invest for growth, and still have a nominal like-for-like controllable cost base of £4.6 billion at the end of 2019 relative to £5.0 billion in 2015. We are targeting a further £350 million of efficiencies in 2020 in our core programme, most of which is underpinned, which is expected to result in exceptional cash restructuring costs of around £300 million. We remain on track to have delivered £2 billion of cumulative efficiencies over the period 2015-22.

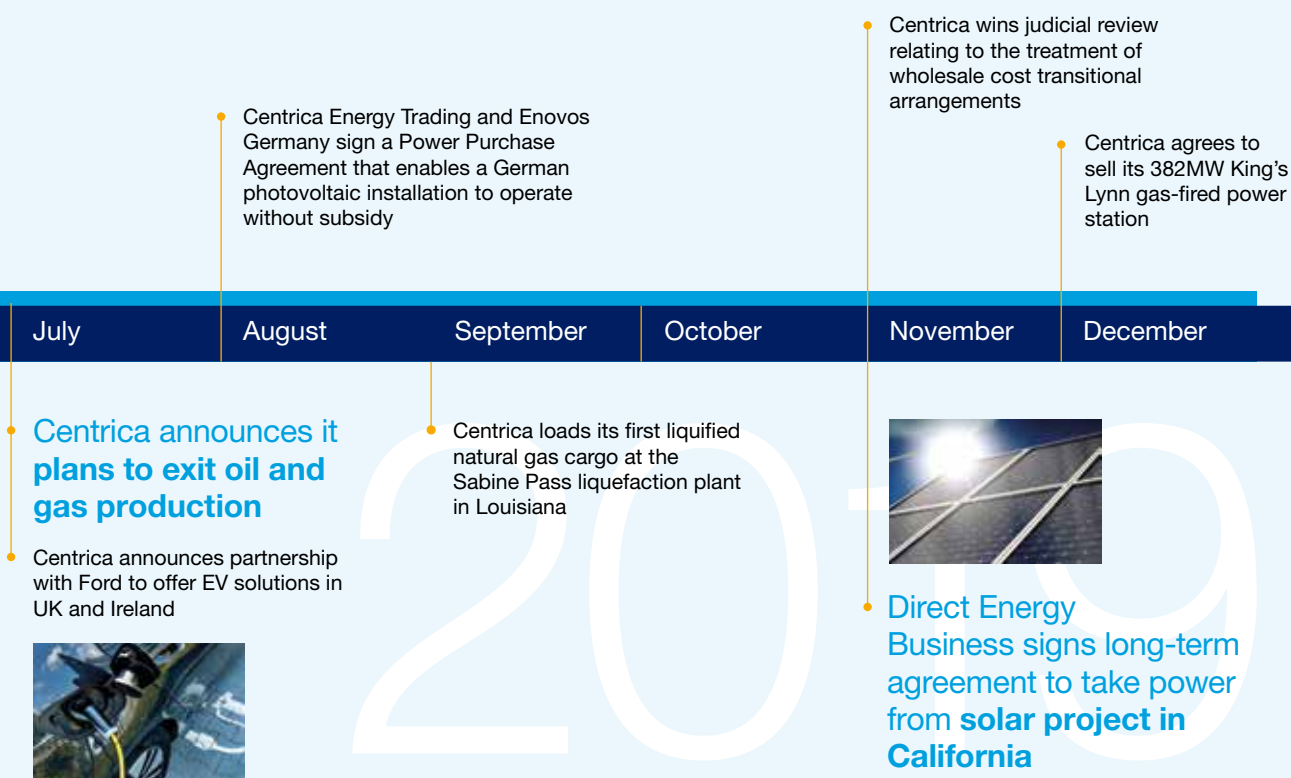
We know however that we can't just cost cut our way to success. While there will still be continuous improvement activities undertaken every year, 2020 is expected to be the last major year of change, transformation and efficiency delivery which will also underpin much of what we need to see come through in 2021. We therefore have an imperative to improve gross margin capture and to use our new capabilities to grow our customer relationships so that we can stabilise and then grow Centrica. While we are encouraged by the progress we have made, our customer journeys are still not as good as we would like and we have to keep focusing relentlessly on improving the experience we offer our customers and driving up NPS as the key measure of our success.

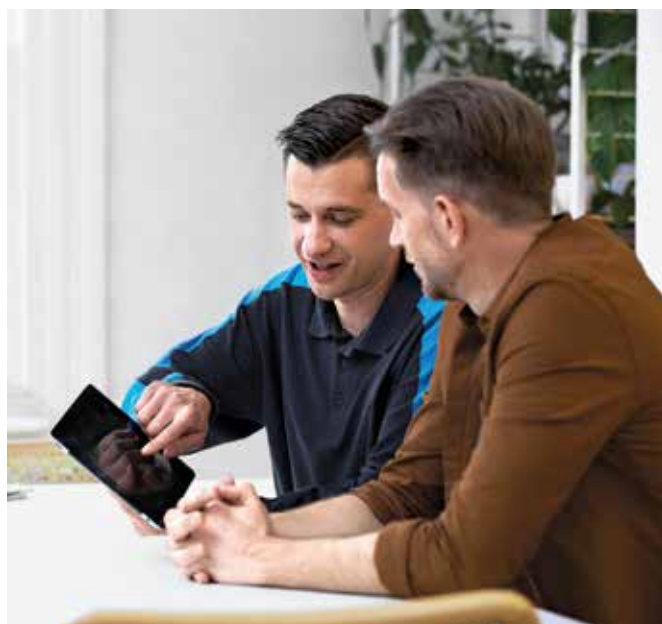
£315m

In 2019 we delivered £315 million of cost efficiencies

£1.26bn

Cumulative efficiencies delivered since 2015 are now £1.26 billion per annum on a like-for-like-basis





Our colleagues

As a business, the changes we have been making to set ourselves up for success in the challenging new operating environment have resulted in a lot of upheaval for our colleagues in the Centrica team. I recognise how difficult this has been for many of them and am humbled by how hard they have worked. I want to thank them for having remained committed to doing the best for our customers and to delivering excellent operations across the Company. They have upheld and lived our values throughout.

Over the last four years our direct workforce has fallen by over one third, from 39,000 at the end of 2015 to just under 27,000 at the end of 2019. This has had a very big impact on morale and the changing business environment and energy transition has created uncertainty about our future. I take very seriously the calls for better communications, making our strategy and vision more accessible, and enabling leaders to empower the wider team, so that we can pull together as a team to deliver the business outcomes we need for our customers. We also need to begin to re-establish a winning mentality as our business stabilises and we shape new opportunities. It is particularly important when we consider that 2020 is going to be another year of significant change for the Company but, as the last year of major transformation, it is the gateway to a new future as a smaller and more sustainable energy services and solutions company.

To ensure we complete our transformation journey successfully, we must continue to live our values of care, delivery, collaboration, agility and courage which we have established group-wide over the last few years. I'm delighted with the way our organisation has embraced our values and, along with Our Code, these help guide us when the going gets tough and we have to face difficult choices and decisions. We have continued to pay attention to other foundational areas including safety, compliance and conduct. In safety, we strive for an incident-free workplace and aim to continuously improve performance through our focus on targeted safety interventions alongside improved controls and monitoring. While there were no significant (Tier 1) process safety events in 2019, we had two Tier 2 process safety events. Our total recordable injury frequency rate also increased by 4% to 1.06 per 200,000 hours worked, although outside of the UK we saw significant improvements in many businesses.

Despite all the change, we have continued to develop and invest in our people, the core strength of our Company, developing new ways to help them to build their skills and improve the consistency with which we approach our work. We also continue to work on the three pillars of our diversity and inclusion agenda: a diverse workforce, an inclusive environment, and meritocratic processes. We have seen significant improvements since I joined the Company – the Board is now 23% female and 23% ethnic minority members. Five of my twelve direct executive reports are women and we have very active affinity groups including our LGBTQ+ community, Spectrum. I recognise there is more to do across all areas of diversity and inclusion. Only by having a diverse and inclusive workforce will we be successful and harness the full range of talent that we need.

A lower carbon future

During 2019 we also reflected on Centrica's purpose. We remain dedicated to satisfying the changing needs of our customers, but increasingly those needs are around the challenge of addressing the threat of climate change, and in 2019 we were therefore ready to make a commitment enabling our customers to transition to a lower carbon future at the core of Centrica's purpose. We have owned the obligation to reduce the emissions of our customers (Scope 3 emissions) and, in addition, we are focused on enabling an energy system which is more efficient and lower carbon whilst continuing to reduce our own carbon footprint. I am pleased that Centrica regained the coveted CDP 'A' rating in early 2020, has signed up to the Taskforce on Climate-related Financial Disclosures (TCFD), and has engaged constructively with representatives of the Climate Action 100+ group of investors.

Centrica is a company now much more in tune with the transition to a lower carbon future. However, our origins and much of our business still revolves around natural gas. While the world will probably use more natural gas before it uses less, as gas displaces coal in the global energy system, we must play our part in helping our customers to use less energy in everything they do, and over time to decarbonise heating through the adoption of new technologies including partial use of hydrogen in the gas system, solar, batteries and heat pumps. Centrica is committed to developing a plan to be net zero by 2050 and playing a major role in helping our customers to do the same.

[Read about our Responsible Business Ambitions to tackle climate change on Pages 50 to 51](#)

“Despite all the change, we have continued to develop and invest in our people, the core strength of our Company, developing new ways to help them to build their skills and improve the consistency with which we approach our work.”

Regulatory and political landscape

I fully recognise we are a business that operates at the behest of policymakers and regulators and the space that we are allowed to occupy is significantly determined by them. We continue to be committed to full engagement with whoever is in power politically, and to collaborate and partner with our regulators in all of our geographies. In November it was announced that we had been successful in the judicial review which challenged the UK energy regulator Ofgem's treatment of wholesale energy costs in the initial period of the UK default tariff cap, and Ofgem announced in January 2020 that they were launching a consultation on the appropriate recovery mechanism. The decision to challenge the regulator in this area was not taken lightly but reflected how important I believe it is that regulatory processes are transparent and rigorous. It is in the long-term interests of customers that we have well designed regulation that supports an effectively functioning energy market.

Over the last few years the continued layering on of new regulation in the energy market in the UK has left it in a very challenging situation. I would encourage further reflection on this and some changes, including the lifting of the price cap, if we're going to create a sustainable market which facilitates much needed future investment. In North America, similarly, I believe in well regulated, competitive markets because these are in the best interests of the customer. We have a range of market designs across our geographies and it is clear that some are more effective than others.

Brexit provided significant uncertainty through 2019. The UK's departure on 31 January 2020 was certainly a milestone, but much remains to be addressed in the negotiation on the future relationship that is to come. Provided policymakers are pragmatic and thoughtful, there should not be material impact of Brexit on the energy markets other than the general impacts of foreign exchange movements on the price of energy and the potential impact of changes in economic growth on demand for energy and our services. Centrica operates in multiple jurisdictions, including Continental Europe, and we will continue to develop our capabilities to serve customers in all these geographies.

CEO succession

Finally, I will be stepping down as Chief Executive in the course of 2020 after five fascinating, but extremely tough years which have been very difficult for our shareholders and our Centrica colleagues in particular. We determined in 2015 that it was urgent the Company repositioned back towards the customer, and built skills and capabilities more in tune with where the energy markets were going, and in line with the demands to address climate change. During that time, as well as the usual challenges of commodity price movements and economic fluctuations, Centrica has faced unprecedented political uncertainty and regulatory intervention. Climate change has risen up the agenda as the major challenge facing our world and, as we predicted in 2015, a new decentralised, more digital and increasingly decarbonised energy system has begun to develop.

Centrica is having to make some huge changes to reposition itself for the future, and much of the burden of this has fallen on the shoulders of our team. I am deeply grateful for the hard work and dedication of the talented people I have worked with in this company, their commitment and caring attitude are what makes it great. As we have done over the last 208 years, Centrica needs to adapt while staying true to our values and to our core of energy, and services and solutions built around it.

Conclusion

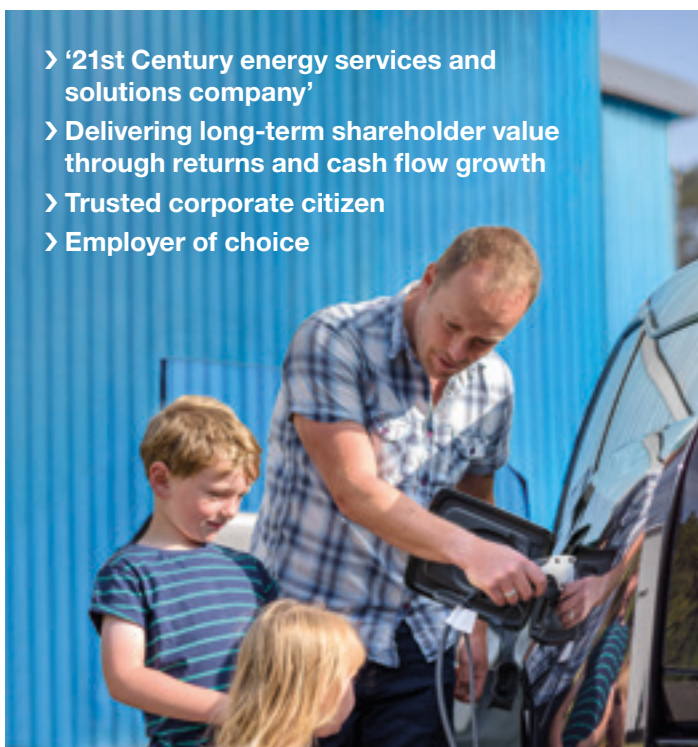
In summary, 2019 has been a very difficult year in terms of the external environment and our key outputs. Our strategy remains clear and our direction towards the customer is unchanged. We are beginning to see success in doing what we said we would do and performance stabilise. We have significant momentum as we enter 2020, and I see 2020 as a gateway to the future of Centrica as a leading international energy services and solutions company, in tune with where the world is going.

Iain Conn

Group Chief Executive
12 February 2020

Our Strategy

Our purpose, as set out in 2015, has been refreshed, but its essence remains unchanged. We are an energy services and solutions company, focused on satisfying the changing needs of our customers and enabling the transition to a lower carbon future.



- › ‘21st Century energy services and solutions company’
- › Delivering long-term shareholder value through returns and cash flow growth
- › Trusted corporate citizen
- › Employer of choice

Section 172(1) Statement

Section 172(1) of the Companies Act 2006 provides that a director of a company must act in a way that he considers, in good faith, would be most likely to promote the success of the Company for the benefit of its members as a whole, and in doing so have regard (amongst other matters) to various other stakeholder interests – below are the six key factors:

- the likely consequences of any decision in the long term;
- the interests of the Company’s employees;
- the need to foster the Company’s business relationships with suppliers, customers and others;
- the impact of the Company’s operations on the community and the environment;
- the desirability of the Company maintaining a reputation for high standards of business conduct; and
- the need to act fairly as between members of the Company.

[Read more about our Stakeholder Engagement on Pages 16 to 17](#)

Strategic context

Our strategic update in 2019 confirmed that the trends we identified in 2015 continue to play out:

- the energy system is becoming more decentralised as advances in distributed technologies support decarbonisation;
- choice, power and influence are moving to the customer; and
- digitalisation is accelerating proposition development, increasing choice and driving efficiency across our sector.

We are now equipped and committed to help our customers transition to a lower carbon future

- we have developed capabilities to help customers reduce their emissions;
- we will exit hydrocarbon production, creating a leading international energy services and solutions provider;
- we supply natural gas and believe in its near-term role in replacing coal. But we also embrace the ultimate need to decarbonise heating; and
- we have targets to reduce the emissions of our customers, the energy system and our own operations and have made a commitment to be net zero by 2050 and communicate our pathway to it by 2030.

[Read more about Delivering our Responsible Business Ambitions Pages 48 to 54](#)

Our divisions

In 2017, we reorganised the Group around the customer, creating two new, customer-facing divisions: Centrica Consumer and Centrica Business. These businesses will continue to focus on the areas of energy services and solutions in which we have distinctive capabilities – energy supply and its optimisation, services and solutions centred around energy. We now have sufficient capability in the customer-facing businesses to allow us to focus completely on the customer. The Upstream division includes our Nuclear, and Exploration & Production assets.



Centrica Consumer

Market trends

- Demographic change
- Ubiquitous technology
- Self-service
- Data analytics, Artificial Intelligence and automation
- Increased regulator and consumer activism
- Growing progress and support for decarbonisation
- Increased competitive intensity

Customer needs

- Value for money
- Easy, empathetic and personalised service
- Trusted, expert support
- Solutions, not just products
- Simple, clear choices
- Responsible options (including green tariffs)

[Read more about Centrica Consumer on Pages 20 to 23](#)



Centrica Business

Market trends

- Volumes per customer reducing
- Margins under pressure
- Gas becoming global
- Mega-trends impacting energy sector
- Electricity system becoming more local

Customer needs

- Reduced cost and increased productivity
- Supply security and resilience
- An expert partner to guide them through complexity
- A trusted and credible counterparty
- Not to be distracted from their main activity

[Read more about Centrica Business on Pages 24 to 26](#)



Upstream

Upstream includes our Nuclear and Exploration & Production assets. Our Exploration & Production activity is focused on North West Europe and consists of a 69% stake in the Spirit Energy business and the Rough field. We announced our intention to sell Spirit Energy and Nuclear.

[Read more about Upstream on Pages 27 to 28](#)

Strategic approach

To deliver the strategy we announced in July 2015, and reviewed in 2019, we set ourselves a number of medium-term objectives to 2020 and focus areas of long-term growth.

Our medium-term strategic objectives

- Demonstrating customer-led gross margin growth
- Driving cost efficiency towards being 'most efficient price setter'
- Improving organisational effectiveness
- Securing the capabilities we need for 2020 and beyond
- Maintaining capital discipline and balance sheet strength

Our focus areas for long-term growth

- Energy Supply
- In-home Servicing
- Home Solutions
- Energy Optimisation
- Business Services & Solutions

Our Business Model

Our business model is designed to deliver returns and growth focusing on energy services and solutions, enabling the transition to a lower carbon future.

Our Energy Supply, Services, Home Solutions, Business Solutions and Energy Marketing & Trading businesses are organised into two global customer-facing divisions; Centrica Consumer and Centrica Business. Our strategic framework shifts our focus towards energy

services and solutions, in addition to providing energy supply, while putting emphasis on helping our customers transition to a lower carbon future.

Centrica Consumer is focused on energy supply, in-home servicing and home solutions centred around energy, including Home Energy Management and Electric Vehicle Integration.

Centrica Business is structured to deliver the full range of energy products and services solutions – from energy supply, to on-site generation and data-driven optimisation, to electricity wholesale market access.

Our Group priorities

In 2019, we evolved our focus on five key priorities to deliver our strategy and we align performance and risk management processes around these, including our Key Performance Indicators. Our Group Priorities are underpinned by safety, compliance and conduct.



Customer Obsession



Operational Excellence



Most Competitive Provider



Cash flow Growth



Empowered Colleagues

[Read more about our Key Performance Indicators on Pages 18 to 19](#)



Safety, compliance and conduct foundation

Our Responsible Business Ambitions

Our 2030 Ambitions set out 15 global goals to help our customers run their world in ever more sustainable ways. The goals are focused around four areas which includes tackling climate change, innovating to make our customers' lives easier, building a more skilled and inclusive workforce and making our communities stronger. Our Ambitions are underpinned by Responsible Business Foundations to ensure we operate with integrity.

We are focused on:



[Read more about Delivering our Responsible Business Ambitions on Pages 48 to 54](#)

Group financial framework to 2022

Our financial goals are delivered through a clear financial framework that enables us to deliver long-term shareholder value through returns and growth.

The risks to achieving the Group's strategy are monitored and reported regularly.

For more information on managing our exposure to risk, see Our Principal Risks and Uncertainties on pages 34 to 45.

Our Group Priorities also ensure that progress in delivering performance in Safety, Customer Satisfaction, Operational Excellence and People is a core part of the overall Group performance, which is then measured through individual employee scorecards.

Metrics	Targets
Adjusted operating cash flow⁽³⁾	• Growth over the medium term
Dividend⁽²⁾	• Progressive dividend from 2019 rebased level linked to growth in adjusted earnings and operating cash flow • Dividend cover from adjusted earnings of 1.5-2.0
Controllable costs⁽¹⁾	• £1bn of annualised efficiency delivery over 2019-22
Capital re-discipline	• Annual capital expenditure of around £500m post Spirit Energy and Nuclear disposals
Credit rating	• Strong investment grade ratings
ROACE⁽³⁾	• At least 10-12%

(1) Further information on controllable costs can be found in Additional Information – Explanatory notes on page 223.

(2) Dividend Policy – the Group has a progressive dividend policy (based off the 2019 dividend level), linked to long-term growth in adjusted earnings and adjusted operating cash flow, and we will target dividend cover from adjusted earnings in the range 1.5-2.0. See note 11 to the Financial Statements for further details on current year dividends.

(3) See note 2 to the Financial Statements for definition and reconciliation of these measures.

Our customer-facing businesses are supported by the common operating functions of Customer Operations and Field Operations. These functions are where we interact with the customer and are fundamental to our success.

The Upstream division includes our Nuclear and Exploration & Production businesses, Spirit Energy and Centrica Storage. We have announced our intention to divest Spirit Energy and Nuclear.

To ensure our model remains efficient and scalable, all businesses are supported by a number of centre-led Group functions that are responsible for setting boundaries and standards which allow us to manage risk effectively and ensure a strong system of internal control.

Our strategic frameworks

 <h3>Centrica Consumer</h3> 	<p>Energy supply</p> <ul style="list-style-type: none"> • Gas supply • Electricity supply <p>In-home servicing</p> <ul style="list-style-type: none"> • Cover products (protection plans, warranties) • On demand repair and maintenance • Electric vehicles charging point installations <p>Home solutions</p> <ul style="list-style-type: none"> • Home security and monitoring • Remote diagnostics • Home control • Appliances control • Home energy management <p>By  British Gas  Local Heroes  HIVE  Direct Energy  Bord Gáis Energy</p>
 <h3>Centrica Business</h3> 	<p>Energy supply</p> <ul style="list-style-type: none"> • Gas supply • Electricity supply <p>Energy optimisation</p> <ul style="list-style-type: none"> • Asset optimisation • Aggregation and optimisation of distributed energy resources • Access to energy, capacity and flexible markets • Trading partner • Energy commodities and risk products <p>Business services and solutions</p> <ul style="list-style-type: none"> • Multi-technology solutions • Design, install, maintain and service • Energy resource management and monitoring • Operational insights from energy data • Preventive maintenance <p>By  British Gas  Direct Energy  <i>centrica</i> Energy Trading  <i>centrica</i> Business Solutions</p>
 <h3>Upstream</h3> 	<ul style="list-style-type: none"> • Focus on safety • Operational excellence <p> SPIRIT ENERGY  <i>centrica</i> storage</p>

Stakeholder Engagement

Engaging with stakeholders delivers better outcomes for society, and our business. It's fundamental to our long-term success.

The world of energy is evolving, customer needs are changing, and the social and environmental pressures we operate under are increasing. Against this backdrop, it's vital that we understand and collaborate with stakeholders so that we can grow our business in a way that delivers for our customers and society over the long term. These pages highlight some of the ways we engaged stakeholders on material issues in 2019.

Customers	Colleagues	Shareholders
 <p>Listening to customers helps us to satisfy their changing needs and reduce costs. We seek feedback on a range of issues such as customer service, new products and pricing. This is done through various methods such as focus groups, listening sessions and surveys, as well as proposition and usability testing.</p>	 <p>We use employee feedback to help develop a workplace where everyone is motivated and able to deliver for our customers. Issues discussed typically include reward, development and culture, with feedback shared via various channels such as events, surveys and performance reviews.</p>	 <p>Shareholders provide funds that help us run and grow our business and they expect a sustainable return. When meeting shareholders and being involved in or responding to information requests, the Directors are conscious that they need to act fairly for all of our shareholders. Such views are particularly important to ensure that when we update on strategy, financial and operational performance, alongside Environmental, Social and Governance (ESG) issues, that it's relevant and beneficial to all our shareholders.</p>
<p>Action from insight We track feedback from customer journeys and run customer experience surveys. The Board receives a quarterly customer dashboard with key performance and plans, and uses this insight to make decisions that serve our customers for the long term as well as foster stronger relationships with them. Feedback, for example, informed the Board that customers wanted a cost-competitive provider with market-leading customer service. The Board has consequently been involved in transforming our customers' experience which includes oversight of the digital transformation.</p> <p>Voice of the customer The Board wanted to empower customer-facing teams with real-time customer service insights, to help them understand the root causes of issues and shape improvements. This led to the 'Discover' platform launching in UK Home and UK Business, which hosts survey feedback from over 20,000 customers a month. Insights from the platform have stimulated Board approval on new ways of working and key customer journeys, such as easier-to-understand bills and pricing renewal policies.</p>	<p>Employee Champion Joan Gillman, Non-Executive Director, completed her first full year as Employee Champion. Having held listening sessions to hear about some of the cultural 'blockers' and 'pain points' employees were experiencing, she has since acted as the voice of the employee on the Board across discussions relating to talent and resource among other areas. Joan has also worked to improve the Board's understanding of employee concerns, including their desire to feel more connected to the Company's strategy.</p> <p>Diversity and inclusion Having a diverse and inclusive workforce is key for our business and people to thrive. Leaders champion inclusion and participate in employee discussions on issues such as gender, ethnicity, sexuality and caring responsibilities, to explore how we can build a more inclusive workplace. With increased insight, the Board took into account the needs of employees by introducing 2030 Responsible Business Ambitions to accelerate progress, signed up to The Valuable 500 to drive disability inclusion and enhanced policies to support carers and parents.</p>	<p>Annual General Meeting (AGM) All shareholders are invited to the AGM where they have the opportunity to hear about our performance and put questions to the Board. Members of the Board, Investor Relations and customer service, are available to speak with shareholders before and after the meeting on issues that matter to them. All resolutions put to shareholders passed in 2019, with percentages ranging from 85.27% to 99.91%.</p> <p>Responsible business Following the introduction of our 2030 Responsible Business Ambitions, we hosted a webinar for investors and analysts to explore our commitments. Our Group Chief Executive also met Climate Action 100+ (CA100+), which represents over 370 investors managing USD\$35 trillion in assets. Engagement helped shape our Ambition to tackle climate change, spurred the publication of our net zero policy position and supported our decision to sign-up to the Task Force on Climate-related Financial Disclosures.</p>
<p>Read more about the benefits of the digital transformation on Page 21</p> <p>Read more about our customer service experience on Pages 22 and 25</p>	<p>Read more from Joan about her role as Employee Champion on Page 67</p> <p>Read more about building a more diverse and inclusive workforce on Page 52</p>	<p>Read more about our AGM engagement on Page 68</p> <p>Read more about our response to climate change on Pages 46 to 47 and 50 to 51</p>

Section 172(1) Directors' Duty

As a result of being responsible for overseeing Our Strategy, described on pages 12 to 13, and Our Business Model, described on pages 14 to 15, both of which centre around the interests of key stakeholders, the Directors remain conscious of the impact their decisions can have on employees, communities and the environment.

Proactive engagement remains a central focus for the Board, which ensures the Directors have regard to the matters set out in S.172(1) (a) to (f) of the Company Act. They receive regular stakeholder insights and feedback, which enables them to place stakeholder considerations at the very heart of the Board's decisions. Examples of such decision making is further described on pages 16 to 17 Stakeholder Engagement, on page 57 S.172

table and page 64 Board activity. In doing so, we are better able to operate in a way that is mutually beneficial to society – from developing strategy and introducing new products, to advocating for policy change and managing our social and environmental impact. Examples are further described on pages 48 to 54 Delivering our Responsible Business Ambitions.

Sometimes the Directors have to take decisions that adversely affect one or more of our stakeholder groups. In these cases, we endeavour to treat those impacted fairly.

[➔ Read more about our Section 172\(1\) Directors' Duty on Page 57](#)

Government and regulators	Suppliers	Communities and NGOs
 <p>The Directors understand the value of fostering our relationship with government and regulators to ensure policies are developed in the interests of our customers, while enabling them to better understand our impact on the community and the environment. We provide expertise to support policy development around topics like market competition, employment and the environment. Engagement includes face-to-face meetings and written responses to consultations.</p>	 <p>The Directors fully support collaboration with suppliers as it reduces risk in our supply chain and ensures we maintain high standards of business conduct which benefits our communities. We interact with suppliers through the tender process, surveys and site inspections. Engagement covers topics including payment practices and strengthening social, ethical and environmental compliance.</p>	 <p>By sharing our expertise and working alongside charities, NGOs and community groups, we not only collaborate to create stronger communities but gain insights that enable the Board to have full regard of our impact on the community and the environment, which helps them better understand the likely consequences of decisions in the long term. In doing so, we can tackle enduring societal challenges together – from tackling climate change to creating carer-friendly communities.</p>
<p>Decarbonising heat We engaged the UK Government and the Committee on Climate Change (CCC) on how to decarbonise heat in a cost-effective way. We shared insight into our trial of new Home Energy Management solutions, the role hybrid heat pumps could play and the opportunity of green gas. The CCC has since become more supportive of hybrid heat pumps in domestic heating and we remain committed to working together to deliver customer-friendly policies and products that enable society's transition to net zero.</p> <p>Opening new markets In collaboration with business trade groups and environmental NGOs, we pursued political and regulatory engagement to open up competition in Virginia's electricity market, so that our customers can access zero carbon power. Due to our efforts, 100% renewable tariffs totalling over 100TWh of annual demand are now available to residential, commercial and industrial customers. This helps customers, such as Bernstein Management Corporation, fulfil their low carbon commitments at a competitive price.</p>	<p>Risk management We conducted nine on-the-ground ethical site inspections on higher risk suppliers located in the UK, China, Italy and Turkey. While no modern slavery risk was detected, we worked with suppliers to create tailored action plans to raise labour and safety standards while providing workers with a confidential modern slavery helpline. The Board reviews our strategy and performance in upholding the Modern Slavery Act each year.</p> <p>Sharing solutions We hosted Responsible Sourcing Council's first meeting of 2019 to share our responsible procurement achievements so that others can learn from our experience, as well as collaborate to find solutions to some of our challenges. A supplier day was also hosted by one of our Board members, which brought together 14 strategic suppliers to explore innovative ideas to deliver our digital technology strategy. We are following up with suppliers to further scope ideas and hope to run similar sessions going forward.</p>	<p>Transition from fossil fuels We announced our intention to exit oil and gas production by the end of 2020 which will complete our shift towards being a customer-facing company. This allows us to focus on our distinctive strengths and respond to the growing call from customers, NGOs and wider society, to enable the lower carbon future. We believe gas has an important role as a transition fuel which does not always align with the expectations of some stakeholders. We continue to engage with them on this.</p> <p>Supporting carers We provide best-in-class support to help carers stay in work by better balancing work with caring responsibilities. With the Board having extended carers' leave allowance to up to six weeks following consultation with our people, we wanted communities to receive these same benefits. Our Group Chief Executive wrote to the UK's largest employers and, together with our charity partner Carers UK, we hosted peer learning forums and campaigned for the UK Government to introduce statutory carers leave which is now part of its legislative programme.</p>
<p>➔ Read more about our net zero policy recommendations on Pages 46 to 47</p> <p>➔ Read more about the positive impact of market reform on Bernstein Management Corporation on Page 26</p>	<p>➔ Read more about reducing risk with suppliers on Page 54</p> <p>➔ Read more about modern slavery governance in the Safety, Health, Environment and Security Committee on Pages 80 to 81</p>	<p>➔ Read more about our transition to a lower carbon future on Pages 50 to 51</p> <p>➔ Read more about how we are helping carers thrive on Page 52</p>

Key Performance Indicators

Our Key Performance Indicators (KPIs) help the Board and executive management assess performance against our Group Priorities.

Our Group Priorities

-  Customer Obsession
-  Operational Excellence
-  Most Competitive Provider
-  Cash flow Growth
-  Empowered Colleagues
-  Safety, compliance and conduct foundation

[Read more about Our Strategy](#)
Pages 12 to 13

[Read more about Remuneration](#)
Pages 82 to 99

[Read more about adjusted performance measures](#)
Pages 223 to 224

Adjusted operating cash flow⁽¹⁾



Adjusted operating cash flow is our key measure of financial performance and is one of the financial metrics for the short-term incentive plan for our Executive Directors. Adjusted operating cash flow was down 18% reflecting lower operating profit offset by working capital movements.

[Link to Remuneration](#)
Short-term incentive

[Link to Group Priorities](#)

Adjusted operating profit⁽¹⁾

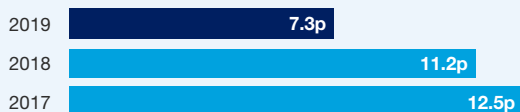


Adjusted operating profit is one of our fundamental financial measures. Adjusted operating profit was down 35% reflecting reduced profit predominantly in our Upstream segment.

[Link to Remuneration](#)
Short-term incentive

[Link to Group Priorities](#)

Adjusted basic earnings per share (EPS)⁽¹⁾

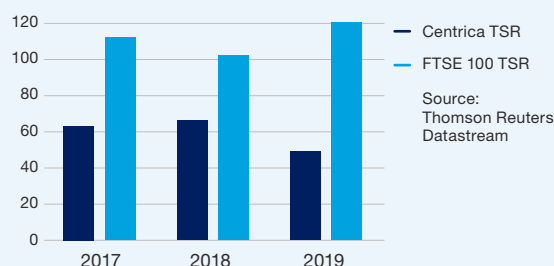


EPS is a standard measure of corporate profitability. EPS is adjusted to better reflect the underlying performance of the business. Adjusted basic EPS was down 35%, reflecting the reduced operating profit.

[Link to Remuneration](#)
Long-term incentive

[Link to Group Priorities](#)

Total shareholder return (TSR) by year



The Board believes that TSR is a valuable KPI to assess the Company's performance in the delivery of shareholder value.

[Link to Remuneration](#)
Long-term incentive

[Link to Group Priorities](#)

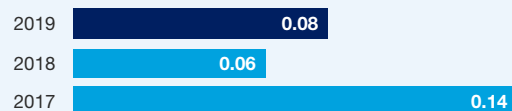
(1) See notes 2, 4 and 10 to the Financial Statements for definition and reconciliation of these measures.

Total recordable injury frequency rate (TRIFR)

Keeping our people safe is a foundation of how we do business. Our TRIFR per 200,000 hours increased by 4%. We remain committed to creating an incident-free workplace.

Link to Remuneration
Long-term incentive

Link to Group Priorities

**Process safety incident frequency rate (Tier 1 and 2)**

We prevent potential incidents where we source, generate and store energy with process safety. Less process safety hours worked per 200,000 hours led to our frequency rate increasing by 33%.

Link to Remuneration
Long-term incentive

Link to Group Priorities

**Brand net promoter score (NPS)⁽¹⁾**

Everything we do is focused on satisfying the changing needs of our customers. Improvements in customer service, enabled by digital transformation, contributed to our aggregated NPS improving by 5.1 points.

Link to Remuneration
Long-term incentive

Link to Group Priorities

**Complaints⁽²⁾**

We are relentless in wanting to provide an excellent service that satisfies our customers and reduces complaints. This has led to our aggregated complaints per 100,000 customers improving by 1%.

Link to Remuneration
Long-term incentive

Link to Group Priorities

**Employee engagement**

Having a motivated and engaged workforce is key to our success. While we took action on feedback from our annual employee engagement survey to improve performance, business restructuring impacted engagement which decreased by 12%.

Link to Remuneration
Long-term incentive

Link to Group Priorities



The KPI performance outcome associated with executive remuneration is set out on page 88.

- (1) Aggregated scores across UK Home, North America Home, Ireland, Centrica Home Solutions, UK Business and North America Business weighted by customer numbers.
- (2) Aggregated scores across UK Home, North America Home, Ireland, UK Business and North America Business weighted by customer accounts.

 **Read more about our responsible business performance on**
Pages 48 to 54 and 225 to 228



Centrica Consumer

Centrica Consumer is focused on three areas, Energy Supply, In-Home Servicing and Home Solutions.

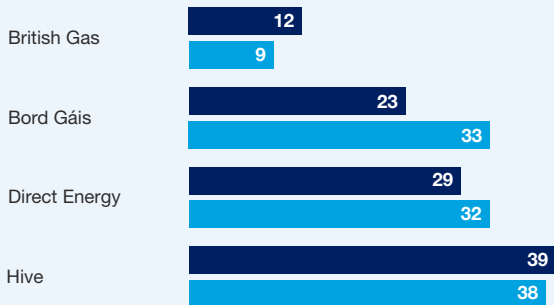
- UK Home
- Ireland
- North America Home
- Centrica Home Solutions



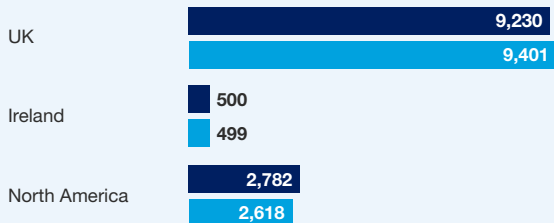
Sarwjit Sambhi
Chief Executive, Centrica Consumer



Brand Net Promoter Score (NPS)



Customers ('000)



Adjusted operating profit (£m)



Adjusted operating cash flow (£m)



■ 2019 ■ 2018

Our Centrica Consumer division is undergoing a digital transformation, broadening its capabilities to enable the launch of innovative new propositions – including combined energy and services bundles – while improving data analytics and customer segmentation. Customer satisfaction levels have risen significantly, and we maintain strong market positions.

In the UK, we are the largest energy supplier; the number one provider of contract energy services; and the largest installer of boilers and smart thermostats. We have leading brand awareness.

In North America, we are among the top three competitive energy suppliers in each of our chosen geographies of Texas, the US North East and Canada. We have a significant services position in a highly fragmented market.

In Ireland, we are the largest gas supplier and the second largest energy supplier overall.

Growth in customer accounts

- Centrica Consumer customer accounts grew by 722,000 in 2019, after adjusting for the impact of the disposal of the Clockwork North America home services business in April which had 182,000 customer accounts at the end of 2018.
- In the UK, total accounts increased by 451,000 in 2019, with 364,000 growth in services due to higher sales of products bundled with energy and 373,000 growth in cumulative home solutions customers, including growth from our remote boiler diagnostics proposition, BoilerIQ, and Cloud storage offer. This more than offset a reduction in energy supply accounts.
- UK Home energy supply customer accounts fell by 286,000, although the rate of losses significantly reduced compared to 2018 against a backdrop of continued high levels of price competition and market switching. Net losses were also lower in the second half of the year compared to the first half and accounts remained broadly stable over November and December 2019, and January 2020. This reflects the launch of a number of attractive customer offers in the fixed price market, including increased sales of energy and services bundles.
- Total accounts were broadly stable in Ireland against a backdrop of high levels of competitive intensity.
- In North America Home, accounts increased by 206,000 as we won some energy supply aggregation auctions in the US North East. We also delivered an increase in sales to customers on fixed price contracts.

Putting customers at the heart of our digital transformation

Our customers increasingly want to go online to complete day-to-day tasks. We're trying to make that experience as simple, easy and effective as possible.

Calling a contact centre can be frustrating and time consuming; but too often the experience of going online is not much better. That's why in early 2018 we embarked on an ambitious digital transformation programme, identifying hundreds of customer 'pain points' and creating new online ways of tackling them. The result has been a faster, slicker website and app offering improved customer experience.

We have three priorities: to ensure that 100% of any task – such as a meter reading – can be completed successfully online; to make it easy and simple with fewer steps; and to make sure our online services can be used effectively on any device.

We've built an entirely new app which has now been downloaded 1.3 million times and is rated as 'standout' by the Energy Saving Trust. Last year there were 2.9 million fewer calls to our British Gas contact centres because customers found it easier and more effective to deal with us online. Here are just a couple of the new features we've introduced so far.



58%

Increase in the number of breakdown appointments booked online

'Book, Track & Manage'

This allows our customers to book and monitor British Gas engineer appointments online. It includes booking progress updates, a timeline to completion, the ability to amend or cancel appointments and a 'Track my Engineer' feature.

Results & key statistics: Breakdown appointments booked online up 58% since launch; calls about appointments down 30% year on year.

'Heating Offline Troubleshooting'

This new feature on our Hive app was launched towards the end of last year to address one of the biggest frustrations for our Hive customers – what to do when the connection between their boiler, smart thermostat and remote control heating app doesn't work properly.

Previously, to fix the problem, customers were directed to a static page on the website with a long list of steps to attempt which were seen as time consuming and complicated. Many customers understandably gave up and phoned a contact centre instead to speak to an agent.

By contrast the new feature offers customers a simple, interactive, conversational troubleshooting journey – with engaging visual prompts – which dynamically adjusts their path based on their product holding and current status.

“Customers rightly expect that they should be able to draw on all the services we provide using their PC, tablet or smartphone. Our digital transformation programme is focused on delivering simple and easy-to-use customer journeys.”

Sarwjit Sambhi
Chief Executive, Centrica Consumer

Improved customer experience and enhanced customer offers

- We continue to focus on improving customer experience and our digital platforms in all markets, leading to a reduction in call volumes in UK Home, North America Home and Ireland.
- The British Gas Brand Net Promoter Score (NPS) improved to +12. NPS for Bord Gáis Energy, Direct Energy and Hive remained at relatively high levels, although Bord Gáis Energy saw a reduction to +23 against a backdrop of new entrants and increasing competition in the Irish market.
- In UK Home, we saw a 16% increase in digital visits in 2019 compared to 2018, and our new digital app had over 2m downloads in the year. The proportion of transactions completed online had increased to 55% by the end of 2019 compared to 50% at the end of 2018 and call volumes dropped by 4.3 million, or 15%.
- We now have more 'online only' than 'offline only' UK energy supply customers.
- We fulfilled 98.2% of UK services appointments on the scheduled day compared to 97.6% in 2018.
- In North America Home, energy digital marketing and web sales were up 30% compared to 2018 and made up 21% of total energy sales. The proportion of transactions completed online increased to 49% in 2019 compared to 45% in 2018 and call volumes dropped by 93,000 or 2%, despite growth in customer accounts.
- We launched over 160 propositions in 2019 in UK Home, including bundled energy and services offers, with 71% of customers who took a bundled offer being new to services.
- We launched our first residential electric vehicle tariff in the UK during the year and in November installed our first domestic charging point.
- In January 2020, British Gas launched its new 'Green Future' tariff, one of the greenest tariffs on the market which offers customers green gas and renewable energy.

Putting customers at the heart of our field operations

We have totally reorganised the way that our engineers work so that we can deliver a better service to UK households.

Our field operatives – the gas and electrical engineers, heating installers, plumbers and smart energy experts – are one of our greatest assets. They are invited into more homes every year than any other brand in the UK and trusted highly by our customers.

But until now they have been working in a fragmented fashion, organised on a nationwide basis around the individual products and services they provide, with different ways of doing things and sometimes duplicating each other's efforts.

We realised that, to make services a real engine for growth in the business, things would have to change. So, starting last July, we have completely reorganised. We have dismantled the product 'silos' to create local multi-functional teams, bringing all the different skills together, under a local manager.

These new teams are directly accountable for the customers they serve locally and will have full visibility of all their needs. We are changing the way that we recognise our engineers, so that rewards are based squarely on customer approval ratings and successful outcomes. Later this year, we will launch a new integrated computer system, in partnership with Microsoft, to manage operations and customer appointments more efficiently. This is not just a new way of doing things. It also marks a fundamental change in our mindset. We are no longer thinking in terms of 'field operations', but rather of 'customer delivery'. From now on, we aspire to work around the customer, rather than expecting the customer to work around us.

“The way we worked before was a bit like a department store, with each department working separately and not understanding the full needs of the customer. Now, by bringing our skills together in local teams, we can better understand and meet customer needs.”

Andrew Reaney
Customer Delivery Director, Centrica UK Field Operations



8,000
engineers and technicians

100+
new local managers recruited

Progress towards fundamentally rebasing UK Home

- In July 2019, we announced that we were developing plans to fundamentally rebase our UK Home business.
- In UK energy supply, our focus will be on continuing to improve the customer experience while moving towards becoming the lowest cost supplier by 2022. Achieving cost leadership will enable sustainable customer and margin growth.
- In UK in-home servicing, we are also focusing on improving our levels of competitiveness while maintaining a high-quality customer experience.
- We removed around 800 non-customer facing roles across energy and services in 2019 as part of our efficiency plans, with energy supply back office costs 15% lower in 2019 than in 2018.
- The cost per UK energy supply customer was £109 in 2019 compared to £103 in 2018, although the underlying figure in 2018 was £111 when excluding the impact of a one-off bad debt credit. The decrease in the underlying figure came despite the lower average number of customer accounts than in 2018 and the impact of inflation.
- UK services cost per customer in 2019 decreased to £330 compared to £348 in 2018, with significant levels of cost efficiency more than offsetting the impact of inflation. Revenue per customer was flat.
- In addition to the progress already made in 2019 to improve the customer experience, we have plans in place to drive a further increase in digital transactions to help reduce call volumes. We are also upskilling contact centre colleagues to reduce the number of internal call transfers, reducing costs and improving the customer experience.
- We continue to develop plans to re-organise around customer end-to-end journeys and transform our technology stack to be more flexible and lower cost. We now have two end-to-end customer journey teams up and running and have a proof of concept technology platform based on our online-only British Gas Lite offer live in the market.
- We are preparing ourselves to benefit from new market opportunities, such as electric vehicle integration. In 2019, we upskilled around 100 of our service engineers to install electric vehicle charging points.

Refocusing Home Solutions

- We announced in July 2019 that our Home Solutions activity would be focused on the UK and Ireland, as we continue to leverage our distinctive field force and look to launch propositions focused around Home Energy Management and Remote Diagnostics and Monitoring.
- Centrica Home Solutions revenue increased by 10% to £74m in 2019 and the gross margin percentage increased to 22% compared to 19% in 2018.
- In May, we launched Hive thermostatic radiator valves which allow customers to digitally manage the temperature in individual rooms in their houses. We have sold over 100,000 units to date.
- Customer satisfaction rates remain high, with the Hive brand NPS at +39, and we continue to see a positive impact on our energy and services businesses. The energy NPS of a Hive customer is 20 points higher on average than for an energy only customer.
- We have taken actions to lower operating costs in the second half of the year, reducing headcount in Centrica Home Solutions by around 40%. As a result, we expect to deliver £15m of operating cost savings and £10m of capital expenditure savings in 2020 when compared to 2019.

10%

increase in Centrica Home Solutions revenue

451,000

growth in UK customer accounts

49%

In North America Home, the proportion of transactions completed online increased to 49% in 2019





Centrica Business

Centrica Business is focused on three areas, Energy Supply, Energy Optimisation and Business Services & Solutions.

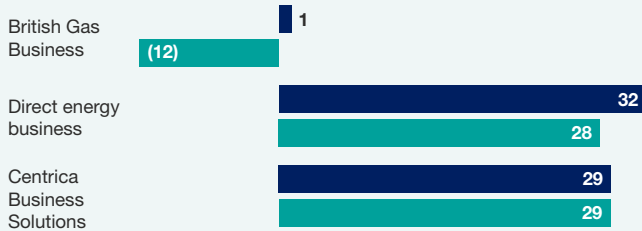
- › UK Business
- › North America Business
- › Centrica Business Solutions
- › Energy Marketing & Trading



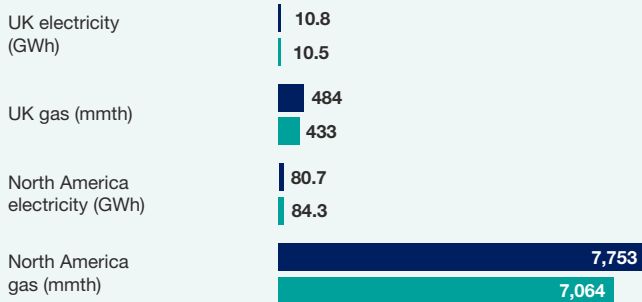
Richard Hookway
Chief Executive, Centrica Business



Brand Net Promoter Score (NPS)



Energy consumption



Adjusted operating profit (£m)



Adjusted operating cash flow (£m)



■ 2019 ■ 2018

Centrica Business has built enhanced capabilities across a range of activities, including distributed energy, route-to-market services and energy optimisation. We maintain strong market positions; we have delivered cost efficiencies to position ourselves competitively; and our customer satisfaction levels have improved.

We are the largest energy supplier to SME customers in the UK and retain a significant presence in the Industrial & Commercial market, where we focus on customers who want to take business services and solutions as well as energy supply.

In North America, we are the second largest supplier of gas and power to business customers and we have significant wholesale and optimisation positions. We have major global route-to-market and demand response optimisation positions, managing around 25 gigawatts of route-to-market capacity and 2.5 gigawatts of optimisation capacity across the UK, North America and Continental Europe.

Customer number stability and volume growth

- UK Business delivered growth in small and medium enterprise (SME) energy supply customer accounts, including from the online only British Gas Lite tariff.
- North America Business energy supply customer accounts were down 6%, reflecting our decision to focus our sales and retention activity on higher value, higher consuming customers. Total gas volumes were up 10%, reflecting this focus and the full year impact of small bolt-on acquisitions completed during 2018.

Improved customer experience

- UK Business brand NPS increased by 13pts over the year to +1, reflecting further operational improvements and enhancements to our digital platform.
- North America Business brand NPS improved by 4pts to +32, as we continued to launch new customer propositions, including those offering optionality on hedging profiles giving the customer more control.
- Centrica Business Solutions brand NPS remained high at +29.

Improving returns in North America Business

- We announced in July 2019 that, following a review of our business energy supply and optimisation activity in North America, we were making structural interventions to improve returns.
- Actions taken to improve margin delivery and customer quality, reduce costs and optimise capital employed have resulted in an improvement in post-tax economic returns to 9% in 2019 from 6% in 2018.
- Further actions underway are expected to result in post-tax average economic returns of 10-12%, which we are targeting to achieve in 2020, and no worse than 8% at the bottom of the cycle.

Saving energy and money to boost healthcare resources in Devon

Centrica Business Solutions is undertaking its most ambitious NHS project yet in the south west of England.

The Royal Devon and Exeter NHS Foundation Trust provides healthcare services to a population of nearly half a million across many sites and communities. Understandably, the trust would rather spend scarce resources on caring for people than paying for energy. So we're helping the Trust to do that.

We're currently installing state-of-the-art energy technology at five healthcare sites across Exeter, including a new 1.5 megawatt combined heat and power (CHP) unit at Wonford Hospital to generate electricity onsite, roof mounted solar panels, LED light fittings, air conditioning upgrades and new energy efficient boilers.

The £7 million project is due for completion by mid-2020 and is expected to reduce the annual emissions of the trust by 2,200 tonnes of carbon dioxide, equivalent to taking more than 1,450 cars off the road. It will save money too, an impressive £800,000 a year, which can be reinvested in critical frontline services.

By providing these solutions we are helping Royal Devon and Exeter to achieve its broader sustainability goals. Centrica currently supplies more than 1,300 NHS providers with products and services.



“ This initiative with Centrica is a major part of our approach to reduce the amount of money we spend on energy and utilities, releasing more funds to invest in frontline patient care and other vital functions. At the same time, reducing our energy consumption helps reduce our environmental impact.”

Robert Steele

Deputy Director of Strategic Capital Planning, Royal Devon & Exeter NHS Foundation Trust

2,200

tonnes of CO₂ saved a year

1,450

Equivalent to taking 1,450 cars off the road

£800,000

a year cost saving

Growing Business Solutions

- We are delivering growth in Business Solutions through leveraging existing energy supply customer relationships and the expansion of our technology range, with the focus increasingly on lower-carbon solutions. We are targeting £1 billion of revenue by 2022 and EBITDA break-even by 2021.
- The Centrica Business Solutions order book has increased by 19% compared to the end of 2018, revenue in 2019 was up 36% to £285 million and the adjusted operating loss reduced.
- On 1 July 2019, we acquired the energy services and solutions company SmartWatt for a total consideration of \$37 million, adding further capabilities in energy efficiency, lighting retrofits, heating, ventilation and air-conditioning, building automation, water conservation and performance assurance in North America.
- We continue to utilise our FlexPond Demand Side Response platform in support of our customer solutions and are also offering it as a 'software as a service' offer to third parties, including an agreement with Japanese utility TEPCO to provide flexibility services for the reserve market in the Kyushu region of Japan.

Expanding our global LNG footprint and route-to-market offering

- In LNG, we signed a landmark LNG sales and purchase arrangement in February under which Tokyo Gas and Centrica will jointly purchase 2.6 million tonnes per annum, delivered ex-ship, from the Mozambique LNG Project from the start-up of production until the early 2040s.
- In customer solutions, our global total route-to-market capacity under management is now 25.0 Gigawatt (GW), 9% higher than at the start of 2019.

Fresh impetus for renewables in North America

Direct Energy is gaining hundreds of new customers in the US state of Virginia by offering 100% renewable power.

The United States is a patchwork of different energy rules, with some states allowing free competition and others retaining a monopoly supplier. That creates a challenging environment for Direct Energy.

One of our leading customers, real estate group Bernstein Management Corporation, has been buying retail power and gas from Direct Energy Business for their Maryland and Washington D.C. properties since 2010; but state regulations prevented them from doing the same in Virginia. Until now. Rule changes introduced last year mean that customers with usage below 5 Megawatts can use an independent supplier if that supplier can offer 100% renewable power. Direct Energy acquired its licence in February 2019 and Bernstein was one of the first customers to sign up.



100%

Renewable power below the utility default rate

200+

New customers

The Company will purchase renewable power at a fixed rate, giving it certainty and boosting progress towards its own renewable goals. But the truly remarkable aspect of the deal is that Bernstein is paying less for its power now than the prevailing monopoly utility rate for electricity in Virginia and will continue to do so.

Last October Centrica also launched a new business unit in the US, Direct Energy Renewable Services, which is focused on this growing market. It will allow us to meet the demands of customers like Bernstein in a more joined-up way.

“For us to have the ability to offer renewable power at below the utility headroom price speaks volumes. It’s a ‘win, win’ for all parties involved and it clearly demonstrates the demand for green energy in Virginia.”

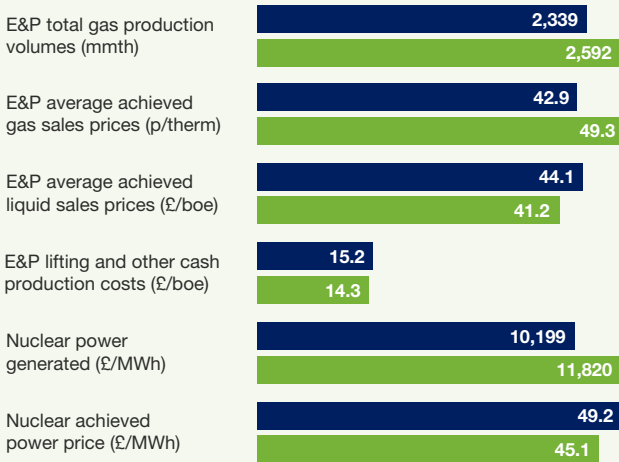
Keith Korin
Bernstein Account Lead,
Direct Energy Business



Upstream

Our Upstream division consists of our Exploration & Production (E&P) and Nuclear power generation businesses.

- > Spirit Energy
- > Centrica Storage
- > Nuclear



Upstream adjusted operating profit (£m)



Upstream adjusted operating cash flow (£m)



■ 2019 ■ 2018

In E&P, Spirit Energy, our joint venture with Stadtwerke München, is a robust, self-financing business.

However, Centrica's journey is back to consumer, so E&P is no longer strategically core for us. That is why we have announced our intention to exit from Spirit Energy by the end of 2020.

We continue to own and operate the Rough field and the onshore Easington gas processing terminal. Our focus is on maximising the value of both these assets.

We also own a 20% interest in EDF Energy's nuclear power generation fleet. In 2018, we announced our intention to dispose of this stake by the end of 2020.

Production and generation performance

- Nuclear generation volumes were down 14% to 10.2TWh in 2019 compared to 2018, reflecting the extensions to outages at the Dungeness B and Hunterston B power stations.
- Total E&P production volumes were down 10% to 52.3mboe in 2019 compared to 2018.
 - Spirit Energy production was down 2% to 45.8mboe with a slight increase in gas production volumes offset by lower liquids production. We saw improved operational performance from the operated Morecambe field which largely offset natural decline across the portfolio and lower availability at Statfjord.
 - Rough production was down 42% to 6.5mboe, in line with the expected decline profile of the reservoir.

E&P development and exploration progress

- In March 2019, the Oda field, Spirit Energy’s first development as the operator on the Norwegian Continental Shelf, came on line five months earlier than originally planned and under budget.
- The development of the Nova field in Norway is proceeding as planned, with production due to begin in the third quarter of 2021. The field has an estimated 77mboe of 2P reserves and Spirit Energy owns 20%.

- In January 2020, we announced plans with our Statfjord partners to drill up to 100 new wells and extend production from the area by more than 10 years.
- Spirit Energy’s 2P reserves were 14mboe higher at the end of 2019 than at the end of 2018, with 64mboe of positive revisions more than offsetting the impact of production and the Valemon and Sindre divestments in the year. This represents a 2P reserves replacement ratio of 140%. The Statfjord life extension resulted in 31mboe of the revision, with positive revisions also recognised at Kvitebjorn, Cygnus and South Morecambe.
- In 2019, three wells were drilled in the Greater Warwick Area, in which Spirit Energy owns a 50% interest. The Lincoln Crestal well confirmed the presence of light oil and produced at potentially commercial rates. The Warwick area yielded mixed results. Warwick Deep proved unsuccessful with water production and minor oil encountered. Warwick West was a discovery and confirmed the presence of light oil which was produced to surface during well testing. Further technical analysis is required to understand reservoir quality in this area.

Breathing new life into our longest serving asset

Spirit Energy has transformed efficiency and production at Morecambe.

The Morecambe Bay gas fields have been a part of Centrica since the Company was founded more than 20 years ago. At one time, they accounted for 15% of the UK’s entire gas needs. They are still a significant production hub. But until recently the ageing infrastructure was beset by problems.

The challenge of extending Morecambe’s life was taken on by the team at Spirit Energy, our specialist exploration and production joint venture with Stadtwerke München. The first task was to shut down the parts of the infrastructure that were no longer needed. We now have one less onshore terminal at Barrow and two fewer platforms to maintain offshore.

The next step was to improve the integrity of the remaining facilities and modernise maintenance strategies to increase uptime. Experts now manage our onshore gas compressor, a key piece of equipment which enables the flow of gas to the grid. Proactive maintenance has helped us to reduce the number of ‘trips’ and failures. Better root cause analysis has enabled us to eliminate defects and get the plant back online quicker when there is a trip.

77%

Efficiency up from 32%

We are already reaping big benefits and the results have exceeded our expectations. Safety performance is at a five-year high. Production volumes increased from 3.2mboe in 2018 to 6.7 million in 2019. Production efficiency has more than doubled from a lowly 32% to 77%.

The rationalised and stable asset also costs less to run. Improved working practices and a focus on supply chain efficiencies have reduced operating cost to £100 million in 2019, down from £140 million the year before.

It is true that we are in the process of selling our stake in Spirit Energy. But we are doing this because Centrica’s journey is back to the consumer. It has nothing to do with the quality of Spirit as a business, which is very high. The turnaround at Morecambe shows what a focused team can achieve and is a great illustration of Spirit Energy’s potential.

“It’s a great time to be involved with Morecambe. The facilities are strategically important as a gas hub and may have a second life as we transition to other forms of energy. The Spirit team are building an operating foundation to be proud of and we are now working on the next phase of value creation from our asset.”

John Cowie
Morecambe Hub Asset Manager,
Spirit Energy



Group Financial Review

“The environment was challenging for Centrica’s portfolio in 2019, which impacted the Company’s performance. However, performance during the second half was much improved compared to the first half.”

Chris O’Shea
Group Chief Financial Officer



Group revenue

- Group revenue included in business performance reduced by £0.6bn or 2% to £26.8bn (2018: £27.4bn). Gross segment revenue, which includes revenue generated from the sale of products and services between segments, reduced by £1.0bn or 3% to £28.0bn (2018: £29.0bn).
- Centrica Consumer gross segment revenue was broadly flat as the impact of energy supply customer account growth in North America offset the impact of a lower average number of energy supply accounts in the UK and lower prices, in part due to the introduction of the UK default tariff cap.
- Centrica Business gross segment revenue fell by £0.7bn, largely due to the impact of lower wholesale commodity prices and warmer weather on gas optimisation revenue in North America.
- Upstream gross segment revenue fell by £0.4bn due to reduced oil and gas production and nuclear power generation volumes and lower achieved gas prices due to falling wholesale commodity prices.

Adjusted operating profit

£901m

2018: £1,392m ▼ 35%

Statutory operating loss

£(849)m

2018: £987m profit

Statutory loss for the year attributable to shareholders

£(1,023)m

2018: £183m profit

Adjusted effective tax rate

34%

2018: 41% ▼ 7ppt

Adjusted operating cash flow

£1,830m

2018: £2,245m ▼ 18%

Statutory basic earnings per share (EPS)

(17.8)p

2018: 3.3p

Adjusted basic earnings per share (EPS)

7.3p

2018: 11.2p ▼ 35%

Statutory net cash flow from operating activities

£1,250m

2018: £1,934m ▼ 35%

Operating profit

- The statutory operating loss was £849m (2018: operating profit of £987m). Adjusted operating profit was £901m (2018: £1,392m). The difference between the two measures of profit relates to exceptional items and certain re-measurements. A table reconciling the different profit measures is shown below.

Adjusted operating profit

- Centrica Consumer adjusted operating profit was down £245m or 33% to £505m.
 - There was a £300m negative revenue impact from the UK residential energy supply default tariff cap, including a one-off £70m impact in the first quarter due to Ofgem's revision to the methodology calculating supplier wholesale costs during the transitional period.
 - Total efficiency savings more than offset lower gross margin resulting from lower average UK energy supply accounts and a change in customer mix in both energy and services towards lower priced products.
- Centrica Business adjusted operating profit was up £142m or 189% to £217m.
 - This includes the impact of a significant improvement in power retail margins in North America and good trading and optimisation performance in Europe.
 - It also includes benefit from the decision to defer delivery of gas from 2019 into 2020 from the one remaining large legacy gas contract and strong trading and optimisation performance in Europe.
- Upstream adjusted operating profit was down £388m or 68% to £179m.
 - Nuclear adjusted operating profit was down £27m or 59% to £19m, with lower output resulting from extensions to outages at the Dungeness B and Hunterston B nuclear power stations not fully offset by the impact of a higher achieved power price.
 - Exploration & Production adjusted operating profit was down £361m or 69% to £160m, largely due to lower achieved gas sales prices reflecting the falling UK NBP price, lower volumes from Rough reflecting the field's natural decline, higher depreciation charges following 2018 asset write-backs and production mix, and field specific write-offs.

Exceptional items

- A net exceptional pre-tax charge of £1,103m was included within Group operating loss before taxation in 2019 (2018: £185m) including:
 - A £476m charge relating to the impairment of E&P assets, predominantly due to the reduction in near-term prices and long-term price forecasts and a conclusion that certain field reserves levels were not sufficient for development.
 - A £381m charge relating to the impairment of power assets, including £372m related to the nuclear investment largely as a result of a reduction in price forecasts and availability issues at the Hunterston B and Dungeness B power stations.
 - A £77m charge following the strategic decision to refocus Centrica Home Solutions activity on the UK and Ireland, largely related to asset impairments (including goodwill), inventory write-downs and onerous contract provisions.
 - £356m of restructuring charges arising from the continuation of phase 2 of the Group's cost efficiency programme, principally related to redundancy, change resource, consultancy, property rationalisation costs, and other transformational activity including member compensation payments from renegotiating UK defined benefit pension arrangements.
 - A £152m net credit relating to pension changes. This includes a £260m credit in relation to a rule amendment to the UK defined benefit pension scheme arrangements to offer members an option to level up their ongoing pension if they retire before the statutory pension age, partially offset by £108m of pension strain costs associated with redundancy.
 - A £35m net gain on disposals of the Clockwork assets, Valemon, Sindre, the King's Lynn power station (which is held for sale) and contingent consideration on the historic disposal of Trinidad and Tobago E&P assets.
- These charges in total generated a taxation credit of £116m (2018: £89m). As a result, total net exceptional charges after taxation were £987m (2018: £235m).
- Further details can be found in note 7(a).

Operating profit

Year ended 31 December	Notes	2019			2018		
		Business performance £m	Exceptional items and certain re-measurements £m	Statutory result £m	Business performance £m	Exceptional items and certain re-measurements £m	Statutory result £m
Adjusted operating profit/(loss)							
Centrica Consumer		505			750		
Centrica Business		217			75		
Upstream		179			567		
Group operating profit/(loss)	4(c)	901	(1,750)	(849)	1,392	(405)	987
Net finance cost	8	(255)	-	(255)	(273)	(139)	(412)
Taxation	9	(218)	219	1	(461)	128	(333)
Profit/(loss) for the period		428	(1,531)	(1,103)	658	(416)	242
Profit attributable to non-controlling interests		(9)			(27)		
Adjusted earnings		419			631		

Certain re-measurements

- The Group enters into a number of forward energy trades to protect and optimise the value of its underlying production, generation, storage and transportation assets (and similar capacity or off-take contracts), as well as to meet the future needs of our customers. A number of these arrangements are considered to be derivative financial instruments and are required to be fair valued under IFRS 9.
- The Group has shown the fair value adjustments on these commodity derivative trades separately as certain re-measurements, as they do not reflect the underlying performance of the business because they are economically related to our upstream assets, capacity/off-take contracts or downstream demand, which are typically not fair valued.
- The operating loss in the statutory results includes a net pre-tax loss of £647m (2018: £220m) relating to these re-measurements, with the decline in gas prices over the period being reflected in the fair valuing of historic and current energy procurement to meet the needs of our customers.
- These re-measurements generated a taxation credit of £103m (2018: £39m). As a result, the total net re-measurement loss after taxation was £544m (2018: £181m).
- The Group recognises the realised gains and losses on these contracts when the underlying transaction occurs. The business performance profits arising from the physical purchase and sale of commodities during the year, which reflect the prices in the underlying contracts, are not impacted by these re-measurements.
- Further details can be found in note 7(b).

Group finance charge and taxation

Finance charge

- Net finance costs decreased to £255m (2018: £273m), largely reflecting the impact of a £1.1bn repurchase of gross debt which was completed in 2018 and the maturity of a bond in September 2018. There were no exceptional net finance items (2018: £139m).

Taxation

- Business performance taxation on profit decreased to £218m (2018: £461m). After taking account of tax on joint ventures and associates, the adjusted tax charge was £217m (2018: £458m). The resultant adjusted tax rate for the Group was 34% (2018: 41%). The decrease in adjusted tax rate reflects the more highly taxed E&P businesses contributing 18% of adjusted operating profit, compared to 37% in 2018. An adjusted effective tax rate calculation is shown below.

Group earnings

Adjusted earnings

- Profit for the year from business performance decreased to £428m (2018: £658m) and after adjusting for non-controlling interests, adjusted earnings fell by 34% to £419m (2018: £631m). This reflects the overall decline in adjusted operating profit, partly offset by the lower net finance costs and adjusted tax charge as described above.
- Adjusted basic EPS was down 35% to 7.3p (2018: 11.2p).

Group statutory loss

- The statutory loss attributable to shareholders for the period was £1,023m (2018: profit of £183m). The reconciling items between Group profit for the period from business performance and statutory profit are related to exceptional items and certain re-measurements.
- The movement to a statutory loss, compared to a statutory profit in 2018, is due to the reduction in adjusted earnings and the increase in the exceptional charges and loss from certain re-measurements, all as described above.
- The Group reported a statutory basic EPS loss of 17.8p (2018: profit of 3.3p).

Dividend

- In addition to the interim dividend of 1.5p per share, the proposed final dividend is 3.5p, giving a total full year dividend of 5.0p (2018: 12.0p).

Group tax charge

Year ended 31 December	2019 £m	2018 £m
Adjusted operating profit before impacts of taxation	901	1,392
Add: JV/associate taxation included in adjusted operating profit	(1)	(3)
Net finance cost	(255)	(273)
Adjusted profit before taxation	645	1,116
Taxation on profit	218	461
Share of JV/associate taxation	(1)	(3)
Adjusted tax charge	217	458
Adjusted effective tax rate	34%	41%

Group cash flow, net debt and balance sheet

Operating cash flow

- Adjusted operating cash flow, which is reconciled to net cash flow from operating activities in the table below, fell by £415m or 18% to £1,830m, largely in line with the reduction in adjusted operating profit after accounting for the increase in depreciation.
- Net cash flow from operating activities decreased to £1,250m (2018: £1,934m), which reflects the reduction in adjusted operating cash flow as described above, higher pension deficit repair payments as agreed with the trustees as part of the triennial review, increased exceptional payments largely relating to the Group's restructuring programme and an inflow of margin cash compared to an outflow in 2018.

Net cash flow

- Net cash outflow from investing activities decreased to £503m (2018: £1,007m) primarily due to the Clockwork disposal proceeds, reduced capital expenditure and lower acquisition spend.
- Net cash outflow from financing activities fell to £1,077m (2018: £2,540m) largely reflecting lower repayment of borrowings due to the debt repurchase programme and a bond maturity in 2018, and a slight reduction in cash equity dividends paid reflecting the rebasing of the 2019 interim dividend paid in November 2019.

Net debt

- Reflecting all of this, and the Company adopting IFRS 16 which increased opening 2019 net debt by £394m, the Group's net debt increased by £525m to £3,181m in the year (2018: £2,656m), including cash collateral posted or received in support of wholesale energy procurement.

Balance sheet

- Net assets decreased to £1,795m (31 December 2018: £3,948m) driven by the statutory loss made in the year, net actuarial losses, exchange differences on translation of foreign operations and dividend payments made during the year.

2019 Acquisitions and disposals

- On 1 July 2019 the Group acquired SmartWatt Energy Inc., a leading energy services and solutions company in North America, for consideration of \$37m (£29m). There have been no other material acquisitions during the year.
- On 30 April 2019, the Group disposed of Clockwork Home Services for a gross consideration of \$300m which, after deal-specific adjustments related to working capital, resulted in a net consideration of \$279m (£215m).

- The Group also disposed of Norwegian exploration and production assets, Valemon and Sindre, during the year. Proceeds of £33 million were equal to the carrying value of the assets disposed of subsequent to the recognition of an impairment charge of £49 million. The impairment charge is included in net gain on disposal programmes within exceptional items.
- Further details on acquisitions, assets purchased and disposals are included in notes 4(e) and 12.

Events after balance sheet date

- On 23 December 2019, the Group agreed to sell its 382MW King's Lynn combined cycle gas turbine power station to RWE Generation for headline consideration of £105 million, adjusted for final working capital, based on a valuation date of 31 December 2019. The deal completed on 12 February 2020.
- Further details of events after the balance sheet date are described in note 26.

Risks and capital management

- The nature of the Group's principal risks and uncertainties are largely unchanged from those set out in its 2018 Annual Report, with two changes to note. The Information Systems and Security risk has been separated into two principal risks, enabling more focused conversations on our digital transformation and ongoing security. A new principal risk, Regulated Insurance and Services, has also been identified.
- In addition, there continues to be a high degree of uncertainty surrounding the future relationship between the EU and UK including trade agreements and the supply of electricity and gas.
- Details of how the Group has managed financial risks such as liquidity and credit risk are set out in note S3. Details of the Group's capital management processes are provided under sources of finance in note 24(c).

Accounting policies

- UK listed companies are required to comply with the European regulation to report consolidated financial statements in conformity with International Financial Reporting Standards (IFRS) as adopted by the European Union. The Group's specific accounting measures, including changes of accounting presentation and selected key sources of estimation uncertainty, are explained in notes 1, 2 and 3. Changes include the presentation of the income statement for energy derivative contracts following an IFRIC agenda decision on the recognition of fair value.

Operating cash flow

Year ended 31 December	2019 £m	2018 £m
Net cash flow from operating activities	1,250	1,934
Add back/(deduct):		
Net margin and cash collateral inflow/(outflow) ⁽¹⁾	46	(57)
Payments relating to exceptional charges	298	248
Dividends received from joint ventures and associates	1	22
Defined benefit pension deficit payment	235	98
Adjusted operating cash flow	1,830	2,245

(1) Net margin and cash collateral inflow includes the reversal of collateral amounts posted when the related derivative contract settles.

Our view on taxation

The Group takes its obligations to pay and collect the correct amount of tax very seriously.

Responsibility for tax governance and strategy lies with the Group Chief Financial Officer, overseen by the Board and the Audit Committee.

Our approach

Wherever we do business in the world, we take great care to ensure we fully comply with all of our obligations to pay or collect taxes and to meet local reporting and disclosure requirements.

We fully disclose information on ownership, transactions and financing structures to the relevant tax authorities. Our cross-border tax reporting reflects the underlying commercial reality of our business.

We are committed to providing disclosures and information necessary to assist understanding beyond that required by law and regulation.

We do not tolerate tax evasion or fraud by our employees or other parties associated with Centrica. If we become aware of any such wrongdoing, we take appropriate action.

We ensure that income and costs, including costs of financing operations, are appropriately recognised on a fair and sustainable basis across all countries where the Group has a business presence. We understand that this is not an exact science and we engage openly with tax authorities to explain our approach.

In the UK we maintain a transparent and constructive relationship with Her Majesty's Revenue & Customs (HMRC). This includes regular, open dialogue on issues of significance to HMRC and Centrica. Our relationship with fiscal authorities in other countries where we do business is conducted on the same principles.

We carefully manage the tax risks and costs inherent in every commercial transaction, in the same way as any other cost. However, we do not enter into artificial arrangements in order to avoid taxation nor to defeat the stated purpose of tax legislation.

We actively engage in consultation with governments on tax policy where we believe we are in a position as a Group to provide valuable commercial insight.

The Group's tax charge, taxes paid and the UK tax charge

The Group's businesses are subject to corporate income tax rates as set out in the statutory tax rates on profits table. The overall tax charge is therefore dependent on the mix of profits and the tax rate to which those profits are subject.

Statutory tax rates on profits

Group activities

UK supply of energy and services	19.0%
UK oil and gas production	40.0%
Norway oil and gas production	78.0%
Netherlands oil and gas production	50.0%
United States supply of energy and services	21.0%
Canada supply of energy and services	26.0%
Denmark energy services	22.0%
Republic of Ireland supply of energy and services	12.5%

Tax charge compared to cash tax paid

	Current tax charge/(credit) £m	Cash tax paid/ (recovered) £m
UK	1	(111)
Europe	131	193
North America	57	46
Total	189	128

For details on the Group's effective tax rate see pages 29 to 32.

Further information on the tax charge is set out in note 9 on Pages 135 to 137

Our Group Tax Strategy, a more detailed explanation of the way the Group's tax liability is calculated and the timing of cash payments, is provided on our website at centrica.com/responsibletax

Our Principal Risks and Uncertainties

Understanding those risks that impact our strategy and determining how much risk we would like to take.

The Group presented an update to the 2015 strategy in the July 2019 Interim announcement. The trends identified in 2015 continue to play out with decentralisation of energy systems, shifting power to the consumer; and increasing digitalisation, presenting both opportunities and risks. Identifying and appropriately managing these risks is critical to the successful delivery of our strategy whilst enabling the transition to a lower carbon future.

The strategy update detailed an evolution of the Group Priorities. Within our System of Risk Management and Internal Control we assess risk in relation to the delivery of Group Priorities and determine the level of risk we are prepared to take. Within this framework we consider safety, compliance and conduct to continue to be an underpinning priority. The Group Risk Appetite Statements were updated in the context of the evolved Group Priorities and approved in November 2019:

- **Customer Obsession:** It is only through delighting our customers and giving them propositions that they want and are willing to pay for that we will be able to grow our Group. We have a moderate risk appetite for pursuing innovative opportunities to deliver better service throughout the customer journey.
- **Operational Excellence:** Paying attention to excellence in the basics in our operations and the way we execute our business processes as we serve our customers is fundamental to our competitive success. As we aim to improve our operations, we have a moderate risk appetite for pursuing innovative opportunities to deliver better service through the customer journey and to deliver improved operational excellence.
- **Most Competitive Provider:** Being the most competitive provider enables us to retain our customers and enable the provision of other services and solutions to them thereby growing our Group. We have a moderate to high risk appetite for identifying and implementing innovative improvements to save cost but a lower risk appetite for managing procurement and managing our business-as-usual processes in a rigorous and systematic way.
- **Cash flow Growth:** Our aim is to deliver long-term shareholder value through returns and cash flow growth. We assess our stakeholder expectations in establishing our financial priorities, allocating capital across our portfolio of businesses, and operating within a disciplined financial framework. We have a moderate risk appetite for seeking opportunities to deliver cash flow growth. However, there are some aspects of this priority impacted by external risks where we have to accept a higher risk appetite.
- **Empowered Colleagues:** A productive, empowered and capable workforce is critical to delivery of our Group strategic priorities. Accordingly, we accept a moderate level of risk in finding effective ways to empower ourselves to innovate and to attract, develop and reward people with the diverse capabilities needed to deliver our ambitions.

- **Safety, compliance and conduct:** We put customers at the heart of everything we do. As part of treating customers fairly we set high standards of fairness and have a low risk appetite for failures of conduct towards customers. Our risk appetite is as low as reasonably practicable as we continue to strive for an incident-free workplace and to conduct business operations in compliance with the laws and regulations and we have a low appetite for rewarding and retaining people who fail to demonstrate Our Values and act within Our Code.

Strengthening our System of Risk Management and Internal Control

Each business unit and Group function is responsible for identifying and assessing its significant risks. We consider both the potential impact to the Group and the likelihood of occurrence on an inherent and residual basis and aggregate these risks within defined Principal Risk categories. The Executive Committee then considers these perspectives alongside broader external and internal factors to create a Group-wide set of prioritised risks.

We categorise our risks as:

- **Risk Requiring Standards (RRS):** Risk with negative impacts that we control through Standards and Management Systems, for example process safety or data security.
- **Risk Requiring Judgement (RRJ):** Risk that we choose to take to execute our business strategy, for example new products or business improvement opportunities.
- **External Risk:** Risk that requires a focus on scenario and contingency planning with little or no ability to reduce likelihood, for example extreme weather or geopolitical turbulence.

We identify all 'severe, but plausible' consequences of our risks, where the realisation is more than remote in likelihood. These consequences are considered in our assessment of viability as described on pages 44 to 45.

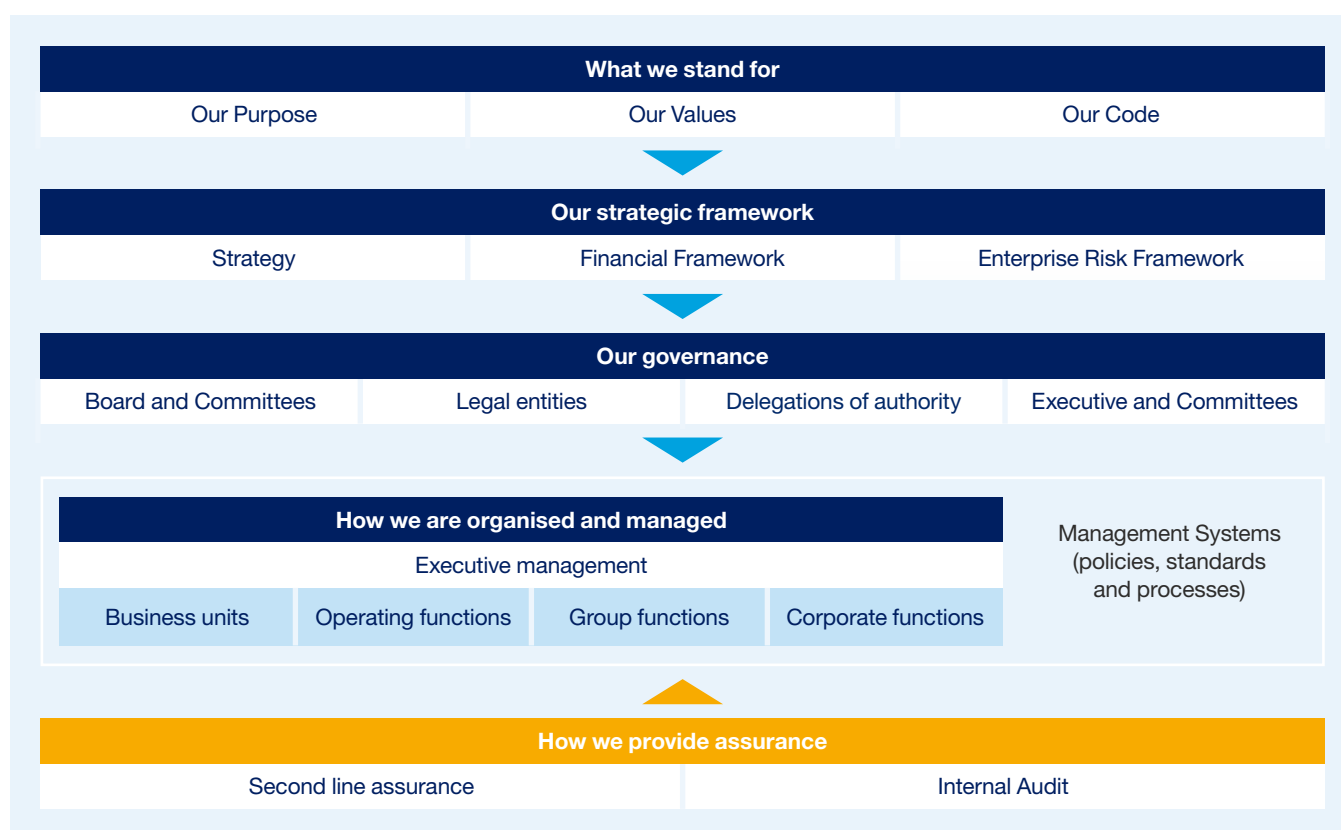
On an annual basis, we evaluate our System of Risk Management and Internal Control, learning from any control incidents that have arisen, to ensure we are mitigating risks in line with our risk appetite. We are evolving our System of Risk Management and Internal Control to ensure it remains appropriate in support of our strategy.

Evaluating risks through our Enterprise Risk Framework

Our Enterprise Risk Framework is designed to enable us to identify, evaluate and mitigate our risks appropriately. It comprises six steps:



Our System of Risk Management and Internal Control: How Centrica works



Mitigating risk through our System of Risk Management and Internal Control

Our System of Risk Management and Internal Control is central to our governance processes and comprises the following elements:

What we stand for:

- Our Purpose: We are an energy and services company. Everything we do is focused on satisfying the changing needs of our customers and enabling the transition to a lower carbon future.
- Our Values: Our Values of Care, Collaboration, Courage, Delivery and Agility underpin our strategy and Group Priorities.
- Our Code: This was launched in early 2018 to replace our Business Principles and provides the foundation for how we operate.

Our strategic framework:

- Strategy: This is aligned throughout the organisation by the five Group Priorities and underpinning priority of safety, compliance and conduct.
- Financial Framework: Sets out parameters and targets within which we operate to guide our strategic planning and financial decision-making.
- Enterprise Risk Framework: Incorporates the Principal Risks within the Group Risk Universe.

Our governance:

- Board and Committees: Structured to effectively execute required duties and through which our Principal Risks are monitored.
- Legal entities: Subsidiary company legal entities with boards of directors required to meet legal and regulatory obligations.
- Delegations of authority: Accountability is delegated through the organisation to individuals in accordance with risk appetite.
- Executive and Committees: Oversight to ensure appropriate planning and performance management.

How we are organised and managed:

- Management Systems: The detailed policies, standards and processes establishing the mandatory requirements and which are required for the systematic management of related risks.

How we provide assurance:

- Second line assurance: Ensuring policies and standards are complied with through monitoring and testing activities performed by individuals who are not directly responsible for the operation of the controls relating particularly to Finance, Health Safety & Environment (HSES), and Digital Technology Services.
- Internal Audit: Providing confidence to the Board, via the Audit Committee, that the Group has appropriate risk management procedures and effective controls in place.

Changes in risk climate and emerging risks

We monitor closely the evolving risk climate in relation to each of our Principal Risks. We consider that the overall risk climate has broadly remained unchanged over the past year, but the markets in which the Group operates continue to be challenging.

Our global Consumer businesses continue to face significant uncertainty with respect to political risks and potential regulatory intervention. Markets in both the UK and US remain highly competitive with pressure from new and existing entrants. Whilst the outcome of the UK general election in December has provided greater certainty over the UK's Brexit strategy, the prospect was raised of the nationalisation of parts of the energy sector under an alternative government in the future. Our UK Energy Supply business is now operating in a market subject to a price cap with the potential for further regulation in UK markets. Recent developments in US states (notably the announcement by New York State to re-regulate aspects of its market) are indicators that further interventions are also a possibility in North American markets.

The Board recognises the significant emerging risks posed by climate change. A climate change risk register is being developed to identify and assess the Group's climate change risks which will be integrated into the Board's oversight of risk through the Group Enterprise Risk Framework. Further details of the risk and opportunities posed by climate change can be seen on pages 46 to 51.

The Group continues to monitor risks relating to global energy and services trends. Our Strategic Update in July 2019 highlighted that the Company's focus would be on its strengths of energy supply and its optimisation, and on services and solutions centred around energy, with an emphasis on helping our customers transition to a low carbon future. This focus is critical to help the Group deliver customer-led growth. Quarterly performance reviews are held with each business and function to monitor progress against targets and embed continuous improvement.

The continued drive for cost efficiency with a view to becoming the lowest cost provider in all our markets, consistent with chosen brand positioning and propositions, is key for the Group, but brings associated risks and challenges. The volume, pace and complexity of change remain significant, including continued large-scale transformational programmes, organisational and structural changes. The Board is focused on risks associated with our people, ensuring that talent is retained and the Company has the capabilities and capacity needed to deliver the strategic goals for 2020 and beyond.

Our Information Systems are transitioning to a new operating model, designed to create a new customer-centric architecture approach to support our Group priority of customer obsession. Security and privacy risks remain a core focus area for the Board and regular Board reviews consider the threats and mitigating actions being taken to detect and protect against potential physical, cyber and insider attacks.

Maintaining capital discipline and balance sheet strength is key and the Board focuses on monitoring our pension obligations and the credit rating of the Group. To mitigate the risk of rising pension obligations and contributions a revised pension funding plan has been agreed and increased interest rate hedging will mitigate the risk of further deficit growth.

Principal Risks

The Group Risk Universe is made up of a holistic framework of Principal Risks, laid out below in the Group's order of prioritisation based on potential impact then likelihood of the risk. We have indicated if the magnitude of the risk driving the prioritisation of risks has increased, decreased or remained unchanged from last year. The Board makes a robust assessment of these Principal Risks, considering future performance and our ability to deliver the strategy, including solvency and liquidity risks. In order to reflect the evolving risk landscape, we have made a number of changes to our Group Risk Universe:

- **Information Systems and Security:** the Board agreed to separate this into two Principal Risks (Digital Technology and Information Systems and Cyber, Security and Resilience), enabling more focused conversations on how we are investing in our digital transformation and our ongoing security and recognising the different appetites for risk between these two areas.
- **Regulated Insurance and Services:** a new Principal Risk, capturing risk relating to our regulated insurance and services businesses British Gas Insurance Limited and British Gas Services Limited. This will facilitate the alignment of our Group Enterprise Risk Framework with the requirements for these businesses.

For each Principal Risk, we discuss the nature of the risk and the impact on our Group Priorities. Each Principal Risk is regularly overseen directly by the Board or one of its Committees, with the Board retaining overall responsibility for risk across the Group.

Our assessment of risk extends to risks associated with our investments in joint ventures and associates, including our nuclear business. The impact and likelihood of these risks are evaluated and reported using a consistent approach.

Non-Financial Reporting Statement

The following Principal Risks have been identified as specifically relating to the matters listed above: Health, Safety and Environment (HSE), People, Strategy Delivery, Legal, Regulatory and Ethical Standards Compliance and Procurement and Supplier Management (Pages 38 to 43).

Principal Risk:	Related topic:
Health, Safety and Environment	Environment and Employees
People	Human Rights and Employees
Strategy Delivery	Social matters
Legal, Regulatory and Ethical Standards Compliance	Anti-bribery and corruption
Procurement and Supplier Management	Human rights, anti-bribery and corruption

Description	<p>Political and Regulatory Intervention</p> <p>Risk of political or regulatory intervention and changes, including those resulting from Brexit, or a failure to influence such changes.</p> <hr/> <p>External Risk</p> <p>Governance oversight: Board</p> <hr/> <p>Priority ↑ ≡</p> <p>Magnitude NO CHANGE</p>	<p>Financial Market</p> <p>Risk of financial loss due to our exposure to market movements, including commodity prices, inflation, interest rates and currency fluctuations.</p> <hr/> <p>External Risk with elements that are Risks Requiring Judgement.</p> <hr/> <p>Governance oversight: Board and Audit Committee</p> <hr/> <p>Priority ↑ ≡</p> <p>Magnitude NO CHANGE</p>	<p>Health, Safety and Environment (HSE)</p> <p>Risk of failure to protect the health and safety of customers, employees and third parties or to take appropriate measures to protect our environment and in response to climate change.</p> <hr/> <p>Risk Requiring Standards</p> <p>Governance oversight: Board and Safety, Health, Environment, Security and Ethics Committee</p> <hr/> <p>Priority ⚠</p> <p>Magnitude NO CHANGE</p>
<p>Potential impacts</p>	<p>Brexit continues to pose risks should the UK fail to agree a trade deal with the EU or through macro-economic impacts following the UK's exit from the EU. While the default price cap has now been in force in the UK market for 12 months, there is continued regulatory pressure in the Consumer Energy Supply markets in the UK and North America that could result in the erosion of our profit margins. There is a risk of partial/total regulation of a small number of retail and/or natural gas markets in the US. Operating costs could also increase in the case of further smart meter and/or energy efficiency obligations. The UK General Election has brought the threat of nationalisation back onto the political agenda.</p>	<p>Due to our large upstream and downstream business positions, our exposure to adverse price movements in commodity markets could impact profitability and cash flow generation across the business. While increased volatility in commodity prices could provide more opportunities, it could also give rise to higher collateral costs and/or additional credit risk for both Energy Marketing & Trading (EM&T) and North America Business. Further, it would create volatility in asset and contract valuations. An unseasonably warm autumn/winter in the UK and a cooler summer in the US could reduce customer demand significantly.</p>	<p>Our operations have the potential to result in personal or environmental harm. Significant HSE events could have regulatory, financial and reputational repercussions that would adversely affect some, or all, of our brands and businesses. We recognise and report on incidents that do occur, as described on page 19.</p>
<p>Mitigation</p>	<ul style="list-style-type: none"> • We are committed to an open, transparent and competitive UK energy market which provides choice for consumers. • Executive Directors and senior management actively engage in discussions with political parties, regulatory authorities and other stakeholders. • We have dedicated Corporate Affairs and Regulatory teams which examine upcoming political and regulatory changes and their impact. Our dedicated Brexit project group continues to assess the Brexit-related risks as the UK aims to negotiate a trade deal with the EU during 2020. 	<ul style="list-style-type: none"> • Financial risk is reviewed regularly by the Financial Risk, Assurance and Control Committee, and the Group Ethics, Risk, Assurance, Control and Compliance Committee to assess financial exposures and compliance with risk limits. Regular review is also undertaken by the Audit Committee. • Stress testing analysis is presented weekly to the EM&T Risk Committee. • As we move into new trading arrangements, we are focused on ensuring that our financial risk policies remain appropriate to the risks we face. • We have appropriate hedging strategies in place that are regularly updated to mitigate exposure to commodity and financial market volatility. • We continue to invest in our systems to further automate and strengthen our control environment. 	<ul style="list-style-type: none"> • HSE Management Systems are established to include the policies, standards and procedures to protect customers, employees and third parties. • We continue to invest in training to ensure we maintain safe operating practices and require all employees to complete the relevant online HSE courses for their role. • We drive an Incident Free Workplace (IFW) culture across our business. • We undertake regular reviews and have assurance processes in place with reporting to the HSE Committee on a quarterly basis. • We engage with regulatory agencies such as the Environment Agency, Oil and Gas Authority and UK HSE to ensure we comply with legislative/regulatory requirements. • We are restructuring our business to make it less carbon intensive and we engage with climate change bodies and NGOs to offer our perspective, understand the direction of future actions and assess our readiness to respond to change.

People

Risk that we are unable to attract and retain employees to ensure that the business has the appropriate capabilities to meet our strategic objectives. There is also a potential risk of industrial action as a large proportion of our field and office-based employees are represented by trade unions and works councils.

Risk Requiring Judgement with elements that are **Risks Requiring Standards**.

Governance oversight: Board and Safety, Health, Environment, Security and Ethics Committee

Priority



Magnitude

INCREASE

Change Management

Risk of failure in the identification, alignment and execution of change programmes and business restructuring.

Risk Requiring Judgement with elements that are **Risks Requiring Standards**.

Governance oversight: Board

Priority



Magnitude

INCREASE

External Market Environment

Risk that events in the external market or environment could hinder the delivery of our strategy.

Risk Requiring Judgement

Governance oversight: Board

Priority



Magnitude

NO CHANGE

Failure to attract and retain key capabilities across the business could have a detrimental impact on our ability to meet our strategic objectives.

The risk of industrial action in our businesses may have a potential impact on customer service levels and retention.

We require the right behaviours from our leaders and employees to deliver our business strategy in line with Our Values and Our Code.

If transformation projects are not aligned to our strategic objectives, or not implemented appropriately, the expected benefits may not be realised and resources for other critical projects may be depleted.



There are many transformation initiatives that could be disruptive and/or result in compromise to the control environment if not governed appropriately.

We operate in highly competitive markets, where customer behaviour, needs and demands are evolving due to digitalisation, energy efficiency, climate change, government initiatives and the general economic outlook. Failure to react appropriately and rapidly to changes in customer behaviour could result in the erosion of our customer base, leading to reduced revenues and associated margins. In addition, we are subject to global market volatility in our upstream businesses in commodity markets.

- Our Code and Our Values set the behavioural expectations for all employees and protection of human rights.
- The Executive Committee has clear oversight through regular discussions of the people-related challenges inherent in our transformation programme.
- We have been developing a more strategic relationship with our trade union colleagues and engage with them on restructuring and issues that could impact terms and conditions, with clear and open processes to cultivate an environment of trust and honesty.
- We conduct annual employee engagement surveys and results are reviewed and actioned by senior leaders.

- We have a standardised requirement articulated as Our Approach to Managing Change Impacts.
- Transformation programmes are approved by the Board via the Group Strategic Planning and capital allocation process.
- Investment appraisal criteria are defined in Group Investment Committee Guidance.
- Progress on specific projects is consistently monitored through Steering Groups and reported through to the Board.
- We have dedicated change capability at Group and business unit level to monitor the realisation of benefits, the prioritisation of efforts and to share best practice.
- We have post-merger integration procedures in place to integrate acquired businesses.

- We focus on understanding consumer segments and their needs, through products and services that are attractive and competitive.
- We undertake regular analysis of commodity price fundamentals and their potential impact on our business plans and forecasts.
- Our Market and Competitive Intelligence team monitors movements in markets and provides information to enable appropriate decision-making.
- The Group is now equipped and committed to help our customers transition to a lower carbon future.
- We have developed Centrica Innovations and our Technology & Engineering function to keep abreast of technological advances.

Description	<p>Strategy Delivery</p> <p>Risk that our strategy is not appropriate to respond to external issues and/or the risk that the strategy is not deliverable due to insufficient capability.</p> <hr/> <p>Risk Requiring Judgement</p> <p>Governance oversight: Board</p> <hr/> <p>Priority </p> <p>Magnitude DECREASE</p>	<p>Brand, Trust and Reputation</p> <p>Risk that our competitive position is compromised by poor standards of fairness and transparency, and by failing to protect our brands.</p> <hr/> <p>Risk Requiring Judgement</p> <p>Governance oversight: Board</p> <hr/> <p>Priority </p> <p>Magnitude DECREASE</p>	<p>Cyber, Security and Resilience</p> <p>Risk of IT system internal misuse, cyber-attack, security of IT systems and resilience and business continuity.</p> <hr/> <p>Risk Requiring Standards</p> <p>Governance oversight: Board, Audit Committee and Safety, Health, Environment, Security and Ethics Committee</p> <hr/> <p>Priority </p> <p>Magnitude NEW</p>
Potential impacts	<p>Successful delivery of our strategy requires serving customers in a way that satisfies their changing needs in a competitive marketplace. Failure to identify changing trends in customers' needs, stay ahead of technological and digital advancements, develop appropriate responses to changing markets and competitive environments, and build the necessary capabilities to compete, have the potential to adversely impact our cash flow growth and value goals.</p>	<p>Failure to appropriately manage brand perception, media attention and lobbying from pressure groups could impact customer sentiment and could ultimately result in a reduction in overall customer numbers.</p> <p>Failure to be fair and transparent could lead to reputational damage, falling share prices and, in the case of very poor standards, legal and regulatory action.</p>	<p>Our substantial customer base and strategic requirement to be at the forefront of technological development mean that it is critical that our technology is robust, our systems are secure and our data is protected.</p> <p>Sensitive data faces the threat of misappropriation, for example from hackers and viruses, leading to potential financial loss and/or reputational damage.</p>
Mitigation	<ul style="list-style-type: none"> • The Board sets and reviews the Group's strategy, determining the strategic direction and confirming the strategic choices made by the business. Regular reviews are conducted considering changes in market trends and the competitive environment, social matters and the business response. • The Board and Executive Committee regularly review the capabilities required to deliver on the strategy and address issues as they appear. • We have a clear financial framework to ensure capital is allocated in accordance with our strategy and that balance sheet strength and return on capital boundary conditions are met. • We have dedicated teams to ensure we continue to develop and innovate in new technologies. • Our Digital Technology Services function works in partnership with change functions to assure and deliver programmes of change. 	<ul style="list-style-type: none"> • We aim to deliver a fair, simplified and transparent offering to all our customers. • We engage with NGOs, consumer and customer groups, political parties, regulators, charities and other stakeholders to identify solutions to help reduce bills and improve trust in the industry. • We review and monitor changes in our customer brand position through NPS. • We are transforming our complaints process to lower backlogs and resolution times, and to address root causes. • We closely monitor key metrics including broken promises/ appointments, grade of service and complaint numbers. 	<ul style="list-style-type: none"> • We operate a combined Global Security function which includes Physical Security and Resilience and Digital Technology Services Information Security. • Our information security strategy seeks to integrate information systems, personnel and physical aspects to prevent, detect and investigate threats and incidents. • We have established governance bodies to oversee compliance with new security requirements. • We regularly evaluate the adequacy of our infrastructure and IT security controls, test our contingency and recovery processes, and undertake employee awareness and training. • Controls testing and security patching around our core systems is performed regularly, and our controls are further tested by outside experts.

Balance Sheet Strength and Credit Position

Risk that our balance sheet may not be resilient, with implications for our ability to withstand difficult market or trading conditions or financial stresses to the business.

Risk Requiring Judgement

Governance oversight:

Board and Audit Committee

Priority



Magnitude

INCREASE

Failure to operate within the Group's financial framework could result in risk to maintaining our target credit rating, which would impact our access to cost-effective capital and trading arrangements.

Long-term financial obligations may increase in value due to factors both inside and outside of our control, such as pension schemes, resulting in additional funding required to meet our obligations.

- We assess available resources on a regular basis. Significant committed facilities are maintained with sufficient cash held on deposit to meet fluctuations as they arise.
- We model the severe but plausible scenarios and consequences of our risks and their potential to impact our net debt position.
- The current credit rating position is reported and discussed regularly by the Board.
- We consider accounting assumptions impacting on our balance sheet carefully, including decommissioning and impairment.
- Long-term obligation estimates are updated annually.
- Counterparty exposures are restricted by setting credit limits for each counterparty, where possible with reference to published credit ratings.
- Wholesale credit risks associated with commodity trading and treasury positions are managed in accordance with Group policy.

Financial Processing and Reporting

Risk of errors or losses arising from the processing and reporting of financial transactions for both internal and external purposes.

Risk Requiring Standards

Governance oversight:

Board and Audit Committee

Priority



Magnitude

NO CHANGE

The accounting landscape is evolving with the adoption of IFRS 16 in 2019.

During the current transformation of our Finance function the potential for failures in core controls is increased.

There is a risk that we fail to comply with relevant tax and regulatory requirements.

- The Audit Committee reviews our compliance with both our internal policies and external requirements.
- The Audit Committee has regularly reviewed progress with regard to the further strengthening of the control environment. During 2019 Project Link was established to further enhance the financial control environment of the Group.
- Our financial control framework incorporates our financial controls and management self-assessment compliance.
- We undertake detailed testing and evaluation of the effectiveness of our controls in response to critical financial risks, reporting to the Finance, Risk, Assurance and Control Committee quarterly.
- The Group Tax function has a control framework, to ensure compliance with all requirements, which has been globalised to drive consistency and simplification.

Customer Service

Risk of failure to consistently provide good quality customer service through the customer lifecycle, with potential consequences being increased consumer churn and declining gross margin.

Risk Requiring Judgement

Governance oversight:

Board

Priority



Magnitude




NO CHANGE

The delivery of high-quality customer service is central to our business strategy. With the entry of new competitors to the market, customers are increasingly likely to switch if they are unimpressed with their customer experience.

Remaining at the forefront of digital developments and innovation is critical as it leads to increased choice and control for our customers.

We also face risks regarding our ability to develop and price propositions competitively and profitably, which has increased recently as our business moves into new markets.

- Leadership teams in our frontline businesses establish accountability for specific aspects of the customer journey and assess performance daily and weekly.
- We operate an environment of continuous improvement, incorporating an accredited programme (STAR), and use root cause analysis of complaint and NPS insight to continuously improve our service delivery.
- Customer and Field Operations teams monitor customer service levels, ensuring enquiries are answered in a timescale and manner acceptable to the customer, complaint levels are minimised, and that customer satisfaction is reviewed at all stages of the customer journey.
- Customer service agents are quality assessed for consistency with a rigorous training and performance management programme.
- Performance parameters are monitored weekly for all third-party service providers involved in the customer service process.

Description	<p>Digital Technology and Information Systems</p> <p>Risk of reduced availability and sustainability, data optimisation and business benefit realisation associated with IT systems and data essential for our operations.</p> <hr/> <p>Risk Requiring Standards and elements that are Risks Requiring Judgements.</p> <hr/> <p>Governance oversight: Board, Audit Committee and Safety, Health, Environment, Security and Ethics Committee</p> <hr/> <p>Priority  Magnitude NEW</p>	<p>Business Planning, Forecasting and Performance Management</p> <p>Risk that plans and forecasts may not be deliverable or may fail to drive efficient and effective performance, and the risk of failures in performance reporting.</p> <hr/> <p>Risk Requiring Judgement with elements that are Risks Requiring Standards.</p> <hr/> <p>Governance oversight: Board</p> <hr/> <p>Priority  Magnitude NO CHANGE</p>	<p>Asset Development, Availability and Performance</p> <p>Risk that failures in the development or integrity of our investments in operated and non-operated assets could compromise performance delivery.</p> <hr/> <p>Risk Requiring Judgement</p> <hr/> <p>Governance oversight: Board</p> <hr/> <p>Priority  Magnitude DECREASE</p>
Potential impacts	<p>Reliance on our IT infrastructure is significant, and it is therefore key that our systems are available in line with user requirements but balanced with financial resources to ensure sustainability.</p> <p>Our data is a key asset and optimisation of that data is key to delivery of our strategic objectives.</p> <p>Failure to deliver IT solutions in support of the prioritised objectives and change programmes in the business would have consequences both for our organisational transformation and, in some cases, our compliance obligations.</p>	<p>We prioritise how we allocate resources according to our business plans and forecasts.</p> <p>Failure to accurately plan and forecast, accounting for the evolving business environment, could result in sub-optimal decisions and failure to realise anticipated benefits.</p>	<p>Failure to invest in the maintenance and development of our assets could result in significant safety issues or asset underperformance through unplanned outages.</p> <p>Operational integrity is vital to our ability to deliver projects in line with the strategic objectives.</p> <p>During 2019 we experienced asset outages across our Nuclear fleet as reported on page 8.</p>
Mitigation	<ul style="list-style-type: none"> • We have a Digital Technology Services Strategy Committee in place to track progress of the strategic priorities for technology, data and digital activities. • We regularly evaluate the adequacy of our infrastructure and IT security controls, test our contingency and recovery processes, and undertake employee awareness and training. • Controls testing and security patching around our core systems is performed regularly and our controls are further tested by outside experts. 	<ul style="list-style-type: none"> • Annual planning processes are subject to scrutiny from the Executive Committee and the Board with respect to underlying market trends, competitive threats, organisational capability and delivery. Central contingencies are considered in response to the aggregated risk position. • Group functions utilise standard planning processes in support of business unit priorities, driving improved integration of plans. • The performance of each business unit is reviewed against their plan throughout the year so that any indications of plans not being delivered can be understood and any required actions can be undertaken. • Quarterly performance review meetings involving the Group CEO and CFO enable the review of plans and forecasts, with revisions identified as necessary. • Post Investment Reviews are conducted to assess investment performance, whether benefits were fully realised and lessons that can be applied for future investment. 	<ul style="list-style-type: none"> • Capital allocation and investment decisions are governed through the Investment Committee. • Group-wide minimum standards are applied to all assets, whether operated or non-operated. • Maintenance activity and improvement programmes are conducted across the asset base to optimise effectiveness and maximise production levels.

Legal, Regulatory and Ethical Standards Compliance

Risk of failure to comply with laws and regulations, and to behave ethically in line with Our Code, resulting in adverse reputational and/or financial impact.

Risk Requiring Standards

Governance oversight:

Board and Safety, Health, Environment, Security and Ethics Committee and Audit Committee

Priority



Magnitude

DECREASE

Regulated Insurance and Services

Risk of loss/adverse change in the value of insurance liabilities, due to inadequate pricing and provisioning, resulting from premium and reserve risk, catastrophe risk and other non-life underwriting risks.

Risk Requiring Standards

Governance oversight:

Regulated Entity Boards, Board, Audit Committee and Safety, Health, Environment, Security and Ethics Committee

Priority



Magnitude

NEW

Procurement and Supplier Management

Risk of failure to source effectively and to co-ordinate and collaborate with the supply chain to ensure value delivery and continuity.

Risk Requiring Judgement with elements that are Risks Requiring Standards.

Governance oversight:

Board and Safety, Health, Environment, Security and Ethics Committee

Priority



Magnitude

NO CHANGE

Any real or perceived failure to follow Our Code or comply with legal or regulatory obligations would undermine trust in our business.

Non-compliance could lead to financial penalties, reputational damage, customer churn and/or legal and/or regulatory action.

There is a significant increase in the number of customer claims as a result of extreme cold conditions.

Gross Premium Rate is significantly overpriced leading to low volume sales or Net Premium Rate is significantly underpriced, resulting in inadequate cash flow and/or leading to a high loss ratio, and adversely affecting profitability and solvency.

Claims made by customers are not adequately validated, leading to the completion of work which is not underwritten by the insurer, which adversely impacts the loss ratio BGI is exposed to, or an unintended liability as a result of imperfectly or ambiguously worded policies and/or terms & conditions.

Our business operations rely on products and services provided through third parties, including outsourced activities, infrastructure and operating responsibility for some assets. We rely on these parties to comply with contractual terms in addition to legal, regulatory and ethical business requirements.

Failure to comply with the Group policy and standards when procuring goods and services or to manage key suppliers and contracts effectively could inhibit the ability of the business to maintain competitive products and services or expose the Group to a range of regulatory or legal risks.

- Regulatory compliance monitoring activities are performed by a single function to drive Group-wide consistency and quality.
- Control frameworks are in place to deliver customer experience in line with requirements over sales compliance, billing, retentions, customer correspondence and complaints handling. These are regularly reviewed by relevant leadership teams through KPIs.
- Our Financial Crime team monitors threats throughout the business and adequacy of response to the threat of anti-bribery and corruption.
- A global 'Speak Up' helpline exists to provide a consistent Group-wide approach and reinforce the importance of this channel as a means to flag unethical behaviour.

- We utilise risk models and demand data to understand the cold weather risks with the data and corresponding actions overseen by the Quarterly Insurance Risk Committee.
- Pricing of premiums is closely monitored and reviewed.
- Anti-fraud controls have been designed and implemented to mitigate the risk of fraudulent claims.
- Insurance policy documentation is subject to review and approval at the Joint Insurance Meeting.

- We operate an end-to-end category management process to maximise value capture throughout the procurement lifecycle, from market analysis through to ongoing contract management and monitoring.
- All suppliers are required to sign up to our 'Ethical Procurement' policies and procedures.
- We review the ethical conduct of our suppliers, including a programme of supplier visits to provide additional assurance over practices employed.
- Financial health, human rights risk and anti-bribery and corruption due diligence and monitoring are implemented in supplier selection and contract renewal processes.
- Audits are conducted in relation to third-party operation of jointly operated Exploration & Production assets.

Viability Statement

Requirement

In accordance with provision 31 of the 2018 UK Corporate Governance Code (2018 Code) the Directors have assessed the prospects and viability of the Group taking into account the business model (as set out in the Strategic Report on pages 14 to 15), current position in the context of liquidity and credit metrics of the Group, and principal risks.

Assessment of prospects

Central to our prospects and delivery of our long-term growth objectives is the Group's business model and strategy which was reviewed in 2019 along with the revised Group Financial Framework to 2022 as set out on page 14. A summary of the business strategy is provided in the Strategic report on pages 12 to 13. In assessing our prospects, we consider the success in delivery of our strategy and our current business performance. We are confident that the measures we have taken and the efficiencies we have realised, as described on page 13, leave the Group in a strong relative competitive position.

The progress in delivering the Group's strategic objectives is assessed annually by the Board through its Corporate Planning process. During this process the Group also considers the forecast strength of the Group at the end of the planning period and the forecast cash the Group would generate against its long-term obligations to debt and defined pension holders.

In assessing delivery of the strategic plan, we consider the market context as well as the progress on executing on our strategic objectives. The financial position of the Group, its performance, cash flows and liquidity are presented in the Financial Review on pages 29 to 33. The Board considers the principal risks facing the Group, as set out on pages 34 to 43. The risks we consider to be of greatest significance include:

- the risk of further political or regulatory turbulence or intervention;
- external risks associated with commodity and other index movements;
- risks associated with the effectiveness of our internal control environment in relation to cyber, data protection and customer conduct; and
- risks related to our competitive positioning in a world of rapid digital innovation and increased customer choice.

Our risk climate has not receded during the year, but we have embedded improved controls and assurance activities in areas including finance, performance management, information security, data protection, cyber, asset integrity, personal safety and regulatory compliance, which we can demonstrate have increased our resilience in the face of both internal and external risks.

The Directors have evaluated and approved the Group Annual Plan for 2020 and, during 2019, have approved the updated strategic plan. In doing so, the Board considered the longer-term prospects of the Group in assessing the forecast strength of the Group, the planned cash generation and obligations at the end of the planning period. Overall, we are comfortable in the prospects for the Group in the context of our strategy and our management of the principal risks.

Assessment of viability

The Board continues to believe that three years is the appropriate timeframe to assess viability reflecting the strategic planning horizon for the Group. The Group's focus on the energy supply and services businesses means our most significant risks continue to be shorter term in nature including the potential for regulatory change and competitive pressures creating disruption in our customer-facing markets. Similarly, the commodity markets in which we operate generally only have transparent and executable pricing available for a three-year period.

A key consideration in the viability assessment is the management of the Group's financing profile through accessing a diverse source of term funding and maintaining access to carefully assessed levels of standby liquidity. These committed facilities of £4.4 billion (set out on page 158) are not due to expire until 2024. The undrawn committed facilities at 31 December 2019 were £3.1 billion.

To make the viability assessment, we have identified five sensitivities (A to E) which incorporate the impact of our principal risks as set out on pages 34 to 43. These five key sensitivities and the linkage to our principal risks are set out in the table below. These risks were selected as they have the most material impact on cash flow, liquidity and credit metrics.

Viability sensitivity tests assessed	Links to Principal Risks
A. External risks associated with a 30% fall in commodity prices	Financial Markets
B. The risk of further regulatory intervention and/or risks in relation to cyber, data protection and customer conduct	Legal, Regulatory and Ethical Standards Compliance Cyber, Security & Resilience Digital Technology and Information Systems
C. Significant under performance operationally of our Upstream asset portfolio	Health, Safety and Environment Asset Development, Availability and Performance
D. Failure to fully deliver our growth agenda and programme to transition Centrica to a low cost, customer focused provider	Change Management People Strategy Delivery External Market Environment
E. Additional Pension contributions are required, the level of undrawn credit facilities are reduced and the Group is subject to a single notch credit downgrade	Balance Sheet and Credit Position

These sensitivities were applied to the Group Annual Plan for 2020 and our Strategic Forecasts over 2021 and 2022 with a particular focus on the impact on headroom against the £3.1 billion of undrawn committed facilities noted previously and our credit metrics.

The five sensitivities were then grouped into three scenarios as set out in the table below. We do not believe that it is plausible that all five sensitivities would occur at the same time, and therefore we consider each of the three scenarios as a plausible combination of events and sensitivities. Within these scenarios, commodity (sensitivity A) and credit rating and liquidity risks (sensitivity E) were selected as constant events in all three scenarios.

Sensitivities grouped into 3 scenarios

Scenario 1: A significant external event outside of the Group's control such as a significant and sustained reduction in commodity price, along with additional regulatory events and additional debt and liquidity risks	A + B + E
Scenario 2: A significant external event outside of the Group's control such as a significant and sustained reduction in commodity price, along with a significant disruption to the Asset-Based Businesses and additional debt and liquidity risks	A + C + E
Scenario 3: A significant external event outside of the Group's control such as a significant and sustained reduction in commodity price, along with an underperformance in delivering Gross Margin and additional debt and liquidity risks.	A + D + E

The scenarios applied sought to confirm that the Group would have sufficient liquidity available against its existing undrawn committed facilities of £3.1 billion and that calculated credit metrics would not imply a sustained fall to below investment grade (S&P BB and Moody's Ba1 NP).

The key assumptions embedded in these tests include:

- historical evidence and the evaluation of similar events observed in the market have been used to inform the potential impact of modelled scenarios;
- whilst we have announced an intention to dispose of the Spirit Energy and Nuclear businesses, this assessment has been prepared on the basis that the current portfolio of assets is maintained and no disposal proceeds are received. By including the disposal the viability assessment is not negatively impacted; and
- no new debt funding within the three-year period of the assessment.

In order to reach a conclusion as to the Group's viability the Directors have considered the following:

- Given the available headroom, did any of the tests breach the available headroom in the 3-year period. While scenario 1 had the most severe impact, sufficient headroom against the £3.1 billion of committed facilities was available in all three scenarios.
- With regards to a downgrade to sub investment grade, scenario 2 had the most severe impact. Given Centrica is currently rated BBB (s)/ A-2 (s) for S&P, and Baa1 (n)/ P-2 (n) for Moody's, this scenario did not lead to a downgrade to sub investment grade (BB for S&P, and Ba1 NP for Moody's).

Minor mitigations were required in certain of the above scenarios, and additional mitigations could be deployed to increase headroom and reduce the risk of a credit downgrade include reductions in operational expenditure, bonuses, capital expenditure and dividend payments, all of which are within the Group's control.

Conclusion

The Directors have considered all the above factors in their assessment of viability over the next three years, including the availability of mitigating actions within their control in the event that one of the scenarios above materialises. We have performed sensitivity analysis that enables the Directors to confirm that they have a reasonable expectation that no individual risk, or plausible combination of risks, will impact on the Group's ability to continue to operate and meet its liabilities, as they fall due, over a period of at least three years.

A Pathway to Net Zero

Climate change is the greatest threat facing society and the energy sector is at the forefront of the need to respond. That's why we're committed to enabling a lower carbon future and why we've set out key policy recommendations to support a pathway to net zero.

We welcome the political momentum that has developed around the need to tackle climate change and we are committed to working with governments, regulators and legislators, to ensure we have the right policies and frameworks in place to achieve net zero by 2050.

The next decade is vital if we are to mitigate the worst effects of climate change. We do not, however, believe that the world is moving fast enough in taking action or finding solutions to some of the challenges around net zero. Decarbonisation will require action at all levels of society – it will involve inspiring and empowering consumers, as well as policy support to introduce and scale up activities and technologies for a lower carbon future.



Power

The power sector has been at the heart of the energy transition and is where the quickest progress can be made in reducing emissions over the next 20 years. Despite generation from renewables being at an all-time high and generation from fossil fuels at an all-time low⁽¹⁾, the UK still needs a quadrupling of renewable capacity by 2050⁽²⁾. To maximise utilisation and minimise costs, we also need a mix of technologies to back-up intermittency and balance the grid while avoiding the need for expensive network upgrades and the construction of large-scale centralised assets.

We're calling on the UK Government to:

- stimulate investment and reduce risk in expanding renewable generation by allowing developers to participate in regular renewable auctions (CfDs), and set an escalating carbon price with a clear forward trajectory; and
- implement a policy framework and reforms to the network architecture that support renewables by driving expansion of flexible and decentralised technologies such as storage, solar and demand response.



Heat

Fossil fuels dominate heating, so transforming how we heat our homes and businesses is an urgent challenge. With 85% of UK homes having a gas boiler⁽³⁾, we need to accelerate the deployment of lower carbon heating solutions. Hybrid heat pumps are the most practical and cost-competitive alternative in the near term, while hydrogen is needed longer term.

We're calling on the UK Government to:

- enable the roll-out of hybrid heat pumps by setting up a grant scheme when the Renewable Heat Incentive ends in 2021, while expanding wider energy efficiency funding for industrial, commercial and public sectors;
- introduce higher decarbonisation standards by bringing forward a Future Homes Standard to 2021 from 2025, banning the use of gas and oil-fired heating in new builds as well as phasing out oil and coal usage in off-grid homes by 2022; and
- stimulate investment and research to define the longer-term role that heat networks, heat pumps, biogas and hydrogen can play.



The gas network

Gas provides an important back-up to intermittent renewables and will remain a key part of the energy mix as we transition to a lower carbon future. We believe green gas and hydrogen should increasingly be injected into the network to replace natural gas. This would also help decarbonise heat in the least disruptive and most cost-effective way.

We're calling on the UK Government to:

- provide greater clarity on the mechanisms that support green gas beyond 2021 to boost investment and increase blending of green gas in the network;
- collaborate across the sector to update the Gas Quality Index which will allow more green gas to be injected into the network and carbon savings to be banked more efficiently; and
- encourage policy to accelerate trials and adoption of hydrogen and Carbon Capture and Storage (CCS) in the long term. Key sites should be identified to support large-scale projects, while new funding models are needed to encourage investment with more effective allocation of risk between the developer and government.

2.7GW[†]

Our flexible, distributed and low carbon capacity under management

(1) Carbon Brief, Analysis: UK electricity generation in 2018 falls to lowest level since 1994, 2019.

(2) Committee on Climate Change (CCC), Net Zero Report, 2019.

† Included in PwC's limited assurance engagement.

9,000

Our global footprint of skilled engineers and technicians to help decarbonise homes and businesses

(3) CCC, Heat in UK Buildings Today, 2017.

Largest UK biomethane provider

We have a 50% share in Barrow Green Gas, the UK's largest shipper of biomethane

Towards this aim, we have set out key policy recommendations for the near term that will support energy's pathway to net zero across the critical areas of power, heat, the gas network and transport.

With the UK now committed to become net zero by 2050, we have focused primarily on outlining the policy recommendations that we believe will help the UK Government achieve this, while summarising how we advocate for lower carbon policies beyond the UK.



Transport

Transport is the most polluting sector in the UK⁽⁴⁾ and electric vehicles (EVs) provide a great opportunity to cut emissions. With EVs set to become cost-competitive by the mid-2020s and The Paris Declaration on Electro-Mobility and Climate Change targeting 100 million EVs to be on the road by 2030, it's vital that we continue their drive into the mainstream and expand the charging infrastructure rapidly.

We're calling on the UK Government to:

- require EV charge points to be smart and interoperable to maximise usability and reduce 'range anxiety' which is a key barrier to take-up;
- allow EV charging to take place in a competitive market to ensure consumers get the best deal; and
- enable research and development into low carbon gases like biogas and hydrogen, which will likely support the decarbonisation of larger vehicles and shipping.

17,200

Electric vehicle charge points we've installed since 2013

(4) Office for National Statistics, Road Transport and Air Emissions, 2019.

Our commitment to net zero

Since 2015, we have been repositioning our business away from centralised power generation and oil and gas production, towards providing energy services and solutions that enable a lower carbon future. And in 2019, we set 2030 Responsible Business Ambitions to:

- help our customers reduce their emissions by 25% through direct and indirect action;
- enable a decarbonised energy system with 7GW of flexible, distributed and low carbon technologies; and
- be net zero by 2050 and develop a pathway to it by 2030.

Net zero

Our global recommendations

Tackling climate change is a global imperative, so we also advocate lower carbon policies beyond the UK. Below are a few examples from our core markets.

Ireland priorities:

- ensure that natural gas remains the most cost-effective fossil fuel during the transition to net zero, and introduce appropriate supports to stimulate investment in grid-injected Renewable Gas projects;
- implement appropriate support schemes, funding mechanisms and skills development to help customers transition to lower carbon heating solutions;
- support CCS near Whitegate Power Station to provide a clean and reliable back-up to renewable generation; and
- enable EVs by developing the charging infrastructure and increasing support for Compressed Natural Gas (CNG), Bio-CNG and hydrogen.

North America priorities:

- support robust competitive markets to give consumers greater choice and access to a range of low carbon and energy efficiency solutions;
- develop smart grid capabilities that enable data insights, flexibility and distributed energy solutions to balance a lower carbon grid;
- promote electrification and reform wholesale markets to send fair price signals that recognise the full value of carbon-free generation, energy efficiency and demand response; and
- support the transition to EVs, which includes robust competition for charging services.

[Read more about our strategy on Pages 12 to 13](#)

[Read more about our Responsible Business Ambitions on Pages 48 to 54](#)

Delivering our Responsible Business Ambitions

Energy is at the heart of homes, businesses and communities and has huge potential to contribute to a more sustainable world.

We take our role as a global energy services and solutions company very seriously, and are committed to accelerate the positive impact we have in society and on the environment. That's why, in 2019, we introduced our 2030 Responsible Business Ambitions – a set of 15 global goals that help our customers run their world in ever more sustainable ways.

Our 2030 Ambitions support the United Nations Sustainable Development Goals and address some of the most challenging issues facing society, in areas where we can have the biggest impact. This includes tackling climate change, driving innovation to make our customers' lives easier, building a more skilled and inclusive workforce and making our communities stronger.

We have a long journey ahead of us, but, by working closely with our customers and expert partners, we will maximise our positive impact and help create a more sustainable world. In doing so, we will realise our strategy to satisfy the changing needs of our customers and enable the transition to a lower carbon future.

Our 2030 Ambitions are underpinned by our Responsible Business Foundations, which ensure our business operates with integrity.


 **Read more about our Responsible Business Ambitions at**
centrica.com/sustainability

Non-Financial Reporting Statement

In line with the Non-Financial Reporting Directive, we have set out where the relevant information we need to report against can be found, together with an explanation of the relevant Group policies which relate to the below matters and an overall summary of the effectiveness of such policies. Specific examples of how these policies are implemented, any due diligence processes are conducted and outcomes can be found on the pages specified below.

Business Model (Pages 14 to 15)	Social matters (Pages 16 to 17, 19 to 26, 40, 49 and 53 to 54)
Anti-Bribery and Corruption (Pages 43 and 54)	Environment (Pages 16 to 17, 38, 46 to 47, 50 to 51 and 54)
Human rights (Pages 17, 39, 43 and 54)	Non-financial key performance indicators across Our 2030 Ambitions and Foundations (Pages 49 to 54 and 225 to 228)
Employees (Pages 16, 19, 38 to 39, 52 and 54)	

Our Code represents a high-level summary of our key policies and forms the foundation for how we do business. Our policy positions are embodied across our Responsible Business Ambitions and Foundations framework. Where specific policies are published externally, these are shared throughout.

 **Read more about Our Code at**
centrica.com/ourcode

 **Read more about our Group policies including the Diversity, Respect and Inclusion Policy, the Health, Safety, Environment and Security Policy and the Procurement and Corporate Responsibility Policy for Suppliers at**
centrica.com/policies

Our 2030 Responsible Business Ambitions

Helping you run your world in ever more sustainable ways

Our Ambition for Customers

Delivering for our customers




Our Ambition for Climate Change

Enabling the transition to a lower carbon future




Our Ambition for Colleagues

Building the workforce of the future






Our Ambition for Communities

Creating stronger communities




Our Ambition for Customers

Delivering for our customers

Through the latest innovations and a commitment to service, we are making our customers' lives easier.



Key: Progress against Ambitions ▲ On track ▼ Behind

Deliver solutions to make our customers' lives easier

2030 Ambitions	2019 Progress (Year 1)
Help customers understand and manage their energy better	10 Innovations delivered ▲
Give customers peace of mind through tailored propositions and connected technologies	6 Innovations delivered ▲
Develop solutions to help our customers run their worlds	6 Innovations delivered ▲

During 2019, we delivered 22 innovations across our goal areas to transform the way we live, work and move. For example, we:

- introduced and sold 100,000 Hive Radiator Valves which helps customers manage the temperature in individual rooms to save energy and improve comfort; and
- developed innovative technologies through our £100 million Centrica Innovations fund which includes investment in Mixergy. Mixergy is a smart hot water system that only heats the amount of water required by adjusting to household routines while storing excess renewable energy from the grid, improving flexibility and reducing energy use from heat losses by up to 40% a year.

We additionally rolled out existing services and solutions that make our customers' lives easier and more sustainable. Around 1.8 million customers now use Hive connected home products that can be controlled with just a tap on the app – from smart thermostats, plugs, lights and cameras, to contact and motion sensors. Our leadership of the UK's smart meter roll-out was also maintained, with cumulative installs totalling over 7.7 million across homes and businesses, improving bill accuracy and energy management.

Satisfy our customers with excellent service

2030 Ambition	2019 Progress (Year 1)
Make it simpler for people to deal with us in ways that work for them	49% Customers using online account management ▲

Our customers want and deserve a better service. One of the ways we are doing this is through the transformation of our customers' digital experience. We are reorganising processes to create smoother journeys, transforming our IT stack to become more flexible and embedding machine-learning automation alongside improved apps. In UK Home, we have also introduced capabilities to book appointments and track engineer visits online, while upgrading diagnostics to boost first-time fix rates. Actions like these have increased the volume of customers managing their accounts online and improved customer satisfaction, as reflected in our aggregated NPS rising by 5.1 points to +15.1.

[Read more about the digital transformation on Page 21](#)



“ We bought originally three and then another five...no longer do we have either hot or cold spots within the house as the heating is more even and we only heat rooms which we use at certain times of the day.”

Richard Southgate gave his new Hive Radiator Valves a 5-star rating on Trustpilot (18 December 2019)

Our Ambition for Climate Change

Enabling the transition to a lower carbon future

We are helping to shape a low carbon future by enabling our customers, the energy system and our business to manage energy more sustainably.



Key: Progress against Ambitions ▲ On track ▼ Behind

Help our customers reduce emissions in line with Paris goals⁽¹⁾

2030 Ambition

Help our customers reduce emissions by 25%, by direct (3%) and indirect action

2019 Progress (Year 1)

3.9%⁽²⁾

Emission reduction ▲

Over 90% of our carbon emissions arise from our customers. So the greatest contribution we can make to tackle climate change is to help them use energy more sustainably. Through our services and solutions, we directly enabled customers to reduce emissions by an average of 3.9% in 2019. This is equivalent to 2.6mtCO₂e, which is an increase of 180% compared to 2018 and is equivalent to the annual emissions of around 900,000 UK homes.

For example, we:

- continued to grow the infrastructure for a low carbon transport system by installing over 17,200 electric vehicle (EV) charge points since 2013, and joined forces with Ford to deliver charging installations and energy tariffs at scale;
- signed one of the UK's largest combined green energy contracts supplying over 4,500 Catholic schools and churches; and
- partnered with Budweiser Canada to provide 100% certified renewable power to brew beer from zero carbon sources.

Read our Health, Safety, Environment and Security Policy at
centrica.com/HSESpolicy

Enable a decarbonised energy system

2030 Ambition

Deliver 7GW of flexible, distributed and low carbon technologies as well as provide system access and optimisation services

2019 Progress (Year 1)

2.7GW[†]

Flexible, distributed and low carbon technologies ▲

We are helping create a cleaner energy system by pioneering end-to-end solutions that enhance grid flexibility, support renewables and reduce reliance on fossil fuels. In line with plans during 2019, we delivered 2.7GW[†] of flexible, distributed and low carbon technology – enough capacity to directly charge around 400,000 electric vehicles simultaneously. This included signing an agreement with Tokyo Electric Power Company, to use our demand response platform to meet industrial demand more flexibly when the grid is under pressure, which avoids the need to turn on additional generation from fossil fuels. We also provided a route-to-market for renewables with 11GW under management. To further this, we have entered into a long-term Power Purchase Agreement for Intersect Power's Athos Solar I 250MW project, generating clean energy for around 70,000 homes in North America.



Reduce our own emissions in line with Paris goals⁽¹⁾

2030 Ambition

Be net zero by 2050 and communicate our pathway to it by 2030

2019 Progress (Year 4)

55,145[†]

Internal carbon footprint (tCO₂e) ▲

Following the strategic transformation of our business, we now produce over 80% less carbon than we did a decade ago (see Strategy overleaf). During 2019, however, our total carbon emissions rose by 31% compared to 2018 due to increased generation from our upstream assets. Meanwhile, the internal carbon footprint of our property, fleet and travel declined by 39% against our 35% reduction target for 2015-25. The reduction of our 2019 footprint was achieved through low carbon fleet initiatives like installing GPS and 'right sizing' vehicles to smaller and more efficient models, delivering property efficiencies across lighting, heating and cooling systems, alongside savings arising from the restructuring of our business. To further reduce emissions, we joined EV100 which brings together forward-looking companies committed to accelerating the transition to EVs, and commits us to electrify our 12,500-strong fleet by 2030.

(1) Paris goals refer to the global agreement to keep temperature rise well below 2°C above pre-industrial levels, and pursue efforts to limit the increase to 1.5°C.

(2) Direct savings only. We intend to enhance our understanding and disclosure of indirect customer carbon savings relating to decarbonising the energy system and advocating for cleaner energy policies. Read how we are advocating for cleaner energy policies on page 17.

† Included in PwC's limited assurance engagement. See page 225 or centrica.com/assurance for more details.

Task Force on Climate-related Financial Disclosures

Climate change is the greatest challenge facing society, and the energy sector has a key role in tackling it. We are committed to reducing energy's impact on the climate, and support increased disclosure on how companies are responding to this important issue. Towards this, we became signatories of the Task Force on Climate-related Financial Disclosures (TCFD) in 2020, and we are committed to progressively align with the recommendations, as well as continuously improve our disclosure.

Governance

The Board has oversight of climate-related issues. In 2019, the Safety, Health, Environment, Security and Ethics Committee reviewed our position on climate change, our performance against our 2030 Ambitions to tackle climate change (see previous page), and our analysis of asset resilience in a net zero 2050 scenario. Meanwhile, the Centrica Executive Committee's Health, Safety, Environment and Security (HSES) Sub-Committee, which is chaired by the Group Chief Executive and is responsible for setting objectives, targets and policies on climate change, met quarterly during 2019. The Sub-Committee developed, approved and assessed performance against our 2030 Ambitions while performing deep dives on topics such as low carbon products.



TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

Became signatories of the Task Force on Climate-related Financial Disclosures in 2020



Rated 'A' for leadership in action and disclosure on climate change by CDP

Strategy

Our business is based on satisfying the changing needs of our customers and enabling the transition to a lower carbon future. We are moving away from fossil fuel production to focus on providing services and solutions that help our customers run their world in ever more sustainable ways, while setting an Ambition to become net zero by 2050. We have assessed the strategic risks and opportunities of decarbonisation, including a 1.5 degree scenario in the UK, and believe that we are well positioned to succeed in the energy transition. In 2020, we will continue to assess our strategy against the requirements of the low carbon transition while senior leaders will further engage stakeholders such as Climate Action 100+ to inform our strategy (see page 16).

Risk management

Climate change risks are managed through our Enterprise Risk Management process. Risk profiles are produced at a business level and reviewed quarterly at the Group Ethics, Risk, Assurance, Control and Compliance Committee. The HSES function additionally provides horizon scanning, testing and calibration. Meanwhile, longer-term risks are

assessed at the annual Board Planning Conference, which considers how the market environment, technology and policy are influenced by climate change.

We have identified and assessed near- and long-term climate-related risks and opportunities. These include trends in policy, technology and markets, such as the decarbonisation of heat, the electrification of transport and changing consumer behaviour. Physical aspects of climate change have also been considered – from the potential impact of extreme weather on our people and operations, to an increase in average temperatures on demand for services and solutions.

Metrics and targets

We were early adopters of best practice greenhouse gas emissions reporting and have a strong track record in setting and achieving climate-related targets. We monitor and report our global scope 1, 2 and 3 emissions (see table below) and have set 2030 Ambitions that are aligned to Paris goals. As part of our TCFD implementation roadmap, we will develop and implement a framework to track and disclose metrics that assess climate-related risks and opportunities on our business.

Our carbon emissions

	2019		2018	
Total carbon emissions	2,283,514tCO ₂ e [†]		1,737,122tCO ₂ e	
Scope 1 emissions	2,246,167tCO ₂ e [†]		1,698,388tCO ₂ e	
Scope 2 emissions	37,347tCO ₂ e [†]		38,734tCO ₂ e	
Scope 3 emissions	127,209,632tCO ₂ e		126,137,878tCO ₂ e	
Total carbon intensity by revenue	101tCO ₂ e/£m		74tCO ₂ e/£m ⁽¹⁾	
	UK & Offshore	Non-UK	UK & Offshore	Non-UK
Total energy use ⁽²⁾	3,130,631,079 KWh	6,964,542,291 KWh	1,642,646,626 KWh	5,635,480,865 KWh

We report on an equity basis with practices drawn from WRI/WBCSD Greenhouse Gas Protocol, IPIECA's Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions and Defra's Environmental Reporting Guidelines.

† Included in PwC's limited assurance engagement. See page 225 or centrica.com/assurance for more details.

(1) Restated due to a change in accounting methodology.

(2) Total energy use of 10,095,173,370kWh has been included in PwC's limited assurance engagement.

Our Ambition for Colleagues

Building the workforce of the future

We are developing vital skills and a more inclusive workforce to ensure we deliver for our customers.



Key: Progress against Ambitions ▲ On track ▼ Behind

Empower people with future skills

2030 Ambition

Inspire and develop 100,000 people with essential STEM skills

2019 Progress (Year 1)

11,409⁽¹⁾
People ▲

We are developing essential STEM (Science, Technology, Engineering and Maths) skills, to deliver for our customers. In 2019, colleagues learnt new skills through our apprenticeships, Career Development Hub and specialist Learning Academies. From 2020, we want to reach more people with new and inspirational STEM learning content.

(1) May involve double counting if someone has undertaken more than one STEM activity.

Build a more inclusive workplace

2030 Ambitions

2019 Progress (Year 1)

Attract and develop more women into STEM with 40% of STEM recruits to be female

17%
Female STEM recruits ▼

Aspire for senior leadership to reflect the full diversity of our labour markets

29% **10%**
Senior gender diversity ▼ Senior ethnic diversity ▲

Help one million carers stay in or return to work via active promotion of carer-positive policies

1,000
Carers supported ▲

Having a diverse workforce that reflects our communities is key to satisfying the changing needs of our customers. That's why we are passionate about creating an inclusive workplace where everyone feels motivated and able to reach their full potential.

Towards this in 2019, we:

- sought to encourage the next generation of young girls to explore a career in STEM by working with the Royal Academy of Engineering to showcase strong female role models;
- rolled out unconscious bias training with interactive workshops completed by leadership and made further training available to all employees; and
- progressed our carer-positive culture by extending our world-class carers leave allowance to up to six weeks in total, advocated for the introduction of statutory carers' leave in the UK which is now part of the UK Government's legislative programme and hosted peer learning forums to share best practice.

Despite our efforts, progress against some Ambitions were impacted by business transformation so we hope to make greater progress next year. We received recognition for diversity and inclusion activities in 2019, including the Working Families' Best in Care and Eldercare Award while two of our leaders ranked in the OUTstanding LGBT+ Role Model Lists.

[Read our Diversity, Respect and Inclusion Policy at centrica.com/DRIpolicy](http://centrica.com/DRIpolicy)

Our diversity

	2019				Changes to gender senior executives and direct reports not made for 2018			
	Female		Male		Female		Male	
	Headcount	Percentage	Headcount	Percentage	Headcount	Percentage	Headcount	Percentage
Gender breakdown⁽²⁾								
Board of Directors	2	17	10	83	2	17	10	83
Senior executives and direct reports	12	35	22	65	12	32	25	68
Senior management	224	29	561	71	277	28	703	72
All employees	7,420	29	18,507	71	8,723	29	21,359	71

(2) Headcount as at 31 December differs from numbers referenced elsewhere in the Annual Report and Accounts due to different methodologies. To accurately reflect the full diversity of our workforce, we use overall headcount numbers rather than a headcount based on their full-time equivalent. Gender of three employees is unknown. In January 2020, female representation on the Board increased to 23%.

	2019		2018	
	Headcount	Percentage	Headcount	Percentage
Ethnic minority breakdown⁽³⁾				
Board of Directors	3	25	0	0
Senior executives and direct reports	6	18	8	22
Senior management	81	10	86	9
All employees	3,126	12	3,683	12

(3) Based on 63% of employees in 2019 and 65% of employees in 2018 who voluntarily disclosed that they are from a Black, Asian, Mixed/Multiple or other ethnic group across the UK and North America, which constitutes the majority of our workforce.

Our Ambition for Communities

Creating stronger communities

By offering our knowledge and expertise, we are empowering communities to take control of their energy and tackle pressing social issues.



Key: Progress against Ambitions ▲ On track ▼ Behind

Apply new energy technologies to drive positive change

2030 Ambitions	2019 Progress (Year 1)
Deliver £5bn of value for communities through new and distributed energy technologies	£27.6m Value for communities ▲
Deliver £300m in energy efficiency savings to public and essential services	£2.5m Savings for public and essential services ▲

Our services and solutions help communities increase their energy resilience, reduce their environmental impact and unlock financial savings that can be used to build a more productive and prosperous economy for all.

For example in 2019, we:

- enabled money from energy savings to be redirected towards patient care by cumulatively installing distributed energy solutions at 90 hospitals; and
- rolled-out technologies such as solar and battery storage in over 200 UK homes and businesses as part of the Cornwall Local Energy Market trial. The trial will test how flexible demand, generation and storage can support the grid during peak times, help stimulate the growth of renewables and create opportunities to reduce energy bills.

[Read more about how we are saving energy and money to boost healthcare in Devon on Page 25](#)

[Read more about how distributed energy solutions are creating savings for communities at centrica.com/economicfuture](https://centrica.com/economicfuture)

Our research shows that if just 50% of the UK's Industry, Healthcare and Hospitality & Leisure sectors took up distributed energy solutions, the potential benefits would be:

£980m

Annual energy bill savings

260,000

Jobs supported

£18.5bn

Gross value added to the economy

11%⁽¹⁾

Annual carbon footprint reduction

“Sustainable healthcare will help our budgets stretch further and the savings, alongside the reduction in our carbon emissions, are invaluable.”

David Furnival

Group Director of Estates at Facilities, Manchester University NHS Foundation Trust (Centrica Business Solutions customer)

Collaborate across sectors to improve local communities

2030 Ambitions

2019 Progress (Year 1)

Encourage our people to share their skills by volunteering over 100,000 days

2,452

Volunteering days ▼

Deliver 2,500 skills development opportunities for young people not in education or employment

362

Young people ▲

We tackle issues our communities and business care passionately about. In 2019, over 360 young, unemployed people were given the opportunity to gain workplace skills through Movement to Work. This brings the overall number of young people helped through the scheme to 1,800 since 2014. Our volunteering days reduced by almost 50% compared to 2018, with participation impacted by the reorganisation of our business.

£6m

Contributions we have enabled over the course of our flagship charity partnerships with Carers UK, Focus Ireland and the Children's Miracle Network Hospitals in North America

(1) Carbon and economic values are calculated using different scenarios. See centrica.com/economicfuture for more information.

Our Responsible Business Ambitions

Our Responsible Business Ambitions are underpinned by strong foundations that ensure our business operates with integrity.

Customers

We care about our customers and want to be there for them. We spent £164 million in mandatory and voluntary contributions to help people with their energy bills. This included nearly 619,000 customers through the UK's Warm Home Discount scheme and over 2,400 customers via North America's Neighbor-to-Neighbor bill assistance programme. The British Gas Energy Trust supported an additional 24,200 customers and non-customers with energy and debt advice. We are also upskilling our call centre advisers to avoid the need for transferring calls, which contributed to our aggregated complaints per 100,000 customers falling by 1% to 3,429.

Environment

Our environmental impact is monitored and managed closely. Following a reduction of more than 40% across our water and waste consumption in 2018, our water consumption dropped a further 11% to 516,836m³ while our waste decreased 9% to 27,596 tonnes. We do not undertake water-intensive activities in water-stressed zones.

Colleagues

We want our people to feel safe, engaged and rewarded. While there were no significant (Tier 1) process safety events in 2019, we had two Tier 2 process safety events. The events related to a 439kg release of gas into the atmosphere following a partial valve opening at a Spirit Energy platform, while a small fire occurred at a customer's site when a combined heat and power (CHP) engine failed. Meanwhile, our total recordable injury frequency rate increased by 4% to 1.06 per 200,000 hours worked. We strive for an incident-free workplace and aim to continuously improve performance with targeted safety interventions alongside improved controls and monitoring. Alongside physical safety, we also focus on mental health. Mental health support was progressed in 2019 with the introduction of the 'Unmind' Wellbeing app, leadership training and support via our 150-strong network of Mental Health First Aiders. The reorganisation of our business contributed to our employee engagement score declining by 12% to 43% favourable. We recognise our people have been through significant change and we want to improve their experience by connecting them with our purpose and enabling them to perform at their best.

We reward our people fairly. This includes paying at least the Living Wage in the UK and upholding equal pay. We are working to reduce our gender pay gap but recognise that it will take time for the positive impact of our diversity and inclusion action plan (see page 52) to transform our business, sector and society. Our gender pay gap is driven by more men working in higher-paid, traditionally male-dominated technical roles such as engineering and, in 2019, our median gender pay gap reduced by 1% to 30% which remains above the national average.

Communities


Our Code and Our Values help us operate in a way that is beneficial to society by setting out the high standards and behaviours we expect from everyone who works for us or with us. For example, Our Code includes our commitment to uphold and protect human rights. We take action to ensure our people and suppliers are safeguarded from abuses which includes undertaking human rights training and conducting on-the-ground ethical site inspections (see page 17) as part of our work to uphold the UK's Modern Slavery Act. Clear guidance is additionally provided on avoiding bribery and corruption by condemning payments we feel to be improper and taking extra care when offering or receiving gifts and hospitality. To reduce risk, training is provided to colleagues in higher risk roles while our Financial Crime team undertakes due diligence and monitors action to reduce threats including across supplier selection, contract renewals and our gifts and hospitality register. During 2019, we provided refresher training to help employees with their ongoing understanding of Our Code. Due to the significant transformation of our business, completion rates of training dropped from 96% to 82% so we will focus on improving this in 2020. If anyone suspects Our Code is being violated, we provide a confidential Speak Up helpline to raise concerns (see page 56).

We want our presence to be a force for good in our communities. In 2019, we invested £167 million in mandatory, voluntary and charitable contributions (see page 53). We also assessed a further 52 suppliers on their social, ethical and environmental standards which resulted in a sustainability score of 59 (low risk). This is better than the multi-industry average of 45 (medium risk). If suppliers receive a medium or high-risk rating, we consider appropriate action which may involve collaboration to raise standards and conducting an on-the-ground ethical site inspection or terminating our relationship.

 [Read more about Our Code and policies at centrica.com/ourcode](http://centrica.com/ourcode)

 [Read more in our Gender Pay Statement at centrica.com/genderpay](http://centrica.com/genderpay)

 [Read more about our Procurement and Corporate Responsibility Policy for Suppliers at centrica.com/supplierpolicy](http://centrica.com/supplierpolicy)

 [Read more in our Modern Slavery Statement at centrica.com/modernslavery](http://centrica.com/modernslavery)

The Strategic Report, which has been prepared in accordance with the requirements of the Companies Act 2006, has been approved by the Board and signed on its behalf by:

Justine Campbell
Group General Counsel
& Company Secretary
12 February 2020

Directors' and Corporate Governance Report

“ We strive to maintain a robust and effective governance framework which supports the execution of our strategy and remains consistent with Our Values and behaviours.”

Charles Berry
Chairman



Dear Shareholder

This is my first review since becoming Chairman of Centrica in February 2019. I am pleased to introduce the Directors' and Corporate Governance Report for 2019 which sets out the systems and procedures the Company has put in place to structure authority, balance responsibility, and provide accountability to our stakeholders.

2018 UK Corporate Governance Code

In 2018 the Financial Reporting Council (FRC) published its updated UK Corporate Governance Code which applied to the Company from 1 January 2019. The 2018 Code is substantially different from the previous versions and Centrica supports the FRC's aim of setting higher standards of corporate governance to promote transparency and integrity in business and attract investment in the UK for the long term, benefitting the economy and wider society.

The 2018 Code focuses on demonstrating how the governance of a company contributes to its long-term sustainable success, achieves wider objectives and has a greater emphasis on culture and board diversity. These principles already existed in Centrica, and many of the initiatives being promoted by the FRC – including those relating to corporate culture and values, diversity and inclusion, strengthening the stakeholder voice and adopting and operating appropriate remuneration structures – continued to be areas of focus for the Board in 2019.

The Directors' and Corporate Governance Report enables shareholders and wider stakeholders to evaluate how we have complied with the principles of the 2018 Code through the application of its principles. It also illustrates how your Board ensures that the Company has effective corporate governance in place that contributes to the long-term sustainable success of the Company and its strategy for shareholders and for stakeholders more generally.

The 2018 Code and associated guidance are available on the FRC's website at www.frc.org.uk. The index on page 101 sets out where to find each of the required disclosures in respect of Listing Rule 9.8.4 and Disclosure Guidance and Transparency Rules 4.1.5R and 7.2.1.

Highlights

- First year as Chairman
- Three new Non-Executive Directors and one Executive Director
- Applied all the principles and fully complied with the provisions of the 2018 Code throughout the year.

Corporate governance

Effective corporate governance provides an essential foundation for the long-term sustainable success of the Company. This report sets out the key elements of Centrica's corporate governance arrangements, including how we have sought to apply the principles and provisions of the 2018 UK Corporate Governance Code (2018 Code) during the year.

Corporate governance

At Centrica we recognise the importance of effective corporate governance in supporting the long-term success and sustainability of our business. Sound corporate governance enables clear and consistent delegation of authority from the Board to senior management and beyond in order to promote robust, informed and transparent decision-making. It also promotes effective stewardship to ensure the delivery of strategic objectives and sustainable success. It is the Board's responsibility to set the tone for the organisation including the right culture, values and behaviours that are intended to protect and promote the long-term success of the business. We strive to maintain a robust and effective governance framework which supports the execution of our strategy and remains consistent with Our Values.

The Board is responsible for providing leadership and stewardship of the Group within a framework of appropriate and effective controls that enable risks to be assessed and then managed in a manner which promotes the long-term sustainable success of the Group. The Board is also responsible for overseeing the execution of the Group's strategy, operational and financial performance, financial reporting, internal control and risk management, and corporate governance.

In order to facilitate its oversight role in these areas, and to ensure that it retains decision-making power over matters considered to be material to the current or future financial performance of the Group, the Board has put in place the governance framework. This includes a schedule of matters reserved to the Board. In order to allow the Board to focus on its priorities, a number of its oversight responsibilities have been delegated to five Committees. These responsibilities are set out in terms of reference for each Committee. The Board regularly reviews the remit, authority, composition and terms of reference of each committee.

The Board has also delegated authority to the Group Chief Executive for the execution of the strategy and day-to-day management of the Group. The Chief Executive's Committee supports the Group Chief Executive in the performance of his duties. The Board oversees, challenges and supports executive management in the execution of the strategy and management of the Group.

Board refreshment and succession planning

During 2019, the Board and the Nominations Committee continued to dedicate considerable time to succession planning. Centrica continues to embrace the importance of diversity and inclusion in all Board recruitment. As part of a structured and continuous process of Board refreshment, this year again saw several changes to the Board.

Margherita Della Valle stepped down from the Board as Non-Executive Director and Chairman of the Audit Committee on 12 May 2019. I joined as a Non-Executive Director on 31 October 2018, becoming Chairman of the Board on 21 February 2019. Two further Non-Executive Directors were appointed to the Board during the year, Pam Kaur, who joined in February 2019 and Kevin O'Byrne who joined in May 2019 and was appointed Chairman of the Audit Committee. Heidi Mottram was appointed to the Board on 1 January 2020. The Board acknowledges that work needs to continue to be carried out to further advance and ensure the right balance on the Board.

In December 2018, we announced that Mark Hodges, Chief Executive, Centrica Consumer would be stepping down from the Board in February 2019. We welcomed Mark's successor, Sarwjit Sambhi, an internal candidate, to the Board in March 2019.



Culture and Values

The Board recognises the importance of its role in setting the tone for the organisation and monitoring the Group's culture and values. Our Code sets out our minimum expectations for all those we work with or alongside. It is a guide to making good choices and represents our commitment to doing the right thing and acting with integrity.

During the year, the Board took several opportunities to engage both formally and informally with colleagues from across the business enabling a better understanding of the extent to which Our Values – care, delivery, collaboration, agility and courage – have been embedded throughout the Group. Our Code, along with Our Values, underpin everything that we do.

During 2019, we provided refresher training to help employees with their ongoing understanding of Our Code, with 82% completing it. In September 2019, we celebrated the second anniversary of Our Values. Chris O'Shea and Sarwjit Sambhi hosted a Q&A session to celebrate the anniversary, and employees asked excellent questions around leaders enabling more recognition of colleagues who uphold Our Values, and how living Our Values can support our customer obsession. In addition to this, employees were invited to take part in Our Values' new year's resolutions challenge and share their work-related aspirations.

An employee engagement survey was conducted in October 2019. It is important we obtain feedback from our colleagues about what we are doing well and what we can improve, so that we can take action on issues that matter to our people and build a motivated and engaged workforce that can deliver for our customers. Further information on employee engagement can be found on page 54.

Speak Up is a confidential whistleblowing hotline for employees to report serious concerns. The Company relaunched Speak Up last year to provide a consistent Group-wide approach to raising a concern or seeking advice about any malpractice and misconduct observed in the Group. The Board acknowledges that speaking up can often require the demonstration of one of Our Values, courage, and therefore the Company has various options available to employees when it comes to raising a concern. In the first instance employees are always encouraged to discuss their concerns with their manager. There are times when this might not be the best option so they should consider an alternative manager or function lead. If an employee is not comfortable approaching someone internally then they can raise their concern to the Speak Up helpline or use the online web tool.

Diversity and inclusion

The Group is committed to putting diversity, inclusion, care and respect at the heart of what we do. Our vision is to employ a rich and diverse mix of people who reflect the societies in which we work. We're creating a workplace in which the most talented individuals reach their full potential, whatever their age, gender or background. Our 2030 Responsible Business Ambition is for our senior leadership teams to reflect the diversity of our communities and the customers they serve by 2030. The Chairman leads the Board in its support for the recommendations of the Hampton-Alexander Review, which aims to raise the proportion of women on UK boards to at least one-third by the end of 2020, and also the Parker Review on ethnic diversity on boards. In November 2019, the Company joined energy sector leaders in committing to eliminate the exclusion of disabled people worldwide by signing up to The Valuable 500, a campaign encouraging global business leaders to recognise the value of the world's 1.3 billion disabled people. The Company also supports networks for employees who are, for example, carers, LGBT+, from an ethnic minority, disabled, and US veterans and military members.

Board effectiveness review

The Board carries out an annual evaluation of its effectiveness which includes assessing how it develops and promotes its shared vision of the purpose of the Group, its culture, its values and the behaviours it wishes to encourage in carrying out its business, since the behaviours demonstrated, individually as Directors and collectively as the Board, set the tone from the top. The previous review of the Board for 2018 was an external evaluation conducted by a governance consultancy, Independent Audit Limited, which has no other relationship with the Company. For the 2019 Board evaluation, Independent Audit Limited was again engaged and supported a self-assessment of the

effectiveness of the Company's Board and Committees, including observing Board and certain Committee meetings. The Board believed that this approach would bring the benefits of continuity from Independent Audit's Limited reappointment and recognised that the Board was in a transitional phase, given the number of changes to the Board during the year. The evaluation exercise was led by the Chairman and supported by the Group General Counsel & Company Secretary. The results of this review are set out on page 66.

Conclusion

Your Board is committed to maintaining high standards of corporate governance across the Group and believes this is integral to the delivery of our strategy for the long-term sustainable success of the Company for the benefit of shareholders and stakeholders.

I am pleased to say that Centrica has applied all the principles and fully complied with the provisions of the 2018 Code throughout the year.

The Directors' and Corporate Governance Report which follows has been prepared in order to provide stakeholders with a comprehensive understanding of the Company's governance framework under the 2018 Code, the Companies Act 2006, the UK Listing Rules and the Disclosure Guidance and Transparency Rules. I hope that you find the Report informative and engaging.

Charles Berry

Chairman

12 February 2020


Section 172(1) Directors' Duty

Section 172(1) considerations	Where to find more information	Page(s)
Decisions for the long-term success of the Company	Our Strategy – six key factors in Directors' decision-making	12
	Stakeholder engagement – decisions involving the interests of employees and the effect of that on principal decisions e.g. exiting Exploration & Production	16 to 17
	Responsible Business Ambitions	48 to 54
	Board activity – examples of decisions made by the Directors	64
How the Board engages with stakeholders and how the Directors have regard to the need to foster the Company's business relationship with all of its stakeholders, and the effect of that regard	Stakeholder Engagement	16 to 17
	Responsible Business Ambitions	48 to 54
	Board activity	64
Risk	Principal Risks and Uncertainties – risk management process, including financial risks	34 to 45
Training and information	Directors' and Corporate Governance Report – Training and development for Directors	65
Policies and procedures	Responsible Business Ambitions – Non-Financial Reporting Statement	48
	Directors' and Corporate Governance Report – Governance framework	63
Capital allocation and dividend policy – the long-term approach to making decisions around the amount and timing of returns to shareholders, including dividends, share buybacks and other capital distributions within the context of any relevant legal or financial constraints	Business Model – group financial framework	14
	Board activity	64
	Note 11	139
Culture and workforce	Stakeholder Engagement	16 to 17
	Responsible Business Ambitions	48 to 54
	Directors' and Corporate Governance Report	56 and 79
	Workforce engagement	67

Board of Directors












It is considered that each of the Directors on the Board of the Company effectively contributes to the Company's long-term sustainability by actively promoting the success of the Company, generating value for shareholders and contributing to the wider society.

 Full biographies can be found at centrica.com/board

Committee membership key

-  Chairman of the Board
-  Audit Committee
-  Disclosure Committee
-  Nominations Committee
-  Remuneration Committee
-  Safety, Health, Environment, Security and Ethics Committee
-  Denotes Committee Chairman

Skills and experience key

-  Energy Sector
-  Geopolitics
-  Emerging Markets
-  Financial Services
-  Technology
-  Engineering/Safety
-  Consumer services
-  Government/Regulatory
-  Finance/M&A

Reasons for the (re-)election of each of our Directors at the forthcoming AGM can be found on our website within the Centrica plc Notice of Annual General Meeting 2020.

Charles Berry
Chairman



Charles joined the Board as a Non-Executive Director on 31 October 2018 and became Chairman of the Board and Nominations Committee on 21 February 2019.

Relevant skills and experience

Charles has a wealth of international energy and engineering knowledge and a track record of successful leadership of businesses across the industrial, minerals, telecommunications and retail sectors. He also has extensive experience, in both the UK and US, of the regulatory framework of the energy and service markets.

Previous experience

Charles has previously held chairman roles at Senior plc, Drax Group plc, EAGA plc and Thus Group plc. Charles was an executive director of Scottish Power plc from 1999-2005.

External appointments

Chairman of The Weir Group PLC and member of the steering group of the Hampton-Alexander Review.

Iain Conn
Group Chief Executive



Iain was appointed Group Chief Executive on 1 January 2015 and is Chairman of the Disclosure Committee.

Relevant skills and experience

Iain possesses a deep understanding of the energy sector built up over a lifetime in the industry and has demonstrated strong commitment to customers, safety and technology.

Previous experience

Iain was previously BP's chief executive, downstream (BP's refining and marketing division), a position he held for seven years. Iain was a board member of BP for 10 years from 2004 and had previously held a number of senior roles throughout BP including in trading, exploration and production, and the management of corporate functions such as safety, marketing, technology and human resources. He also served as a non-executive director and latterly senior independent director of Rolls-Royce Holdings plc from January 2005 until May 2014.

External appointments

Non-executive director of BT Group plc, chairman of the advisory board of Imperial College Business School and a member of the CBI's President's Committee.

Responsibilities

The Group Chief Executive is responsible for the executive leadership and day-to-day management of the Company, to ensure the delivery of the strategy agreed by the Board.

Chris O'Shea
Group Chief Financial Officer



Chris was appointed Group Chief Financial Officer on 1 November 2018.

Relevant skills and experience

Chris is an experienced listed company chief financial officer with considerable experience of complex, multi-national organisations, not only in the energy sector but also in technology-led engineering and services industries.

Previous experience

Prior to joining the Company, Chris was group chief financial officer of both Smiths Group plc and Vesuvius plc, and a non-executive director of Foseco India Ltd, an Indian-listed supplier to the foundry industry. From 2006 to 2012 Chris held various senior finance roles with BG Group plc, including chief financial officer of Europe and Central Asia, prior to which he held a number of senior roles with Royal Dutch Shell plc in the UK, the US and Nigeria, and with Ernst & Young. Chris studied Accounting and Finance at the University of Glasgow, is a Chartered Accountant, and holds an MBA from the Fuqua School of Business at Duke University.

External appointments

Chairman of the Tax Committee of the 100 Group of UK Finance Directors.

Responsibilities

Responsible for providing strategic financial leadership of the Company and day-to-day management of the finance function. Also responsible for Exploration & Production.



Sarwjit Sambhi
Chief Executive, Centrica
Consumer



Sarwjit was appointed Chief Executive, Centrica Consumer and joined the Board on 1 March 2019.

Relevant skills and experience
Sarwjit joined Centrica in 2001 and has held senior leadership positions in retail, strategy, finance, trading, power generation, exploration and production.

Previous experience
Prior to joining the Company, Sarwjit worked for the management and technology consulting company, Booz Allen & Hamilton. Most recently, he was Managing Director, UK Home at the Group.

External appointments
Director of Energy UK (representing Centrica).

Responsibilities
Responsible for executive leadership and day-to-day management of Centrica Consumer in support of the Group Chief Executive and the delivery of the strategy agreed by the Board.



Richard Hookway
Chief Executive, Centrica
Business



Richard was appointed Chief Executive, Centrica Business and joined the Board on 1 December 2018.

Relevant skills and experience
Richard has worked in the energy sector for 35 years at BP plc, most recently as Group Chief Operating Officer for Global Business Services and IT.

Previous experience
Prior to joining the Company, Richard spent seven years as chief financial officer for BP's Downstream division which includes customer-facing businesses, refining and marketing and the P&L for BP's oil trading activities. He previously held a number of senior commercial roles both in the UK and in North America including head of the Natural Gas Liquids business based in Houston and the Commercial and Industrial Marketing business for Europe. He also held positions in trading, exploration and production, petrochemicals and in group functions.

External appointments
Non-Executive Director of EDF Energy Nuclear Generation Group Limited (representing Centrica).

Responsibilities
Responsible for executive leadership and day-to-day management of Centrica Business in support of the Group Chief Executive and the delivery of the strategy agreed by the Board.



Joan Gillman
Non-Executive Director



Joan joined the Board on 11 October 2016 and is the Employee Champion on the Board.

Relevant skills and experience
Joan's expertise lies in optimising stakeholder management and shaping growth and transformational strategies to lead and govern high performing teams. She has a consistent track record of thought leadership and growth in new technology.

Previous experience
Joan started her career as an executive in a Senator's office of the United States Senate. As the internet became a growing force, she has driven growth and transformation across four media and communications companies since 1995. Most recently, Joan served as a former executive vice president of Time Warner Cable, as well as chief operating officer, Time Warner Cable Media and president, Time Warner Cable Media LLC. Joan led one of Time Warner Cable's three operating divisions, doubling revenues and overseeing the company's big data strategy.

External appointments
Director of Airgain, Inc., InterDigital, Inc and Cumulus Media, Inc.



Stephen Hester
Senior Independent Director



Stephen joined the Board on 1 June 2016 and is the Senior Independent Director.

Relevant skills and experience
Stephen has wide-ranging experience, particularly in customer-facing businesses, together with recognised expertise in transforming business performance. He has a deep knowledge of operating within highly regulated businesses with over 35 years' experience in financial services and within FTSE 100 companies.

Previous experience
Stephen has previously held positions as chief executive of Royal Bank of Scotland Group, chief executive of British Land plc and chief operating officer of Abbey National plc, as well as a number of senior executive roles at Credit Suisse First Boston in London and New York.

External appointments
Group chief executive of RSA Insurance Group plc.



Pam Kaur
Non-Executive Director

AC SC NC



Pam joined the Board on 1 February 2019.

Relevant skills and experience

Pam has extensive experience in audit, business, compliance, finance and risk management.

Previous experience

Pam has previously held various senior roles at global financial institutions including Citigroup, Lloyds TSB, the Royal Bank of Scotland and Deutsche Bank, and has worked with regulators and supervisory boards across the world. She has an MBA in finance and a BCom (Hons) from Panjab University in India and is a qualified chartered accountant.

External appointments

Group Chief Risk Officer at HSBC Holdings plc.



Heidi Mottram
Non-Executive Director

NC SC



Heidi joined the Board on 1 January 2020.

Relevant skills and experience

Heidi brings considerable relevant strategic and operational experience acquired in her current and previous roles. Her deep understanding of the importance of customer service, delivered in complex multi-stakeholder environments with a high public profile, is particularly pertinent to the Company, at this time, as it focuses on the delivery of its customer-centric strategy.

Previous experience

Heidi began her career with British Rail in the mid-1980s. She held a number of roles in GNER, before joining Midland Mainline in 1999 as Operations Director. She was Commercial Director for Arriva Trains Northern from January 2004, before becoming Managing Director of Northern Rail Limited, the UK's largest rail franchise.

External appointments

CEO of Northumbrian Water Limited and Northumbrian Water Group Limited. Vice-Chair of the North East Local Enterprise Partnership, and a member of the CBI Board and Vice-Chair of Newcastle University Council.



Kevin O'Byrne
Non-Executive Director

AC NC



Kevin joined the Board on 13 May 2019 and is Chairman of the Audit Committee.

Relevant skills and experience

Kevin brings extensive retail and finance experience to the Board, having occupied senior roles in a number of leading UK and international retailers. The Board considers that Kevin has recent and relevant financial experience.

Previous experience

Kevin was previously chief executive officer of Poundland Group plc, and held executive roles at Kingfisher plc including divisional director UK, China and Turkey, chief executive officer of B&Q UK & Ireland and group finance director. Prior to that he was finance director of Dixons Retail plc. From 2008 to 2017 he was a non-executive director and chairman of the audit committee of Land Securities Group PLC where he was also senior independent director from 2012 to 2016.

External appointments

Group chief financial officer of J Sainsbury plc.



Carlos Pascual
Non-Executive Director

NC RC SC



Carlos joined the Board on 1 January 2015.

Relevant skills and experience

Carlos has held a number of senior positions in the energy industry and is a senior leader in energy geopolitics and economic and commercial development.

Previous experience

Between 2011 and 2014 Carlos established and directed the US State Department's Energy Resource Bureau and until August 2014 Carlos was special envoy and co-ordinator for international energy affairs, acting as senior adviser to the US Secretary of State on energy issues. He has also served as US ambassador in Mexico and Ukraine.

External appointments

Non-resident senior fellow at the Center on Global Energy Policy, Columbia University, and senior vice-president for global energy at IHS Markit.



Steve Pusey
Non-Executive Director

AC NC SC



Steve joined the Board on 1 April 2015 and is Chairman of the SHESEC.

Relevant skills and experience
Steve has a wealth of international experience as a senior customer-facing business technology leader. He also has considerable experience in the telecommunications industry, in both the wireline and wireless sectors, and in business applications and solutions.

Previous experience
Between 2006 and July 2015 Steve was the chief technology officer of Vodafone Group Plc and held responsibility for defining and leading their global technology strategy. Steve was a director of Vodafone Group Plc for six years. Prior to joining Vodafone Group Plc, Steve was executive vice president and president of Nortel in Europe, Africa and the Middle East, and spent several years with British Telecom. Steve is a graduate of the Advanced Management Program at Harvard University.

External appointments
Non-executive director of FireEye, Inc.



Scott Wheway
Non-Executive Director

NC RC SC



Scott joined the Board on 1 May 2016 and is the Chairman of the Remuneration Committee.

Relevant skills and experience
Scott has a wealth of experience as a senior customer-facing business leader with a mix of deep retail and consumer expertise. He has considerable knowledge gained in both the retail and insurance sectors, together with a strong understanding of operating within highly regulated businesses.

Previous experience
Scott worked in retail for 27 years both in the UK and internationally. He is the former chief executive officer of Best Buy Europe (retail services), director of The Boots Company plc, managing director and retail director of Boots the Chemist at Alliance Boots plc and a director of the British Retail Consortium. He formerly held a number of senior executive positions at Tesco plc (retail services), including chief executive of Tesco in Japan, and served as non-executive director of Aviva plc.

External appointments
Chairman of AXA UK plc and senior independent director of Santander UK group Holdings PLC.

Board changes and attendance

Board changes

- Pam Kaur joined the Board on 1 February 2019
- Rick Haythornthwaite stepped down from the Board on 20 February 2019
- Charles Berry became Chairman on 21 February 2019
- Mark Hodges stepped down from the Board on 28 February 2019
- Sarwjit Sambhi joined the Board on 1 March 2019
- Margherita Della Valle stepped down from the Board on 12 May 2019
- Kevin O'Byrne joined the Board on 13 May 2019
- Heidi Mottram joined the Board on 1 January 2020

The Board has agreed that each Director shall stand for election or re-election at each AGM. Copies of the Executive Directors' service contracts and the Non-Executive Directors' Letters of Appointment are available for inspection by shareholders at each AGM and during normal business hours at the Company's registered office.

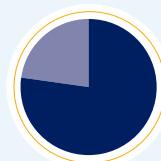
Board attendance

	Board ⁽¹⁾⁽³⁾
Number of meetings	
Charles Berry ⁽²⁾	10/11
Iain Conn	11/11
Margherita Della Valle	3/3
Joan Gillman	11/11
Rick Haythornthwaite	2/2
Stephen Hester	11/11
Mark Hodges	2/2
Richard Hookway	11/11
Pam Kaur	10/10
Kevin O'Byrne	8/8
Chris O'Shea	11/11
Carlos Pascual ⁽²⁾	9/11
Steve Pusey ⁽²⁾	10/11
Sarwjit Sambhi	9/9
Scott Wheway	11/11

- (1) During the year there were 11 Board meetings, of which nine were scheduled meetings and two were called at short notice.
- (2) All absences were due to Directors having unavoidable diary conflicts.
- (3) Attendance is expressed as the number of meetings attended out of the number eligible to be attended.

Board diversity

By gender



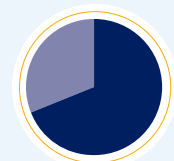
■ Male 83%
■ Female 17%

By nationality



■ British 67%
■ American 17%
■ Indian 8%
■ Irish 8%

By tenure



■ 0-3 years 69%
■ 3-6 years 31%

*Data as at 31 December 2019

Senior Executives



Charles Cameron
Director of Technology & Engineering and Chairman of Centrica Innovations

Charles was appointed Director of Technology & Engineering on 1 January 2016 and Chairman of Centrica Innovations on 1 May 2017.

Skills and experience

Charles has extensive technology and engineering experience and has held corporate roles in marketing, planning and M&A. Before joining the Group, he was head of technology, downstream at BP plc and was a member of the downstream executive team. Prior to his time at BP, Charles spent 23 years with the French Institute of Petroleum and their catalyst, technology licensing and engineering service business, Axens.



Justine Campbell
Group General Counsel & Company Secretary



Justine was appointed Group General Counsel & Company Secretary on 1 April 2019 and has responsibility for legal, regulatory, compliance and governance across the Group.

Skills and experience

Justine joined Centrica in 2013 as General Counsel for British Gas. Prior to joining Centrica, Justine was General Counsel and Corporate Affairs Director of Vodafone UK for five years, before which she spent seven years at O2/Telefonica, the final two as European general counsel. She qualified with Freshfields in London and Brussels and holds a law degree from Trinity College, Dublin and an advanced management qualification from the Saïd Business School, Oxford.



Jill Shedden, MBE
Group Human Resources Director

Jill was appointed Group Director, Human Resources on 1 July 2011.

Skills and experience

Jill joined British Gas plc as a graduate in 1988 and has since held a wide range of senior HR roles across the Group. Prior to her appointment as Group HR Director, Jill was HR Director in British Gas Business, British Gas Energy and Centrica Energy. In 2017 Jill was awarded an MBE for 'services to women and equality' in recognition of her work with, amongst other organisations, the Women's Business Council.

External appointments

Non-executive director of Thames Water Utilities Limited.



Mike Young
Group Chief Information Officer

Mike was appointed Group Chief Information Officer on 1 November 2016.

Skills and experience

Mike brings a wide range of experience in managing global information systems functions in partnership with customer-facing units and using big data and digital technologies to drive revenue growth and improve the customer experience. Before joining the Group he was group chief information officer with the media and digital marketing company Dentsu Aegis Network.

Governance framework

The Board

The Board is collectively responsible for the long-term success of the Group. With due regard to the views of shareholders and other stakeholders, it provides leadership and direction including establishing the Group's culture, values and ethics, setting strategy and overseeing its implementation, ensuring only acceptable risks are taken and being responsible for corporate governance and the overall financial performance of the Group.

Matters reserved exclusively for the Board

There are certain key responsibilities that the Board does not delegate and which are reserved for its consideration. The full Schedule of Matters Reserved is available under governance on our website, but key features include:

- the development of strategy and major policies;
- approving the annual operating plan, Financial Statements and major acquisitions and disposals;

- approving interim dividend payments and recommending final dividend payments; and
- the appointment and removal of Directors and the Company Secretary.

➔ [Read more about our Stakeholder Engagement on Pages 16 to 17](#)

➔ [Read more on how we manage our Risks on Pages 34 to 45](#)

➔ [Read more about Our Strategy and Our Business Model on Pages 12 to 15](#)

Board composition and roles

Chairman

Responsible for the leadership and management of the Board. In doing so, he is responsible for promoting high ethical standards, ensuring the effective contribution of all Directors and, with support from the Group General Counsel & Company Secretary, best practice in corporate governance.

Group Chief Executive

Responsible for the executive leadership and day-to-day management of the Company, to ensure the delivery of the strategy agreed by the Board.

Group Chief Financial Officer

Responsible for providing strategic financial leadership of the Company and day-to-day management of the finance function.

Independent Non-Executive Directors

Responsible for contributing sound judgement and objectivity to the Board's deliberations and overall decision-making process, providing constructive challenge, and monitoring the Executive Directors' delivery of the strategy within the Board's risk and governance structure.

Senior Independent Director

Acts as a sounding board for the Chairman and serves as a trusted intermediary for the other Directors, as well as shareholders as required.

Group Executive Directors

Responsible for executive leadership and day-to-day management of relevant business units in support of the Group Chief Executive and the delivery of the strategy agreed by the Board.

Group Company Secretary

Adviser to the Chairman and the Board on matters of corporate governance, induction, training and the efficient management of Board and Committee meetings. Responsible for ensuring the effectiveness of the Company's governance framework.

Committees

Audit Committee

➔ [For more information Pages 69 to 75](#)

Disclosure Committee

➔ [For more information Page 76](#)

Nominations Committee

➔ [For more information Pages 77 to 79](#)

Remuneration Committee

➔ [For more information Pages 82 to 99](#)

Safety, Health, Environment, Security and Ethics Committee

➔ [For more information Pages 80 to 81](#)

🖱 [The role and responsibilities of each Committee are set out in its Terms of Reference found on the Company's website at \[centrica.com/boardcommittees\]\(http://centrica.com/boardcommittees\)](#)

Board activity

Board meetings

The Board held 11 meetings in 2019, nine of which were in person and two by scheduled telephone conferences. If Directors are unable to attend a meeting, they have the opportunity beforehand to discuss any agenda items with the Chairman.

Each year the Board seeks to combine one or two meetings with visits to the Group's operations and in 2019 visited North America Home, Houston, in March and British Gas, Stockport, in September. Details of these visits can be found on page 65. During the year, the Non-Executive Directors, including the Chairman, met frequently without management present. The Non-Executive Directors met once during the year without the Chairman present.

Board activity

During the year, the Board considers a comprehensive programme of regular matters covering operational and financial performance reporting, strategic reviews and updates, and various governance

reports and approvals. In addition, each Board meeting features deep dives into a specific operation or topic. In 2019, the Board's focus for the first half was on the strategic update and during that the Board reviewed the foundations of the 2015 Group Strategy Review (GSR), considered developments in the external environment since the time of the GSR and in that context reflected on the Company's progress in delivering its strategy. Various scenarios were modelled and discussed, with regard to all stakeholders, focusing in particular on the options for exiting Exploration & Production, and Nuclear and the implications for the Group's financial framework. In addition, the Board reviewed the Group's potential for delivering further cost efficiencies as well as the future potential of the North America Business, Centrica Business Solutions and Centrica Home Solutions business units. Following four months of review, the Board announced the results of its review in July 2019, including the divestment of Spirit Energy and the rebasing of the dividend.

During 2019, Board discussions included:

Key areas of activity	Matters considered	Views of Stakeholder groups considered
Strategy and business plan	<ul style="list-style-type: none"> Strategic update Group Annual Plan Multi-year efficiency programme update Portfolio optimisation Group Strategic Transformation Programme 	<ul style="list-style-type: none"> Customers Investors and shareholders Communities and NGOs Government and regulators Suppliers Colleagues
Performance and risk	<ul style="list-style-type: none"> Group Performance Reports, including reports from the Group Chief Executive, Group Chief Financial Officer and Executive Directors Business reviews Periodic results –including dividend Going concern and viability statements UK Defined Benefit Pension Schemes Valuation and Funding 	<ul style="list-style-type: none"> Customers Investors and shareholders Suppliers Government and regulators Colleagues
Governance	<ul style="list-style-type: none"> Annual Report and Accounts AGM documentation 2018 UK Corporate Governance Code Board evaluation findings Succession planning for Directors and Senior Leadership Team Reports from Committee Chairs Conflicts of interest review Terms of Reference reviews Director independence 	<ul style="list-style-type: none"> Investors and shareholders Government and regulators Colleagues
Culture and stakeholders	<ul style="list-style-type: none"> Employee engagement surveys Feedback from Employee Champion Investor updates and feedback Our Code Diversity and inclusion Culture, talent & capability review Town hall meetings Site visits Gender pay gap reporting 	<ul style="list-style-type: none"> Investors and shareholders Communities and NGOs Government and regulators Colleagues
Political and regulatory environment	<ul style="list-style-type: none"> Climate change Brexit preparations Energy supply nationalisation Modern Slavery Act Price cap and judicial review 	<ul style="list-style-type: none"> Investors and shareholders Communities and NGOs Government and regulators Suppliers

Directors' independence and conflicts

All our Non-Executive Directors are considered to be independent against the criteria in the 2018 Code and free from any business interest which could materially interfere with the exercise of their judgement. In addition, the Board is satisfied that each Non-Executive Director is able to dedicate the necessary amount of time to the Company's affairs.

The Non-Executive Directors' Letters of Appointment state that Non-Executive Directors must inform the Group Company Secretary of any other business, directorships, appointments, adviserships or other relevant connections (including any relevant changes, and a broad indication of the time involved). By accepting their appointment, Non-Executive Directors agree to confirm that they are able to allocate sufficient time to meet the expectations of their role and to perform their responsibilities effectively. Directors also confirm that they will inform the Board of any subsequent changes to their circumstances which may affect the time they can commit to their duties. The agreement of the Chairman must be obtained before accepting additional commitments that might affect the time Non-Executive Directors are able to devote to their appointment.

In accordance with the Companies Act 2006 and the Company's Articles of Association, Directors are required to report actual or potential conflicts of interest to the Board for consideration and, if required, authorisation. If such conflicts exist, Directors recuse themselves from consideration of the relevant subject matter. The Company maintains a schedule of authorised conflicts of interest which is regularly reviewed by the Board.

The Company's Articles of Association provide how Directors are appointed, retired and replaced. These can be found on our website.

Directors' induction

All new Directors appointed to the Board receive a comprehensive induction programme which is led by the Chairman and supported by the Group Chief Executive. This programme is tailored to meet each individual's needs and is structured and designed to ensure that new Directors are equipped with the requisite information and knowledge about the Group and its markets to contribute meaningfully and effectively to Board discussions as soon as possible. The programme includes briefings from members of the Executive, and management teams covering key areas of the business, an overview of the Group's risk management processes, the Internal Audit function and the corporate governance framework within Centrica. The induction programme also includes a series of site visits for new Directors to familiarise themselves with the Group's businesses.

On completion of the induction programme, all new Directors will have sufficient knowledge and understanding of the business to effectively contribute to strategic discussions and the oversight of the Group.

Training and development for Directors

It is important to make sure that Directors' skills and knowledge are refreshed and updated regularly. The Chairman is responsible for the ongoing development of all Directors and discusses with each Director any individual training and development needs, such as formal and informal briefings, meetings with management and visits to the Group's operations. As part of this approach, formal insight and training sessions are held each year. In March, a session was held for new Directors which focused on Market Abuse Regulation and Directors' duties (including their section 172(1) duty). This was followed in September by teach-ins on planning and dispatch, digital journeys, and the SIPD (simplified,

integrated planning and dispatch) Programme. Two showcases were presented to the Board members covering customer STAR intervention (demonstrating the value of thinking differently resulting in improved performance across key metrics), and customer empathy.

In addition, the Directors have full access to the advice and services of the Group General Counsel & Company Secretary, who is responsible for advising the Board, through the Chairman, on corporate governance matters. Directors are also able to seek independent professional advice at the Company's expense in respect of their duties.

Board diversity

The Company recognises the benefits of diversity and inclusion in all its forms, at Board level and throughout the Group.

Our Nominations Committee is committed to ensuring and promoting a diverse blend of skills, backgrounds and nationalities on the Board and further details on the Committee's activities in this regard are set out in the Nominations Committee report on pages 77 to 79.

The Company supports the recommendations of the Hampton-Alexander and Parker Reviews in relation to gender and ethnic diversity and is continuing to develop a diverse talent pipeline with the necessary skills, experience and knowledge. Our Chairman, Charles Berry, is a member of the Hampton-Alexander steering group.

As at 31 December 2019, 17% of the Board were women and comprised Directors from the UK, Ireland, US and India with a wide range of skills and expertise. Heidi Mottram was appointed a Non-Executive Director with effect from 1 January 2020, increasing the proportion of women on the Board to 23%.

 [Read more about our employee diversity on Page 52](#)

Board planning conference

At this year's planning conference the Board focused on the performance and implementation of the most material deliverables arising from the Strategic Update announced in July 2019. It marked the beginning of the Group Annual Plan cycle for 2020. Following the Board Planning Conference, the 2020 Group Annual Plan was finalised and approved by the Board.

Site visits

While the bulk of the Board's work is conducted around the boardroom table, Directors recognise the importance and benefits gained by visiting the Group's operations. During 2019, the Board visits included the Group's operations in the US (Houston) and the UK (Stockport).

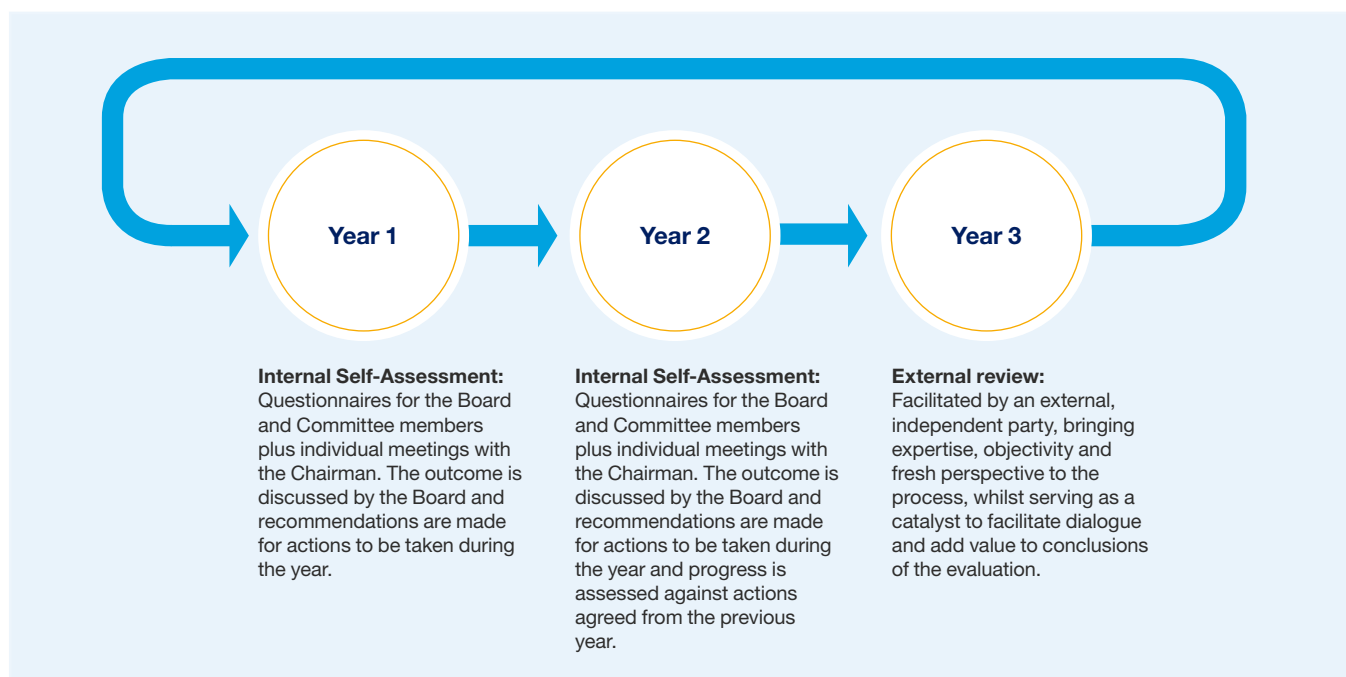
In March 2019, the Board visited Centrica's North America Home team in Houston. The visit comprised a scheduled Board meeting and discussions with the North America Home leadership team on strategy and performance. There was also a town hall held with employees and some Board members, including the Chairman.

In September 2019, the Board visited British Gas, UK Home, in Stockport. The visit comprised a scheduled Board meeting and discussions with the British Gas UK Home Energy & Services leadership team on strategy, performance and culture. In addition, the visit provided the Board with an opportunity to meet colleagues involved with British Gas operations. The Board members were able to meet and explore the plans relating to the digital transformation of the customer operations environment for UK Home Energy & Services.

Evaluation of the Board and its Committees

The Board recognises that it continually needs to monitor and improve its performance. The performance and effectiveness of the Board and its Committees are subject to formal review through the annual evaluation process. In accordance with the 2018 Code, Centrica's annual evaluation of Board effectiveness is facilitated by an independent third party at least once every three years.

Three-year evaluation cycle



Progress against the 2017-18 external Board evaluation

In 2017-18, the performance and effectiveness of the Board were reviewed through an externally facilitated evaluation process by Independent Audit Limited, a governance consultancy that has no other relationship with Centrica. The Directors concluded that the Board and its Committees continued to discharge their duties and responsibilities effectively. A number of opportunities for improvement in the way the Board operates were also identified and these were set out in the 2018 Annual Report. The main agreed actions included reviewing and enhancing Board papers and presentations to promote high quality input, debate, support and challenge at meetings; reviewing the use of operational KPIs in Board reports to enhance the level and clarity of insight provided to the Board; and considering whether further discussion on business performance should be incorporated into future Board agendas.

During 2019, these areas were progressed, through: the alignment of timings and processes of Secretariat and Centrica's Executive Committee (CEC); guidance for Board papers drawn up and templates updated; and KPIs reflected and reported on at each Board meeting, with new KPIs added where necessary.

For the 2019 Board effectiveness evaluation, Independent Audit Limited was again engaged to support a follow-up self-assessment of the effectiveness of Centrica's Board and Committees. The Board believed that this approach would bring benefits of continuity.

The evaluation process was led by the Chairman and supported by the Group General Counsel & Company Secretary. All Board members and certain executives completed questionnaires which

were designed to focus on issues that were raised in the 2017-18 external evaluation. Additionally, Independent Audit Limited observed Board and Committee meetings and reviewed meeting papers and presentations. The responses from the questionnaires were collated with Independent Audit Limited's observations and the results of the review were presented to and discussed by the Board at its meeting in December 2019.

The Directors believe that the Board and Committees continue to operate effectively and, around the boardroom table, there are good levels of engagement and, overall, a collegiate atmosphere. The Directors also recognise that there have been significant changes to the Board, with seven new Directors joining the Board since the last effectiveness evaluation. Good progress has been made in bringing the refreshed Board together and this will continue to be a focus for the Chairman. While progress has also been made on the actions identified in the previous effectiveness evaluation, these will continue to be ongoing themes for 2020.

Chairman's performance

The Senior Independent Director, Stephen Hester, conducted the evaluation of the Chairman's performance through discussions with Directors and Senior Executives. Stephen then discussed the feedback with the Chairman.

Individual performance

The Chairman held performance meetings with each Director to discuss their individual contribution and performance over the year and their training and development needs. Following these meetings, the Chairman confirmed that each Director continued to make an effective contribution to the Board and the Company.

Workforce engagement

Employee engagement is critical to our success. During 2019, we began the work to embed the role of Employee Champion as an integral part of Centrica's governance framework. Using the output from employee discussions in 2018, we formalised the Employee Champion role in written terms of reference to ensure that its purpose was clear, it was well supported by the Company, and there were mechanisms in place for reporting and feedback.

The key purposes set out in the terms of reference are to:

- Bring employee perspectives to the Board to increase board effectiveness and decision making through the lens of an employee;
- Review reports on the Group's organisational health and culture; and
- Bring about positive results for employees with the Board being better informed by employee perspective and insight.

During 2019, I continued discussions with employees across the Centrica group. Workshops were held at our UK sites in Manchester, Cardiff, Windsor, Staines and London and in the US, at our main locations in New Jersey and Houston. These workshops were held across a range of organisational levels to gather a broad range of views and were structured around understanding how we could "improve the experience of our colleagues" to empower them and to help them perform at their best in order to better serve our customers. Colleagues were also encouraged to share their views on any other aspects of their working environment.

I am pleased to report that employees across the group continued to engage fully and openly, sharing their views on key themes such as ways of working in the context of significant organisational transformation, and colleagues' understanding of the Group's strategy as it relates to the roles they perform. Feedback from colleagues during the workshops was not always positive and this was reinforced by the engagement scores from the Our Voice employee engagement survey which were lower than the previous year. After the workshops, feedback and observations were provided to senior management who kept the Board informed on actions taken to address employee concerns. Additionally, follow-ups were sent to all employees summarising thoughts, observations and the actions arising from the workshops.



Our workshops

USA

- 1 Houston
- 2 New Jersey

United Kingdom

- 3 Manchester
- 4 Cardiff
- 5 Windsor
- 6 Staines
- 7 London

The principal purpose of the role of Employee Champion is to ensure the voice of the workforce is heard in the boardroom and considered in Board discussions and decision making. The Board has listened to what employees have said and has therefore made empowering colleagues a Group priority for 2020 and beyond. Its aim is to eliminate obstacles and create opportunities for our employees to deliver for our customers. To ensure this happens, a number of initiatives were implemented during 2019 including:

- The inclusion of people and culture in the SHESEC agenda;
- The development of a people and talent dashboard for the Board; and
- The appointment of the Employee Champion to the Remuneration Committee.

We will further develop the role and impact of the Employee Champion during 2020 and beyond, with a focus on the following key areas:

- Engagement for all Board members with colleagues at offsite visits and town hall briefings;

- Improved communications to enable all of our colleagues to connect to our Purpose and to perform at maximum capability;
- Ensure the Board has more clarity on goals and initiatives that senior executives are pursuing to address pain points that prevent colleagues from performing at their best;
- Graduate and apprentice focused events to support engagement with future leaders; and
- Diversity, respect and inclusion – ensure that this remains firmly on the Board agenda.

Looking ahead, I will continue to spend time with colleagues in 2020 and work with senior executives to develop a programmatic effort to ensure that we create an environment where each employee can reach their full potential and be at their best, and we can retain and develop the best talent to continue to deliver for our stakeholders.

Joan Gillman
Employee Champion

Shareholder engagement

The Board is committed to maintaining open channels of communication with all of the Company's stakeholders. An important part of this is providing a clear explanation of the Company's strategy and objectives, and ensuring feedback is acknowledged, considered and, where appropriate, acted upon. During 2019, the Chairman held 27 one-to-one meetings with investors.

Meetings, roadshows and conferences

We typically offer meetings with senior management to our major institutional shareholders twice a year, following the Company's Preliminary and Interim results. These meetings are attended by the Group Chief Executive and Group Chief Financial Officer, and also sometimes divisional Chief Executives, to ensure that shareholders have the opportunity to hear directly from management on the Company's performance and progress.

In addition, management and/or Investor Relations attend a number of investor conferences throughout the year, giving shareholders further opportunity to meet and receive updates directly from Company representatives, while senior management are also available to meet on an ad hoc basis with major shareholders if requested.

Engagement themes with our institutional shareholders

During the year, engagement themes included:

- Centrica's strategic update, announced alongside the Interim results in July;
- The intended divestments of Nuclear and Spirit Energy;
- The regulatory and political environment for UK energy;
- Restructuring and cost efficiency progress;
- Climate change and Centrica's role in this; and
- CEO succession.

Key investor relations activities during the year



Annual General Meeting

Our AGM is attended by our Board and Executive Committee members and is open to all our shareholders to attend. A summary presentation of financial results is given before the Chairman deals with the formal business of the meeting. Shareholders present during the meeting can question the Board. Representatives from Investor Relations and customer services are available before and after the meeting to answer any additional questions that shareholders may have. Our 2019 AGM was very well supported; the level of support for the resolutions carried ranged from 85.27% to 99.91%.

We are holding our 2020 AGM at the Manchester Central Convention Complex, Windmill St, Manchester M2 3GX on Monday, 11 May 2020. The move to a regional location reflects the breadth of our customer and shareholder base and office locations too, and we look forward to holding future AGMs in other UK locations to enable us to reach more of our shareholders. Further information is available in the Notice of AGM (see centrica.com/agm20).

Reuniting our shareholders with unclaimed dividends

Since 2009, together with our Registrar, Equiniti, and its partner ProSearch, Centrica has run an asset reunification programme. This seeks to reunite shareholders with uncashed dividends and share entitlements. To date, we have successfully reunited £23.5million of share and dividend assets with shareowners.

At the 2019 AGM, shareholders approved the adoption of new Articles which have provided the Company with greater control

and flexibility in relation to its treatment of untraced shareholders, the procedure for the payment of dividends and the holding of combined physical and electronic general meetings. Following the adoption of the new Articles and attempts to trace shareholders, the forfeited shares were sold in June 2019. The funds will be spent on progressing Centrica's 2030 Responsible Business Ambitions and the 15 global goals we have set to contribute to a more sustainable world. Further information can be found on page 48 and on our website. As agreed, the Company will honour all late claims and asks shareholders who want to make a claim to contact our Registrars who are managing this process for us. Contact details can be found on page 222.

Share dealing programme

We continue to run our popular share dealing programme for shareholders with shareholdings of up to 5,000 shares, giving them the option to sell or increase their shareholdings at a fixed fee. Shareholders who sold their shares had a further option to donate the proceeds to UK Charity ShareGift, resulting in over £404,000 being donated since 2010.

Centrica.com

Our website, centrica.com, contains up-to-date information for shareholders and other interested parties including annual reports, shareholder circulars, share price information, news releases, presentations to the investment community and information on shareholder services.

 [Read more about Shareholder Information on Page 222](#)

Audit Committee



Kevin O'Byrne
Committee Chairman

“My priority in this first year has been to get to know Centrica – its people, its businesses, its operations, and its risk management processes and internal controls.”

Committee membership

	Meetings attended ⁽¹⁾
Kevin O'Byrne, Chairman (since 13 May 2019)	2/2
Margherita Della Valle, Chairman (until 12 May 2019)	1/1
Stephen Hester, Senior Independent Director	3/3
Pam Kaur, Non-Executive Director (since 1 February 2019)	3/3
Steve Pusey, Non-Executive Director	3/3

(1) Attendance is expressed as the number of meetings attended out of the number eligible to be attended.

All current Audit Committee members also attended the two joint SHESEC/Audit Committee meetings held in 2019.

Committee highlights in 2019

- Kevin O'Byrne and Pam Kaur joined the Committee as Chair and Member respectively
- Conducted reviews of the control environment of Centrica Business, Centrica Consumer and Spirit Energy
- Continued dialogue with management in relation to the Finance Transformation Programme
- Monitored progress on projects to enhance Group level controls and an independent review by Internal Audit of their effectiveness (or implementation)
- Reviewed accounting judgements in particular relating to exceptional or one-off items excluded from underlying results

Areas of focus for the Committee in 2020

- Review of Group-wide Financial Risk
- Reviews of regulated entity risks within UK Insurance, North America Business and EM&T
- External Quality Assessment (EQA) of Internal Audit to be performed in 2020 (performed every three to five years, with the last EQA being in 2016)
- Review and refresh of Enterprise Risk Framework
- Monitor delivery of certain Finance Transformation actions
- Continue to monitor ongoing projects to enhance Group level controls and Internal Audit's review of their effectiveness
- Review trading controls of EM&T

Dear Shareholder

On behalf of the Board, I am pleased to present the Audit Committee's report for the year ended 31 December 2019 which explains the Committee's focus and activities during the year and its objectives for 2020. This is my first report to you as Audit Committee Chair having joined the Board in May 2019. My priorities in this first year have been to spend time visiting a number of Company offices, meeting with colleagues, and understanding the operations, risk management processes, and internal controls. I have also spent time with the Company's professional advisers. I hope you find this report an interesting explanation of our work during the year. It should be read in conjunction with our UK Corporate Governance Code compliance section on pages 55 to 56, Our Principal Risks and Uncertainties on pages 34 to 43 and our Viability Statement on pages 44 to 45.

The Audit Committee assists the Board in fulfilling its oversight responsibilities by reviewing and monitoring the integrity of the financial information provided to shareholders and other stakeholders. The Committee oversees financial reporting and related risks and internal controls, and also has a role in overseeing the internal and independent auditors, as well as interacting with other members of management and external stakeholders.

I believe that the Committee has performed effectively in 2019 and I would like to thank members of the Committee and all the colleagues who have contributed to our work, for their time and commitment during what has been another busy year. In the coming year I plan to increase my own knowledge of the business while ensuring this Committee continues to perform effectively.

Role of the Committee

The Committee's Terms of Reference are available on centrica.com. The core responsibilities of the Committee are to:

- support the Board in fulfilling its responsibilities to maintain effective governance and oversight of the Company's financial reporting, internal controls and risk management;
- provide advice to the Board on whether the Annual Report and Accounts, when taken as a whole, is fair, balanced and understandable and provides all the necessary information for shareholders to assess the Company's position, performance, business model and strategy;
- monitor and review the operation and effectiveness of the Group's Internal Audit function, including its independence, strategic focus, activities, plans and resources;
- facilitate the appointment and, if required, the removal of the Group Head of Internal Audit, Risk & Control;
- manage the relationship with the Group's external auditors on behalf of the Board including the policy on the award of non-audit services;
- conduct a tender for the external audit contract at least every 10 years and make appointment recommendations to the Board; and
- consider and review legal and regulatory compliance issues, specifically in relation to financial reporting and controls, and, together with the Safety, Health, Environment, Security and Ethics Committee (SHESEC), maintain oversight of the arrangements in place for the management of statutory and regulatory compliance in areas such as financial crime.

The Committee regularly undertakes reviews of its Terms of Reference to ensure it reflects the actual role carried out by the Committee and is operating at maximum effectiveness.

Membership of the Committee and attendance at meetings

The Committee is comprised solely of independent Non-Executive Directors: Kevin O'Byrne (since 13 May 2019), Stephen Hester, Pam Kaur (since 1 February 2019) and Steve Pusey. Margherita Della Valle stepped down from the Audit Committee on 12 May 2019.

Kevin O'Byrne, as Group Chief Financial Officer of J Sainsbury plc, is considered by the Board to have recent and relevant financial experience as required by the 2018 Code. The Board is satisfied that the Committee has the resources and expertise to fulfil its responsibilities.

Meetings of the Committee are attended by the Chairman of the Board, the Group Chief Executive, the Group Chief Financial Officer, the Group General Counsel & Company Secretary, the Group Head of Corporate Finance and the Group Head of Internal Audit, Risk & Control, none of whom do so as a right. Other Senior Executives will attend as required to provide information on matters being discussed which fall within their area of responsibility. The external auditors, Deloitte LLP (Deloitte), also attended each meeting. The Committee meets individually with the external auditors, the Group Chief Financial Officer and the Group Head of Internal Audit, Risk & Control at each meeting without other Executive Directors present.

The Committee met five times in 2019, twice jointly with the SHESEC, where each committee retains discretion to require a full presentation and discussion on any joint meeting topic at their respective meeting if deemed appropriate. I have appreciated the contribution from the members of the Committee, management team and auditors in facilitating an open discussion and in taking the important work of the Committee forward.

The Committee has developed its agenda to enable, over the course of a year, active oversight of all key areas of responsibility and to facilitate deeper dives into topics of particular importance or pertinence. At the joint meetings between the Committee and the SHESEC, the Committees considered the Group's System of Risk Management and Internal Control: in the first quarter to assess the system's effectiveness; and in the fourth quarter to look prospectively at plans for 2020.

More detail on the key issues considered by the Committee in 2019 are given below.

Main activities of the Committee during 2019

- Conducted reviews of the control environment of Centrica Business, Centrica Consumer and Spirit Energy;
- Continued dialogue with management in relation to the Finance Transformation Programme;
- Review of 2018 financial results, Annual Report and Accounts and 2019 Interim results;
- Review of structure of 2019 Annual Report and Accounts to best reflect the Group's operations in line with the strategic update in July 2019;
- Oversight of implementation of IFRS 16;
- Update to the policy on independence of external auditors following a decision to reduce the annual non-audit fee limit;
- Effectiveness review of external auditors;
- Continued oversight of the maintenance and development of the control environment;
- Regular reports on Risk, Assurance and Controls, Internal and External Audit;

- Monitored progress on projects to enhance Group level controls and on independent review by Internal Audit of their effectiveness or implementation; and
- Reviewed accounting judgements in particular relating to exceptional or one-off items excluded from underlying results.

Effectiveness of the Committee

Read more about the Committee's effectiveness, which was considered as part of this year's evaluation process, on page 66.

Risk management and internal controls

Internal Audit

The Committee is responsible for monitoring and reviewing the operation and effectiveness of the Group's Internal Audit function, including its independence, strategic focus, activities, plans and resources. The appointment and removal of the Group Head of Internal Audit, Risk & Control is also a matter for the Committee.

The Committee approved the Group's annual Internal Audit plan. The plan is developed in response to those risks identified through the Enterprise Risk Management processes, using the independent insight and experience of the Internal Audit team and their advisers. It incorporates assurance over all aspects of our Group Risk Universe, including the Principal Risks in the categories of Strategic, Financial, Operational and Legal & Regulatory risk. As part of its consideration of the plan, the Committee reviewed staffing levels and qualifications to ensure these were appropriate and adequate for the delivery of the plan. An External Quality Evaluation of Internal Audit will be conducted in 2020 (deferred from 2019 to accommodate the roll-out of a new audit software tool and methodology), following a positive outcome in 2016. Further information on the Principal Risks is available on pages 34 to 45.

During the year, the Committee received regular reports summarising the findings from the Group Internal Audit team's work and action plans to resolve any highlighted areas. The Committee monitored the progress of the most significant action plans to ensure these were completed satisfactorily.

Review of the System of Risk Management and Internal Controls

Each year, an extensive process of self-certification operates throughout the Group whereby the effectiveness of the System of Risk Management and Internal Controls, including compliance with Our Code, and policies are assessed. In addition, there is a comprehensive programme to assess the Group's entity level controls. The results of the annual process, together with the conclusions of the internal reviews by Internal Audit, enable the Audit Committee and the SHESEC, on behalf of the Board, to form and report their view on effectiveness.

During 2019, there was further activity to improve the financial and commercial controls across the Group. These improvements were discussed within the Committee and the SHESEC throughout the year to provide support and guidance to our management teams. The Committee concluded that the System of Risk Management and Internal Control is effective, whilst recognising the need for ongoing and continuous improvement. We have confidence in the work of Internal Audit and the functional assurance teams, alongside our management teams, to identify issues that arise and remediate control gaps where necessary in line with our risk appetite.

Fair, balanced and understandable

As part of the Committee's determination, on behalf of the Board, of whether the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy, the Committee considers the processes and controls involved in its production and the financial reporting responsibilities of the Directors under section 172 of the Companies Act 2006 to promote the success of the Company for the benefit of its members as a whole. There is a robust governance framework around the production of the Annual Report to ensure it is critically reviewed and signed off by the key teams in the relevant businesses and functions and the Committee was satisfied that the process was effective and confirmed to the Board that the Annual Report, when taken as a whole, was fair, balanced and understandable.

External auditors

The Committee manages the relationship with the Group's external auditors on behalf of the Board. The Committee considers annually the scope, fee, audit plan, performance and independence of the external auditors as well as whether a formal tender process is required. The Committee last led a formal audit tender process in 2016, the details of which can be found in the 2016 Annual Report and Accounts.

The Board considers it of prime importance that the external auditors remain independent and objective and, as a safeguard against this being compromised, the Committee implemented and monitors a policy on the independence of external auditors. This policy details the process for the appointment of the external auditors, the tendering policy, the provision of non-audit services, the setting of audit fees and the rotation of audit partner and staff. There are no contractual or similar obligations restricting the Group's choice of external auditors.

Deloitte was appointed as the Company's auditor at the beginning of 2017 and will this year perform its third full audit. The re-appointment of Deloitte as auditors was approved by shareholders at the AGM in May 2019 and it has been recommended for re-appointment again in 2020.

The Company has complied with the Statutory Audit Services Order 2014 for the financial year under review.

Effectiveness and independence of the external auditors

To assess the effectiveness and independence of the external auditors, the Committee carried out an assessment of Deloitte, primarily looking at the key areas of audit quality, capability and competence, past performance and independence. This assessment included a review of the report issued by the Audit Quality Review (AQR) team regarding Deloitte and separately an internal questionnaire was completed by the Chairman of the Board, Committee members and senior members of management on their views of Deloitte's performance. The questionnaire covered a review of the audit partner and team, the audit scope and approach, audit plan execution, auditor independence and objectivity and robustness of the challenge of management. The feedback received was reviewed by management and reported to the Committee and the Board.

The FRC's AQR review of Deloitte's 2017 audit was completed in early 2019 and the Committee reviewed the detailed findings. Recommendations have been built into ongoing processes. The Committee was satisfied with the external auditor's commitment to audit quality, the robust and professional working relationship with management and demonstration of strong technical knowledge and professional scepticism.

In addition, to ensure the independence of the external auditors and in accordance with International Standards on Auditing (UK & Ireland) 260 and Ethical Standard 2019 issued by the Accounting Practices Board and as a matter of best practice, Deloitte has confirmed its independence as auditors of the Company. Together with Deloitte's confirmation and report on its approach to audit quality and transparency, the Committee concluded that Deloitte demonstrated appropriate qualifications and expertise and remained independent of the Group and that the external audit process was effective.

Non-audit fees

To safeguard the objectivity and independence of the external auditor, the Committee is responsible for the policy on the award of non-audit services to the external auditors. A copy of this policy is available on our website. All requests to utilise Deloitte for non-audit services must be approved by the Chairman of the Audit Committee and the current cap on non-audit work is £1 million (reduced from £2.75 million during 2019), which is assessed annually for appropriateness against external guidance and regulation. This cap is significantly below the EU regulation of 70% non-audit fees compared to the three-year average of statutory audit fees. Non-audit fees for 2019 totalled £0.8 million – being 10% of this three-year average. All non-audit work within this policy is detailed and reviewed by the Committee at the next meeting. All significant non-audit work is tendered and, where Deloitte was appointed, it was considered that its skills and experience not only made it the most appropriate supplier of the work but also there was clear evidence that another firm could not be used without adversely impacting the business.

Kevin O'Byrne
on behalf of the Audit Committee

Key judgements and financial reporting matter in 2019	Audit Committee reviews and conclusions
<p>Determination of long-term commodity prices and their use in valuing long-lived assets</p> <p>Long-term commodity price forecasts are a key assumption in the valuation of the Group's long-lived assets. Historically, these have been derived internally, using valuation techniques based on available external data and then benchmarked against other third-party forecasts. In 2019, following debate with the Committee, the Group has moved to using a "P50" median price curve, derived from a collection of third-party forecasts. The advantage of this approach is to more clearly align to pricing that a reasonable market participant would use and so that other external data points (e.g. consensus view of impact of climate change) are factored into these prices.</p> <p>Impairment of long-lived assets</p> <p>The Group makes judgements and estimates in considering whether the carrying amounts of its assets are recoverable. In particular, the main assets under consideration are Goodwill, Upstream gas and oil fields, the Nuclear investment, and Centrica Home Solutions' and Centrica Business Solutions' non-current assets. These judgements include primarily the achievement of Board-approved business plans, long-term projected cash flows, generation and production levels (including reserve estimates and life extensions) and macroeconomic assumptions such as the growth and discount rates and long-term commodity and capacity market auction prices used in the valuation process. When deriving forecast cash flows, market prices are used for the period when a commodity is liquid. For the longer-term illiquid period, the "P50" median price curve is used (see "Determination of long-term commodity prices and their use in valuing long-lived assets", above).</p> <p>At the year-end, pre-tax net exceptional impairment write-offs of Upstream gas and oil fields of £476 million were booked, relating to UK, Danish and Norwegian assets (including decommissioning cost updates). Pre-tax exceptional impairments of £381 million in relation to power assets (of which £372 million is against the Nuclear investment) and £77 million in relation to Centrica Home Solutions (including inventory and goodwill write-downs) were also booked. No impairment was required for Centrica Business Solutions customer business.</p> <p>Note that other impairments have also been reflected in exceptional items as part of property rationalisation costs and net gain on disposals, as well as within business performance (e.g. dry hole costs). These items are generally not judgemental.</p>	<p>In previous periods, the Committee had observed the sensitivity of long-lived asset valuations to long-term commodity prices and had challenged proposed commodity curves in the context of external third parties' views. Accordingly, the move to a "P50" median curve approach (derived from third parties) was welcomed by the Committee.</p> <p>The Committee also noted that the "P50" long-term commodity price forecasts had reduced year on year, in line with most external third-party forecasts.</p> <p>Deloitte provided detailed reporting and held discussions with the Committee on the impact of the commodity curves.</p> <p>As a result of the above, the Committee was comfortable the curves and consequent valuations were appropriate.</p> <p>Sensitivities of the asset impairment tests to changes in price forecasts are provided in note 7 on pages 131 to 133.</p> <p>The Committee reviewed management reports detailing the assets at risk of impairment and the key judgements and estimates used. The Committee observed the general year-on-year fall in both liquid and "P50" commodity prices.</p> <p>It noted that £198 million of the Upstream gas and oil asset write-offs were primarily due to these price reductions. £310 million related to fields where development was now deemed unlikely and there was a £32 million write-back of decommissioning liabilities from updated assumptions.</p> <p>The Committee noted the Nuclear investment recoverable amount continues to be based on a value-in-use (VIU) calculation rather than on a sales basis, and that the held for sale criteria had not been met. It observed that the impairment booked was primarily driven by the price reductions noted above. The Committee requested that disclosure be maintained in the Annual Report to note that any future sales proceeds could still be lower than this VIU.</p> <p>The Audit Committee challenged management and Deloitte on the key inputs to the impairment models including price, outage rates, life extensions and discount rates, and was comfortable with the conclusions reached.</p> <p>The Committee also noted the methodology used in valuing the Centrica Home Solutions and Centrica Business Solutions businesses, which included looking at sensitivities and benchmarking to external valuations.</p> <p>The Committee concurred with management's assessment of the level of impairment required for the Centrica Home Solutions assets and that no impairment was needed for Centrica Business Solutions customer business.</p> <p>Further detail on impairment arising and the assumptions used in determining the recoverable amounts is provided in notes 7 and S2 on pages 131 to 133. and 167 to 169.</p>

Classification and presentation of exceptional items and certain re-measurements

The Group reflects its underlying financial results in the business performance column of the Group Income Statement. To be able to provide this clearly and with consistent presentation, the effects of certain re-measurements of financial instruments and exceptional items are reported separately in a different column in the Group Income Statement.

The classification of items as exceptional and specific trades as certain re-measurements (see “Energy derivatives – classification and valuation” below) are subject to defined Group policies. These policies are reviewed annually by management.

At the year-end, exceptional items included the impairments noted above, as well as restructuring costs related to the Group’s cost efficiency programme of £356 million, net pension change credit of £152 million (see “Pensions” below) and net gains from disposals of £35 million.

Certain re-measurements totalled a £647 million cost.

During the year, the Group changed the presentation of its Income Statement following the IFRIC agenda decision on Physical Settlement of Contracts to Buy or Sell a non-financial item. This saw the inclusion of a “Re-measurement and settlement of energy contracts” line item within gross margin and meant that the certain re-measurement column was amended to facilitate this re-presentation.

Energy derivatives – classification and valuation

The Group enters into numerous commodity contracts in its ordinary course of business. This can be to procure load for its downstream business, sell output from its upstream assets, to trade around its other commodity exposures or to make money from proprietary activities. On entering into these contracts, the business assesses each of the individual trades and classifies them as either:

(i) Out of scope of IFRS 9:

- for commodities with no active market and where contracts cannot otherwise be net settled;
- for “own use” contracts (i.e. customer contracts, contracts to take delivery and meet customer demand or sell upstream output); or

(ii) In scope of IFRS 9:

- contracts for commodities which have the ability to be and practice of being net settled.

Energy contracts outside the scope of IFRS 9 are accruals accounted. Those contracts deemed in scope of IFRS 9 are treated as derivatives and are marked-to-market (fair valued). If the derivatives are for proprietary energy trading, they are recorded in the business performance column of the Income Statement. If they are entered into to protect and optimise the value of underlying assets/contracts or to meet the future downstream demand needs, they are recorded as certain re-measurements.

The fair value of derivatives is estimated by reference to published liquid price quotations for the relevant commodity. Where the derivative extends into illiquid periods, valuation techniques are used based on forecasts of long-term commodity prices.

Judgement is required in all aspects of both the classifications and valuations.

One of the Group’s critical accounting judgements is that LNG contracts are outside the scope of IFRS 9 because there is still no active market (i.e. liquid prices are not available) and our LNG contracts cannot be net settled.

The Committee formally reviewed and approved the Group’s policy on exceptional items in 2018 and, in the current year, it used this policy to help inform the appropriateness of the proposed classifications.

The Committee challenged the items classified as exceptional items, considering their size, nature and incidence and in the context of the Group policy. The Committee concluded that separate disclosure of these items as exceptional was appropriate in the Financial Statements.

The Committee also noted that the Group policy on certain re-measurements classification remained unchanged from previous periods and that this presentation allowed underlying performance to be reflected on a consistent and comparable basis. It also noted the grossing-up impact from the IFRIC re-presentation and concurred that this was an appropriate response to the new guidance.

Further detail is provided in notes 1 and 7 on pages 119 to 121 and 131 to 133.

The Committee noted that the Group’s policy and methodologies in classifying and valuing energy derivatives were unchanged from previous periods.

The Committee also reviewed and understood the breakdown by business of the movement in IFRS 9 derivative valuations in the Income Statement.

It reflected on the fact the Group is generally a net buyer of commodity and that in a period of falling prices, contracts in the scope of IFRS 9 will see a loss booked into the Income Statement.

The Committee noted and concurred with the specific judgement around LNG.

Further detail is provided in notes 1 and 7 on pages 119 to 121 and 131 to 133.

Key judgements and financial reporting matter in 2019	Audit Committee reviews and conclusions
<p>Energy supply revenue recognition</p> <p>The Group's revenue for energy supply activities includes an estimate of energy supplied to customers between the date of the last meter reading and an estimated year-end meter reading. It is estimated through the billing systems, using historical consumption patterns, on a customer-by-customer basis, taking into account weather patterns, load forecasts and the differences between actual meter readings being returned and system estimates. An assessment is also made of any factors that are likely to materially affect the ultimate economic benefits which will flow to the Group, including bill cancellation and re-bill rates. To the extent that the economic benefits are not expected to flow to the Group, revenue is not recognised.</p> <p>At the year-end, unbilled energy income for the supply businesses was £1,342 million (2018: £1,542 million).</p>	<p>The Committee has reviewed the level of unbilled revenue accrual and provisions made during the year and discussed with management and the external auditors.</p> <p>The Committee noted that the unbilled accrual had followed the same estimation process as in previous years and that Deloitte had independently reperformed this calculation to within an immaterial difference.</p> <p>More details of accrued energy income and provision for credit loss are provided in note 17 on pages 147 to 148.</p>
<p>Pensions</p> <p>The assets and liabilities, and the cost associated with providing benefits under defined benefit schemes, are determined separately for each of the Group's schemes. Judgement is required in setting the key assumptions used for the actuarial valuation which determines the ultimate cost of providing post-employment benefits, especially given the length of the Group's expected liabilities.</p> <p>The net Group pension deficit was £163 million (2018: £79 million). The UK defined benefit schemes used a nominal discount rate of 2.2% (2018: 3.0%) and inflation of 2.9% (2018: 3.1%).</p> <p>During the year, the Group renegotiated some of the terms and conditions associated with the UK schemes (including contribution rates, salary caps and pension in retirement options). The impact of these changes has been reflected in the above deficit (and is part of the net pension exceptional item).</p>	<p>The Committee received training on the Centrica Pension Schemes in July 2018. The Committee noted the key assumptions and disclosures in the Financial Statements. The Committee noted the negotiated changes to the schemes and the link to exceptional items.</p> <p>The Committee also noted the consistent year-on-year methodology used to derive the key defined benefit assumptions and that the rates were within comparator range.</p> <p>It also recognised the role of the independent actuary, who is consulted on the appropriateness of the assumptions, and discussions were also held with the external auditors.</p> <p>Further details on pensions are set out in note 22 on pages 162 to 166.</p>
<p>Going concern, Viability Statement and liquidity risk</p> <p>The Group experiences significant movements in its liquidity position due primarily to the seasonal nature of its business and margin cash. To mitigate this risk the Group holds cash on deposit and maintains significant committed facilities. The Group regularly prepares an assessment detailing these available resources to support the going concern assumption in preparing the Financial Statements. The Group also models various possible downside scenarios to show the longer-term viability of the business and to support the Viability Statement.</p>	<p>The Committee reviewed and challenged management's funding forecasts and sensitivity analysis and the impact of various possible adverse events including significant commodity price movements and credit rating downgrades.</p> <p>The external auditors also provided detailed reporting and held discussions with the Committee.</p> <p>Following the review, the Committee recommended to the Board the adoption of the going concern statement in the Annual Report and Accounts 2019 and concurred with the viability conclusion.</p> <p>Further details on sources of finance are set out in note 24 on pages 158 to 160. The Going Concern section is in Other Statutory Information on page 102 and the Viability Statement in Our Principal Risks and Uncertainties on pages 44 to 45.</p>

Key judgements and financial reporting matter in 2019

Audit Committee reviews and conclusions

IFRS 16: Leases

The Group was required to adopt IFRS 16: Leases in 2019. This had the effect of bringing all leases (excluding low value or short-term leases) on balance sheet. Following a detailed review of the Group's relevant contractual positions, application resulted in the recognition of total lease liabilities and right-of-use assets on 1 January 2019 of £620 million and £463 million respectively. £402 million of the lease liability is incremental to the previous position and so consequently increased net debt.

Judgement was required around the treatment of extension and termination options and identifying the customer for arrangements involving assets used in joint operations.

Ofgem Consolidated Segmental Statement

The Group is required to prepare an annual regulatory statement (Consolidated Segmental Statement (CSS)) for Ofgem which breaks down our licensed activities for the financial year into a generation, domestic and non-domestic and electricity and gas result.

The CSS is reconciled to our externally reported International Financial Reporting Standards Annual Report and Accounts. The Group publishes the CSS at the same time as the full year Annual Report and Accounts and the CSS is independently audited.

In preparing the CSS, judgement is required in the allocation of non-specific costs between domestic and non-domestic and electricity and gas and the distinction between licensed and non-licensed activities.

The Committee reviewed and challenged the Group's assessment of the accounting impact of IFRS 16 and also discussed the approach and conclusions with the external auditors.

The Committee concurred with the conclusions reached on adoption of this standard.

Further details on the new accounting standards are included in note [1] on pages 119 to 121.

The Committee reviewed the Ofgem Consolidated Segmental Statement and the key judgements and disclosures made in its preparation.

The external auditor also provided a detailed report and held discussions with the Committee.

The full CSS and the independent audit opinion approved by the Committee for publication are set out on pages 212 to 221.

Disclosure Committee



Iain Conn
Committee Chairman

Committee membership

	Meetings attended ⁽¹⁾
Iain Conn , Group Chief Executive	6/6
Chris O'Shea , Group Chief Financial Officer	6/6
Justine Campbell , Group General Counsel & Company Secretary (since 1 April 2019)	4/4
Grant Dawson , Group General Counsel & Company Secretary (until 30 March 2019)	2/2

(1) Attendance is expressed as the number of meetings attended out of the number eligible to be attended.

Committee focus in 2019

- Reviewed the Preliminary Results announcement, the Annual Report and Accounts, the Interim Results and the trading statements and advised on the scope and content of disclosure
- Reviewed announcements regarding Board and key management changes
- Specific projects – in relation to confidential and inside information

Areas of focus for the Committee in 2020

- Review results announcements to determine scope and content of disclosure
- Keep Confidential Projects under review in relation to confidential and inside information
- Keep under review the systems and controls in respect of management and disclosure of inside information

Dear Shareholder

On behalf of the Board, I am pleased to present the Disclosure Committee report for the year ended 31 December 2019 which explains the Committee's focus and activities during the year and for 2020.

Role of the Committee

The Disclosure Committee is responsible for the disclosure controls and procedures of the Group and for ensuring that Centrica meets the regulatory requirements when disclosing information concerning the Company. It is therefore responsible for the design, implementation, operation and monitoring of systems and controls in respect of the management and disclosure of inside information, keeping the adequacy of Disclosure Procedures under review, and for ensuring that regulatory announcements, shareholder circulars, prospectuses and other documents issued by the Company comply with applicable legal or regulatory requirements and specifically the Market Abuse Regulation, the Listing Rules, and Disclosure Guidance and Transparency Rules. The Committee resolves questions about the materiality and treatment of information and considers and determines whether certain issues or events give rise to inside information about the Company which requires disclosure and/or the creation of insider lists. The Committee, in conjunction with its advisers, will also, in certain exceptional circumstances, consider whether the conditions for delaying disclosure of inside information about the Company are satisfied and, where appropriate, will implement and monitor the delay procedure.

The Committee has scheduled meetings each year to approve the Interim and Preliminary Results announcements and trading statements and meets as required to review other matters falling under the Committee's remit.

Membership and attendance at meetings

The Committee is comprised of the Group Chief Executive, Group Chief Financial Officer and Group General Counsel & Company Secretary. The Committee met six times during 2019, with each meeting having a distinct agenda to reflect the particular matters for the Committee's consideration. Members of management are invited to attend when required. The auditors, Deloitte, attended the 20 February meeting.

Main activities of the Committee during 2019

During the year the Committee reviewed the Preliminary Results announcement, the Annual Report and Accounts, the Interim Results and the trading statements, and advised on the scope and content of disclosure. The Committee also considered the release of regulatory and industry announcements, reviewed announcements regarding Board and key management changes, and considered specific confidential projects to determine whether there was inside information in relation to the Company.

Committee effectiveness

Read more about our Board and Committee evaluation process on page 66.

Iain Conn
on behalf of the Disclosure Committee

Nominations Committee



Charles Berry
Committee Chairman

“ We continue to align the Board and senior leadership succession planning with Centrica’s strategy and culture.”

Committee membership

	Meetings attended ⁽¹⁾
Charles Berry , Chairman (since 21 February 2019) ⁽²⁾	4/5
Rick Haythornthwaite , Chairman (until 20 February 2019)	1/1
Joan Gillman , Non-Executive Director	5/5
Stephen Hester , Senior Independent Director	5/5
Pam Kaur , Non-Executive Director (since 1 February 2019) ⁽²⁾	3/5
Kevin O’Byrne , Non-Executive Director (since 13 May 2019)	4/4
Carlos Pascual , Non-Executive Director	5/5
Steve Pusey , Non-Executive Director ⁽²⁾	4/5
Scott Wheway , Non-Executive Director	5/5
Margherita Della Valle , Non-Executive Director (until 12 May 2019)	1/1

(1) Attendance is expressed as the number of meetings attended out of the number eligible to be attended.

(2) Absence due to unavoidable diary conflicts.

Heidi Mottram, Non-Executive Director, joined the Committee on 1 January 2020.

Committee highlights in 2019

- Succession planning
- Three new Non-Executive Directors appointed
- One new Executive Director appointed
- Committee membership changes

Areas of focus for the Committee in 2020

- Succession planning of Executive Directors: Recruitment and onboarding of the Group Chief Executive to succeed Iain Conn
- Executive Director and senior leadership succession: enhancing the talent development and diversity pipeline

Dear Shareholder

On behalf of the Board, I am pleased to present the Nominations Committee’s report for 2019 which explains the Committee’s focus and activities during the year and looks ahead to 2020. I hope you will find the report that follows interesting and informative.

The Nominations Committee continues to play a key supporting role in Centrica’s strategy, maintaining a balanced and effective leadership, to create and promote the Group’s culture and values. This year the Committee has continued to focus on succession planning and, specifically, refreshing the executive and non-executive membership of the Board. The Committee has also continued its internal talent development, this year looking at its diversity pipeline, and has conducted a rigorous internal review of its performance.

Role of the Committee

The Nominations Committee is responsible for ensuring that the Board and its Committees have the appropriate balance of skills, knowledge and experience to effectively lead the Company both now and in the future. This is achieved through effective succession planning, the identification and development of internal talent and a clear understanding of the competencies and capabilities required to support the delivery of Centrica’s strategy.

The Committee undertakes comprehensive reviews of the leadership needs of the Company, both executive and non-executive, to ensure the continued ability of the organisation to compete effectively in the marketplace and keeps informed of the strategic issues and commercial changes affecting the Company and the market in which it operates.

The Committee plays an important role in promoting diversity and inclusion on the Board. In identifying and nominating candidates to fill Board vacancies, the Committee considers candidates from a wide range of backgrounds, assessing them on merit against objective criteria and with due regard for the benefits of diversity on the Board.

The Committee regularly undertakes reviews of its Terms of Reference to ensure that it reflects the actual role carried out by the Committee and is operating effectively. The Board reviewed and approved new Terms of Reference for the Committee in July 2019. The Terms of Reference and operations of the Committee already captured the bulk of the new requirements set out in the 2018 Code, and therefore only minor changes were required. The membership requirement was altered to at least three members to align with the other Committees; the definition of diversity was extended more broadly than solely gender diversity; and in line with best practice, a requirement for new Directors to disclose other interests was added.

Membership and attendance at meetings

The Committee is comprised solely of Non-Executive Directors: Charles Berry (Chairman), Joan Gillman, Stephen Hester, Pam Kaur, Heidi Mottram (since 1 January 2020), Kevin O'Byrne, Carlos Pascual, Steve Pusey and Scott Wheway. The Board is satisfied that the Committee has the resources and expertise to fulfil its responsibilities.

During the year, the Group Chief Executive and Group HR Director were invited to attend meetings, as and when the Committee thought it appropriate and necessary. If required by the Committee, other Senior Executives may be invited to attend to provide information on matters being discussed which fall within their area of responsibility.

The Committee met five times during 2019, with each meeting having a distinct agenda to reflect the particular matters for the Committee's consideration.

Main activities for the Committee during 2019

- Ensured the Board and senior leadership succession planning is aligned with Centrica's strategy and culture;
- Reviewed Director elections and re-elections at the forthcoming AGM following a formal and rigorous process for evaluating the performance of individual Board members;
- Identified and recommended to the Board new Non-Executive Directors. Pam Kaur replaced Lesley Knox; Charles Berry succeeded Rick Haythornthwaite as Chairman; Kevin O'Byrne was appointed to succeed Margherita Della Valle as Audit Committee Chairman; and Heidi Mottram was appointed during the year, joining the Board on 1 January 2020.
- Began the recruitment process for a successor to the Group Chief Executive; and
- Recommended changes in membership of the Audit, Nominations and Remuneration Committees and of the SHESEC.

Board succession

Throughout the year, the Committee continued to focus on Board succession. Succession planning within the Company is continuous and pro-active and arrangements are in place to ensure that changes to the membership of the Board are well managed. The Committee keeps under review the leadership needs of the organisation, both executive and non-executive, with a view to ensuring the continued ability of the organisation to compete effectively in the marketplace.

The Committee embraces the importance of diversity and inclusion in all Board recruitment and supports the recommendations of the Hampton-Alexander and Parker Reviews in relation to gender and ethnic diversity. The Committee remains committed to achieving a more diverse Board, with broad search criteria used to encourage a diverse range of candidates.

The Committee also regularly reviews the structure, size and composition (including the skills, experience, independence, knowledge and diversity, including gender and ethnicity) of the Board and its Committees to ensure they can discharge their duties effectively. This planning is in alignment with the Company's values and culture and takes into account the challenges and opportunities facing the Company.

Non-Executive Directors

Following a formal and rigorous process for evaluating the performance of the individual Board members, which gives due regard to their time commitment, performance and ability to continue to contribute to the Board taking account of the knowledge, skills and experience required, the Nominations Committee proposed all serving Directors for election or re-election by shareholders at the AGM.

It is the role of the Committee to ensure there is a formal and appropriate procedure for the appointment of new directors to the Board. The Committee is responsible for leading this process and making recommendations to the Board. The search process for new Non-Executive Directors is to appoint search firms to secure a strong and diverse list of candidates. A shortlist of candidates is shared with the Committee, meetings scheduled and then once the candidates have been identified, confirmation of the time commitment required and disclosure of any other business interests that may result in a conflict of interest.

During 2019, a search process was initiated, to identify three new Non-Executive Directors. Pam Kaur joined the Board on 1 February 2019. Pam's considerable experience of audit, compliance, finance and risk management will be of significant benefit to the Board. Kevin O'Byrne joined the Board on 13 May 2019 and brings a wealth of retail and finance experience; he was also previously chair of the Audit Committee at Land Securities Group PLC. In May, I engaged Korn Ferry to carry out a search process to identify a suitable candidate for a further appointment of a Non-Executive Director with operational utility experience. I am delighted that Heidi Mottram joined the Board on 1 January 2020. She was selected for her considerable relevant strategic and operational experience acquired in her current and previous roles and her deep understanding of the importance of customer service, delivered in complex multi-stakeholder environments with a high public profile.

Executive Directors

In 2018, in line with our Executive Director succession planning, the Nominations Committee recommended, and the Board approved, the appointment of Sarwjit Sambhi as Chief Executive, Centrica Consumer, who joined the Board on 1 March 2019. Sarwjit joined the Group in 2001 and has held senior leadership positions in retail, strategy, finance, trading, power generation, exploration and production. Most recently, he was Managing Director, UK Home.

In July 2019 it was announced that Iain Conn had agreed with the Board to step down as Group Chief Executive and retire from the Board in 2020. The Nominations Committee appointed Korn Ferry to focus on identifying and assessing both internal and external candidates for the role.

Committee memberships

During the year the Nominations Committee carried out a review of the composition of the Committees to take into account the new Board members and the skills that they bring to the Board and made recommendations for changes to the membership of four of the Committees. Kevin O'Byrne was appointed as Chairman of the Audit Committee and Pam Kaur joined as a member. Pam Kaur also joined the SHESEC on 21 August 2019, and Joan Gillman joined the Remuneration Committee on the same date. Heidi Mottram joined the Board on 1 January 2020 and became a member of the SHESEC upon appointment. All Non-Executive Directors are members of the Nominations Committee.

Talent development

Internal talent development and the ability to attract, retain and develop skilled, high potential individuals within Centrica are areas on which the Committee continues to focus. The Nominations Committee, supported by the Group HR Director, and in partnership with Spencer Stuart, has developed a clear understanding of how the requirements of our senior management roles are changing in line with the evolving customer requirements, with the aim of upgrading and realigning our leadership capability. The review carried out identified key employees who were considered to be, or could be developed to be, critical to the success of the Group, and appropriate plans were put in place to ensure there is an appropriate mix of employees within the Group who could fill key roles in the short and longer term. The Group Chief Executive and Group HR Director provide the Committee with regular updates on succession planning for senior management.

The Committee encourages the development of board-level skills through senior executives taking on roles on subsidiary boards and external directorships.

Senior Executives

The Senior Executives are members of the Centrica Executive Committee, and are responsible for setting expectations, policies, processes and an executive governance framework for strategy, people, performance management, communications, and risk management.

The Nominations Committee recommended the appointment of Justine Campbell as Group General Counsel & Company Secretary, which the Board approved with effect from 1 April 2019. Justine has been with the Group since 2013 and has considerable legal and regulatory experience in both the energy and telecommunications sectors.

The Committee recognises the importance of and the benefits to the Company of developing a diverse pipeline and it will continue to work with senior management to develop internal talent.

Diversity, respect and inclusion

The Group operates in increasingly diverse communities, both in the UK and internationally, and this diversity is evident in our workforce, and among our customers, suppliers and other stakeholders. We recognise the value that individuals from different backgrounds and of different abilities can bring to our business, and in an increasingly competitive environment this is an important factor in the Company's strategy, in particular our customer obsession.

The Board Diversity Policy sets out the approach of the Group to diversity and inclusion. Throughout the process of appointment of Board members, due regard is given to ensuring fairness and diversity through consideration of skills, experiences, competencies and individual characteristics. The recruitment process complies with Group HR recruitment processes around diversity, respect and inclusion. The Chairman of the Board is accountable for the implementation of the Board Diversity Policy and considering and adopting a range of approaches to promote diversity within the Board. For example, these may include but are not limited to:

- Informal and formal Board discussions;
- Board agenda items relating to diversity;
- Raising awareness on the benefits of diversity;
- Board learning and development activities which promote diversity; and
- Diversity impact assessments in respect of Board-related projects or activities where relevant and appropriate.

Applying these principles ensures that the Board better reflects the communities in which we operate. The Board periodically monitors and measures Board diversity and drafts action plans where improvements are required.

Senior managers are also required to support this policy in developing diversity in the broader business and must also comply with Group HR recruitment processes and the Centrica UK Diversity, Respect and Inclusion Policy.

The Board has already met the Parker Review target, following the appointment of Sarjit Sambhi and Pam Kaur to the Board in 2019 in addition to Carlos Pascual who joined the Board in 2015. The Board fully supports the recommendations of the Hampton-Alexander Review and aspires to meet its goals by 2022 of having 33% women on our Board (and senior leaders). We recognise that there is always more we can do and will continue to work to build an inclusive workplace at all levels of the Company.

Board and Committee evaluation

For the 2019 Board evaluation, Independent Audit Limited, an external provider, facilitated a self-assessment of the effectiveness of the Company's Board and Committees, including observing Board and Committee meetings. The evaluation exercise was led by the Chairman and supported by the Group General Counsel & Company Secretary. Independent Audit Limited attended Board and various Committee meetings and produced a report for the Chairman which was discussed by the Board. Read more about the Board evaluation process on page 66.

Committee effectiveness

Read more about our Board and Committee evaluation process on page 66.

Charles Berry
on behalf of the Nominations Committee

Safety, Health, Environment, Security and Ethics Committee



Steve Pusey
Committee Chairman

“ We’ve raised awareness of our views on climate change, set our climate change Ambitions to 2030 and engaged with key stakeholders, with positive feedback.”

Committee membership

	Meetings attended ⁽¹⁾
Steve Pusey, Chairman	4/4
Margherita Della Valle, Non-Executive Director (until 12 May 2019)	1/1
Joan Gillman, Non-Executive Director	4/4
Pam Kaur, Non-Executive Director (since 21 August 2019)	1/1
Carlos Pascual, Non-Executive Director	4/4
Scott Wheway, Non-Executive Director	4/4

(1) Attendance is expressed as the number of meetings attended out of the number eligible to be attended.

All current SHESEC members also attended the two joint SHESEC/Audit Committee meetings held in 2019.

Heidi Mottram, Non-Executive Director, joined the Committee on 1 January 2020.

Committee highlights in 2019

- Cultural assessment across all NA businesses and functions – no systemic issues exist; common themes and opportunities for improvement
- Approved change to environmental KPIs following the Group’s outperformance against the internal carbon footprint KPI and the changes to the Group’s assets
- Separately reviewed deep dives on Centrica’s Occupational and Process Safety performance and the key 2019 initiatives for each of these areas
- Oversaw transition from implementation of Ethics and Compliance (E&C) structures to embedding E&C into business activities

Areas of focus for the Committee in 2020

- Process safety
- Occupational safety
- Resilience and business continuity
- Impact of transformation activity on workforce

Dear Shareholder

On behalf of the Board, I am pleased to present the Safety, Health, Environment, Security and Ethics Committee (SHESEC) report for the year ended 31 December 2019 which explains the Committee’s focus and activities during the year and for 2020.

The SHESEC plays a supporting role in Centrica’s strategy by providing constructive challenge to the management of risks and reviewing the effectiveness of the control framework related to safety, health, environment, security and ethics.

I hope that you find this report an interesting explanation of our work during the year.

Role of the Committee

The Committee is responsible for keeping under review the adequacy and effectiveness of the Company’s internal controls and risk management systems related to safety, health, environment, security and ethics in respect of:

- People: Engagement, Culture and Behaviours;
- Sourcing and Supplier Management;
- Infrastructure, Equipment and Practices affecting Health, Safety, Environment and Security;
- Information Systems and Security; and
- Legal, Regulatory and Ethical Standards Compliance.

The Committee regularly undertakes reviews of its Terms of Reference to ensure that it reflects the actual role carried out by the Committee, and is operating effectively. The Board reviewed and approved new Terms of Reference for the Committee in July 2019 which incorporated only minor changes, to remove the requirement for the Committee to meet at least twice a year with only the Head of Internal Audit present and to amend references to the Group’s Business Principles to Our Code.

Membership of the Committee and attendance at meetings

The Committee comprises Steve Pusey (Chairman), Joan Gillman, Pam Kaur (since 21 August 2019), Heidi Mottram (since 1 January 2020), Carlos Pascual and Scott Wheway. All of the Committee’s members are independent Non-Executive Directors.

SHESEC members bring a wide range of sector experience, insight and stakeholder perspectives which are used to challenge, shape and provide oversight of the SHESEC’s agenda. Details of the matters discussed at Committee meetings are set out later in this report.

During the year, the Chairman of the Board, the Group Chief Executive, the Group General Counsel & Company Secretary, the Group HR Director, the Group HSES Director and the Group Head of Internal Audit, Risk and Control attended all Committee meetings, as did other key executives.

The Committee met four times during 2019, with each meeting having a distinct agenda to reflect the particular matters for the SHESEC’s consideration.

At each meeting the Committee receives reports from Group HSES, Group Ethics & Compliance and Group Internal Audit & Enterprise Risk, in addition to deep dives on key areas of focus.

The SHESEC's forward programme is developed with the Group General Counsel & Company Secretary and is regularly reviewed. The SHESEC and Audit Committee work together, through their Chairmen and secretaries, to ensure that agendas do not overlap or omit coverage of any key risks during the year.

Joint meetings of the Audit Committee and SHESEC

The Audit Committee and SHESEC hold joint meetings twice a year to simplify reporting of key issues that are within the remit of both Committees and to make more effective use of the Committees' time. At the joint meetings in 2019, the Committees considered the Group's systems of risk management and internal control: in the first quarter to assess the system's effectiveness; and in the fourth quarter to look prospectively at plans for 2020. Each Committee retains discretion to require a full presentation and discussion on any joint meeting topic at their respective meeting if deemed appropriate. Further details are included in the Audit Committee's report.

Main activities of the Committee during 2019

The review of operational risk and performance forms a large part of the Committee's agenda. Group HSES, Group Internal Audit, Risk & Control and Ethics & Compliance provided quarterly reports on their assurance work, on operational risk, including on the Group's health, safety and environmental performance and operational integrity. Further deep dives provided measures of personal and process safety, environmental and regulatory compliance, security and cyber risk analysis. The Committee reviewed these risks and their management and mitigation in depth with relevant executive management. The main activities of the Committee in 2019 were:

- approved change to environmental KPIs following the Group's outperformance against the internal carbon footprint KPI and the changes to the Group's assets;
- reviewed Centrica's adherence to FCA's Market Conduct;
- reviewed the impact of transformation activity on the HSE function and our overall HSE performance, as measured by our key metrics;
- separately reviewed deep dives on Centrica's Occupational and Process Safety performance and the key 2019 initiatives for each of these areas;
- oversaw transition from implementation of Ethics & Compliance (E&C) structures to embedding E&C into business activities;
- GDPR programme reaching a 'mature state' with the adoption of similar data privacy frameworks and controls in North America drawing on the experience of the GDPR programme for the UK and ongoing activity to raise employee awareness of the importance of data as a key strategic asset;
- reviewed the work undertaken to ensure slavery and human trafficking are not taking place within Centrica's business or supply chains and endorsed the proposal that Centrica's 2019 Modern Slavery Act (MSA) Statement be recommended to the Board for approval;
- discussion of an initiative for desired culture in North America and the multi-year journey required to deliver the actions as a result of the review. Cultural assessment across all NA businesses and functions – no systemic issues exist; common themes and opportunities for improvement;
- Our Code e-learning and certification launch;
- Ethics & Compliance – minimum standards had been reached during 2018, progress to embed/build upon during 2019;
- audit of NEAS; and
- reviewed the developing governance arrangements for subsidiary companies and in particular for Centrica's regulated entities.

Safety

The Committee continued to prioritise safety as a key focus area. Whilst customer injury numbers remained low, our recordable injury frequency rate increased slightly in 2019. Overall injury numbers continue to reduce but our reorganisation has led to lower worked hours year on year. We experienced two Tier 2 process safety events in 2019, a gas release on the J6A platform within our Spirit Energy joint venture in April and a fire on a CHP unit in Centrica Business Solutions in October. This compares to one Tier 1 and one Tier 2 event in 2018. However, our process safety incident frequency rate also increased as our worked hours reduced year on year. The rate remains better than target. Due to the previous year's Tier 1 event, which also occurred on J6A, the Committee discussed in detail the 2019 gas release, the investigation findings and actions, also referring to the findings of the previous event investigation. The final investigation report was circulated to the Committee. The CBS event was discussed at the CEC HSES Sub-committee.

Our Spirit Energy joint venture is required to comply with Centrica's HSES policies and is accountable to the Spirit Energy Board for its HSES performance. Spirit Energy's Board's assurance of policy compliance is provided through Spirit Energy's HSES and Internal Audit functions. Centrica assures Spirit Energy's HSES performance through: the Centrica-appointed directors on the Spirit Energy Board; regular reviews by Centrica Executive Management and Board; and, where necessary, through the right to independently audit Spirit Energy's performance and compliance with our HSES policies.

Environmental review

Environmental Leadership was a core element of the Centrica HSE plan for 2018-19 and will remain a core element for 2020. In 2019, we made strong progress in raising awareness of our views on climate change, introduced 2030 Responsible Business Ambitions to tackle climate change and increased our engagements with key stakeholders including customers and investors, with positive feedback on our ambitions.

Committee effectiveness

Read more about our Board and Committee evaluation process on page 66.

Steve Pusey
on behalf of the SHESEC

➔ [Read more about our process safety performance in our Key Performance Indicators on Pages 18 to 19](#)

➔ [Read more about Our Code and the Speak Up helpline \[centrica.com/ourcode\]\(http://centrica.com/ourcode\)](#)
See Page 54 or centrica.com/ assurance for more details.

Remuneration Report



Scott Wheway
Committee Chairman

“ We continue to take a disciplined approach to executive remuneration that seeks to ensure Executive Directors are fairly and appropriately rewarded while ensuring alignment with the expectations of all our stakeholders.”

Committee membership

	Meetings attended ⁽¹⁾
Scott Wheway, Chairman	4/4
Joan Gillman, Non-Executive Director (since 21 August 2019)	1/1
Stephen Hester, Senior Independent Director	4/4
Carlos Pascual, Non-Executive Director⁽²⁾	3/4

(1) Attendance is expressed as the number of meetings attended out of the number eligible to attend.
 (2) Absence due to unavoidable diary conflict.

Committee key activities in 2019

- Executive remuneration market updates and revised investor guidelines
- 2019 performance metrics, targets and award levels
- Executive Director and Executive Committee objectives for 2019
- Review of two significant incentive plans operating across the Group
- The CEO pay ratio
- Executive and senior manager pension benefits
- Business performance and remuneration outcomes
- Pay, benefits, incentives and policy across the wider workforce

Areas of focus for the Committee in 2020

- Review of Executive Remuneration Policy
- Remuneration arrangements for a new CEO
- Working with the employee champion to bring the employee voice to our meetings
- 2020 performance metrics, targets and award levels
- Pay, benefits, incentives and policy across the wider workforce

On behalf of the Board, I present the Remuneration Committee’s report for 2019.

In summary

2019 was a very difficult year for Centrica with performance outcomes that were disappointing in a number of areas. The external environment continued to be challenging, with the implementation of the UK default tariff cap, low wholesale gas prices and nuclear outages. Adjusted earnings and adjusted operating cash flow (AOCF) were down compared with the previous year. However, net debt was in line with our 2019 target ranges and cost efficiency delivery was strong. For our non-financial KPIs, brand NPS improvements and customer complaint targets were met and process safety performance was held at top quartile levels.

The Committee has carefully considered the many exceptional contributions of the leadership team and the wider workforce with the mitigation of external factors outside of management control, alongside absolute performance outcomes and shareholder experience in the year.

In this context we have made some tough decisions which reflect our determination to demonstrate that a number of the financial outcomes for 2019 were below expectations.

In summary the Committee has decided:

- to reduce the CEO and Executive Directors’ 2019 annual bonus to zero;
- to use discretion to reduce to zero the 2017/19 LTIP outcome for Executive Directors as a result of overall financial performance over the three-year performance period;
- not to award any annual pay increases to Executive Directors; and
- to reduce the 2020/22 LTIP grant from 300% to 250% in recognition of the lower starting share price.

The effect of these decisions is that the CEO and Executive Directors will receive no variable remuneration for 2019. This is an unusual and far-reaching outcome but the Committee believes it shows appropriate alignment with our key stakeholders, including our shareholders and our workforce, all of whom have endured a very difficult 2019.

Performance outcomes for the year

The Committee has carefully assessed performance against the original targets that were set for the 2019 Annual Incentive Plan (AIP). The formulaic outcome resulted in AOCF narrowly missing the threshold level. Ordinarily, discretionary adjustments for commodity price movements and other external factors would have increased the AOCF result to midway through the award range. However, Adjusted Operating Profit (AOP) failed to meet the required threshold even with commodity price movements and other external factors considered. Cost efficiency delivery was strong, with an outcome midway between target and maximum for this measure. In making its assessment of performance overall the Committee took into full consideration the shareholder experience over 2019 and as a result, concluded that irrespective of the formulaic result, it was not appropriate to make an annual bonus payment to any of the Executive Directors for the year.

The Committee also assessed the vesting outcome for the Long Term Incentive Plan (LTIP) awards that were made in 2017. The performance conditions were equally weighted between EPS growth, absolute aggregate Economic Profit and non-financial KPIs over the three-year period. The two financial targets were not met, but performance against the non-financial KPIs across the period resulted in a vesting of 40% for this element of the award, mainly as a result of strong safety performance. However, given the poor performance against the two financial measures, the Committee decided to exercise its discretion and reduce the overall outcome of the 2017/19 LTIP to zero.

Application of Policy for 2020

In 2020, no Executive Director will receive a salary increase. The Committee has also considered the impact that the current share price could have on the number of shares to be granted under the 2020/22 LTIP cycle and as a result has decided to reduce the award level to 250% of salary.

The Committee has reviewed the bonus measures and weightings to apply for 2020, in line with the Group Annual Plan. 50% of the financial measures will be based on adjusted operating profit, 30% of the financial measures will be based on free cash flow and 20% of the financial measures will be based on cost efficiency.

Remuneration Policy review

In accordance with the established three-year cycle of presenting remuneration policy to shareholders, during 2020 the Committee will review its Policy to ensure that it remains aligned with the strategic objectives and long-term aims of the Group prior to presentation at the 2021 AGM.

Conclusion

Overall, 2019 has been a challenging year for Centrica as a business and for our shareholders. The Committee continues to take a disciplined approach to executive remuneration that seeks to ensure Executive Directors are fairly and appropriately rewarded while ensuring alignment with the expectations of all our stakeholders. We believe that the difficult decisions made in respect of 2019 achieve this aim and align pay and performance effectively. The Committee is dedicated to an open and transparent dialogue with our investors and therefore I welcome views on any part of our remuneration arrangements.

Scott Wheway

on behalf of the Remuneration Committee

Role of the Remuneration Committee

The role of the Committee continues to be ensuring that the Directors, the Executive Committee and the Chairman of the Board are appropriately rewarded, through making recommendations regarding remuneration policy and framework. The Terms of Reference further extend the Committee's remit to include greater responsibility for understanding how pay and conditions align across the Group.

The Committee monitors and reviews the effectiveness of the Remuneration Policy and considers its impact and compatibility with remuneration policies across the wider workforce. To facilitate this remit, the Committee is provided with information and context on pay, benefits and incentive structures in place across the Group to support its decision making.

Membership and attendance

The Committee is chaired by Scott Wheway, an independent Non-Executive Director. Each member of the Committee is independent. No Director is involved in the determination of, or votes on, any matters relating to his or her own remuneration.

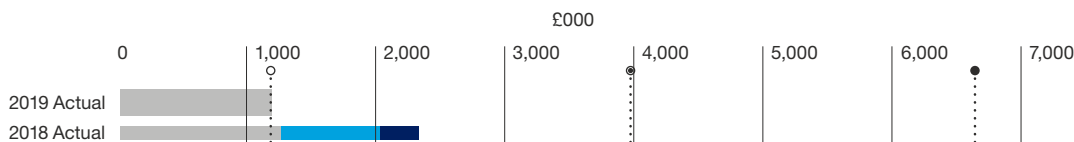
The Chairman of the Board, the Group Chief Executive, the Group General Counsel & Company Secretary, the Group HR Director and the Deputy Group HR Director & Group Head of Reward are normally invited to attend each Committee meeting to provide advice and guidance, other than in respect of their own remuneration.

Joan Gillman, Non-Executive Director, became our Employee Champion in 2018. Joan was appointed to the Remuneration Committee in October 2019 to ensure the employee voice is taken into consideration as it relates to decision making on executive pay.

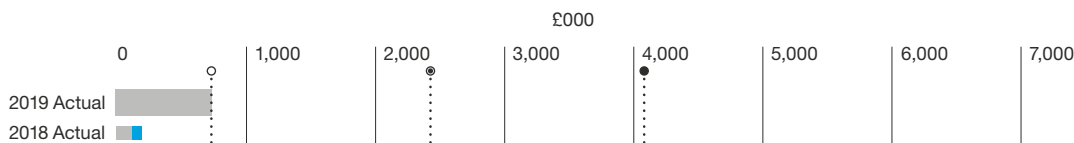
Remuneration Summary for 2019

Total remuneration received in 2019 (£000)⁽¹⁾

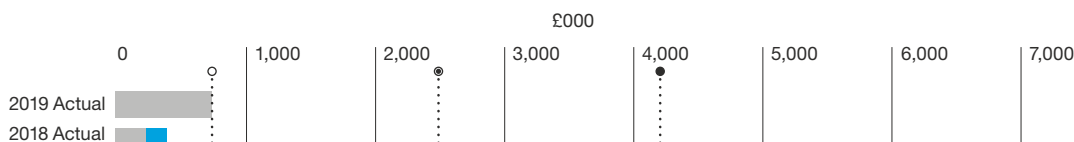
Iain Conn
£1,186
2018: £2,335



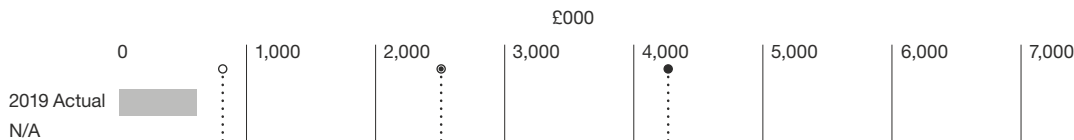
Richard Hookway
£744
2018: £206



Chris O'Shea
£752
2018: £394



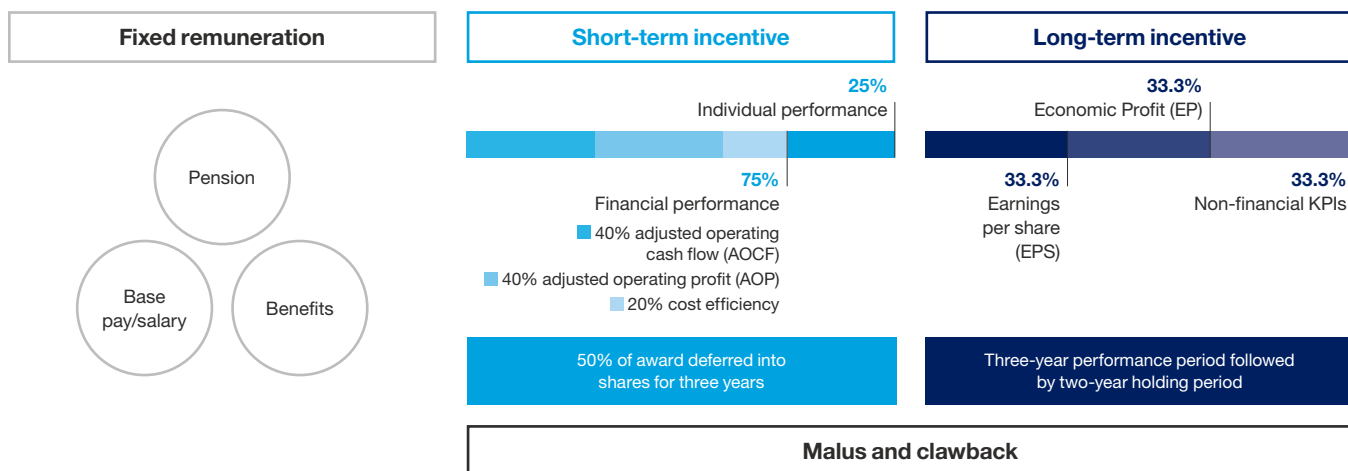
Sarwjit Sambhi
£607
N/A



- Fixed remuneration
- Short-term incentive
- Long-term incentive
- Minimum total pay
- On-target total pay
- Maximum total pay

(1) Prepared on the same basis as the single figure for total remuneration table set out on page 86.

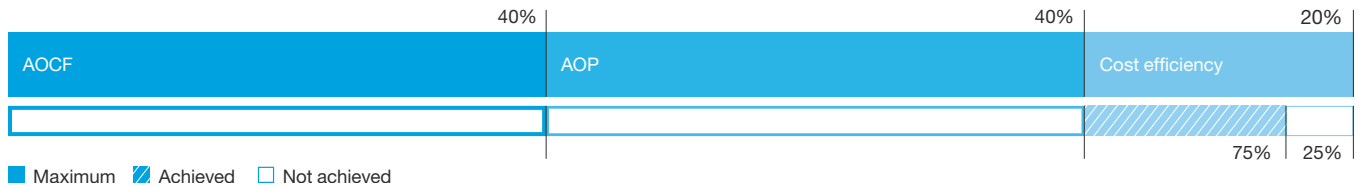
Components of remuneration package in 2019



[Read more about our Remuneration Policy](#)
Pages 94 to 99

Short-term incentive outcome (Annual Incentive Plan)

Financial performance



Irrespective of the formulaic result, due to the financial performance of the business in 2019 the Committee exercised discretion resulting in a zero bonus for Executive Directors.

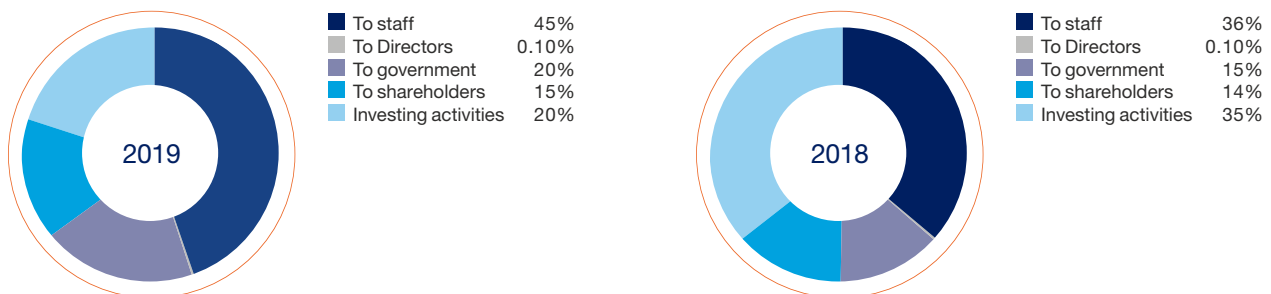
Long-term incentive outcome (Long Term Incentive Plan)



Irrespective of the formulaic result, the Committee decided to use its discretion to reduce to zero the 2017 LTIP outcome for Executive Directors as a result of overall financial performance over the three-year period.

2019 cash flow distribution to stakeholders

The Committee monitors the relationship between the Directors' total remuneration and cash outflows to other stakeholders. As demonstrated by the chart, the Directors' aggregate total remuneration for the year equates to 0.10% (2018: 0.10%) of the Group's operating cash flow.



Directors' Annual Remuneration Report

Directors' remuneration in 2019

This report sets out information on the remuneration of the Directors for the financial year ended 31 December 2019.

Single figure for total remuneration (audited)

£000	Salary/fees		Bonus (cash)		Bonus (deferred)		Benefits ⁽¹⁾		LTIPs ⁽²⁾		Pension ⁽³⁾⁽⁴⁾⁽⁵⁾		Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018 ⁽²⁾
Executives														
Iain Conn	953	940	-	388	-	388	31	31	-	306	202	282	1,186	2,335
Jeff Bell ⁽⁶⁾	-	479	-	198	-	198	-	35	-	182	-	101	-	1,193
Mark Hanafin ⁽⁶⁾	-	584	-	235	-	235	-	23	-	207	-	163	-	1,447
Mark Hodges ⁽⁷⁾	106	638	-	-	-	-	4	25	-	-	27	159	137	822
Richard Hookway ⁽⁸⁾	600	100	-	41	-	41	34	4	-	-	110	20	744	206
Chris O'Shea ⁽⁹⁾	620	191	-	79	-	79	25	7	-	-	107	38	752	394
Sarwjit Sambhi ⁽¹⁰⁾	517	-	-	-	-	-	21	-	-	-	69	-	607	-
Total													3,426	6,397

(1) Taxable benefits include car allowance, health and medical benefits and financial planning advice. Non-taxable benefits include matching shares received under the Share Incentive Plan (SIP). Both taxable and non-taxable benefits are included in the table.

(2) The values of the LTIP awards vesting in April 2019 have been recalculated based on the share price on the date of vest which was 113.6 pence. The previous disclosure in the 2018 single figure table used an estimated share price. Iain Conn, Jeff Bell and Mark Hanafin's total remuneration for 2018 has therefore been restated to include the amended value of these awards.

(3) Notional contributions to the Centrica Unapproved Pension Scheme defined contribution section (CUPS DC) for Jeff Bell, Mark Hanafin, Richard Hookway and Chris O'Shea have been included in this table as if CUPS DC was a cash balance scheme. This includes a deduction in respect of an allowance for CPI inflation on the opening balances of 2.4% in 2019 (3.0% in 2018). CUPS DC contributions for Richard Hookway and Chris O'Shea were reduced to 15% from 1 June 2019 to move towards alignment with the wider workforce.

(4) Iain Conn and Mark Hodges were entitled to receive a salary supplement in lieu of a pension contribution. Iain Conn's salary supplement was reduced to 15% from 1 June 2019 to move towards alignment with the wider workforce.

(5) The value of the increase in defined benefit (DB) pension accrual for Sarwjit Sambhi has been calculated using 20 times the increase in accrued pension over the period, less the contributions paid by him over the year. He received a salary supplement of 10% of the difference between the earnings cap and base pay between 1 March and 31 December 2019.

(6) Jeff Bell stepped down from the Board on 31 October 2018 and Mark Hanafin stepped down from the Board on 30 November 2018. The remuneration in this table includes their pro-rated salary, bonus, benefits and pension benefits earned up to the date they stepped down. The remuneration for the remainder of 2018, whilst they were working their remaining notice periods, was disclosed in the payments for loss of office disclosure on page 94 of the Annual Report and Accounts 2018. The full value of the LTIP awards that vested in April 2019 has been included in the single figure table above. Both Jeff Bell and Mark Hanafin were appointed as non-executive directors of Spirit Energy during 2019.

(7) As Mark Hodges had tendered his resignation and agreed a leaving date of 28 February 2019, his AIP award relating to the 2018 year, and all unvested LTIP awards as at his date of leaving, were forfeited.

(8) Richard Hookway was appointed to the Board on 1 December 2018.

(9) Chris O'Shea was appointed to the Board on 1 November 2018.

(10) Sarwjit Sambhi was appointed to the Board on 1 March 2019.

Single figure for total remuneration (audited)

£000	Salary/fees		Bonus (cash)		Bonus (deferred)		Benefits		LTIPs		Pension		Total	
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Non-Executives														
Rick Haythornthwaite ⁽¹⁾	71	495	-	-	-	-	-	-	-	-	-	-	71	495
Charles Berry ⁽²⁾	392	12	-	-	-	-	-	-	-	-	-	-	392	12
Margherita Della Valle ⁽³⁾	36	98	-	-	-	-	-	-	-	-	-	-	36	98
Joan Gillman	93	73	-	-	-	-	-	-	-	-	-	-	93	73
Stephen Hester	93	93	-	-	-	-	-	-	-	-	-	-	93	93
Pam Kaur ⁽⁴⁾	67	-	-	-	-	-	-	-	-	-	-	-	67	-
Kevin O'Byrne ⁽⁵⁾	62	-	-	-	-	-	-	-	-	-	-	-	62	-
Carlos Pascual	73	73	-	-	-	-	-	-	-	-	-	-	73	73
Steve Pusey	93	93	-	-	-	-	-	-	-	-	-	-	93	93
Scott Wheway	93	93	-	-	-	-	-	-	-	-	-	-	93	93
Total													1,073	1,030

(1) Rick Haythornthwaite stepped down from the Board on 20 February 2019.

(2) Charles Berry was appointed Chairman of the Board on 21 February 2019.

(3) Margherita Della Valle stepped down from the Board on 12 May 2019.

(4) Pam Kaur joined the Board on 1 February 2019.

(5) Kevin O'Byrne joined the Board on 13 May 2019.

Payments for loss of office (audited)

There were no payments for loss of office in 2019.

Base salary/fees

Base salaries for Executives were reviewed in January 2019 and the Committee determined that the salary for Iain Conn would be increased by 1.9% to £957,500 with effect from 1 April 2019. As all other Executives were new in post or were leaving the Company during the year, there were no other salary increases for existing Executives.

Base fees for Non-Executives, as well as the additional fee for the Chairman of the Audit Committee, were last increased on 1 January 2016.

The CEC reviewed Non-Executive Director fee levels in December 2019 and it was agreed that no changes would be made to the base fees or the Committee Chairman fees. However, it was determined that the Employee Champion role would receive a fee of £20,000 per annum, in line with the current Committee Chairman fees, with effect from 1 January 2019.

Bonus – Annual Incentive Plan (AIP)

The charts on page 85 under short-term incentive outcome indicate the extent of achievement against the financial measures and targets that had been set for the AIP for 2019.

In line with the Remuneration Policy, 75% of the award was based on a mix of financial measures based on the Company's priorities for 2019 and 25% was based on personal objectives. Half of any AIP award is deferred into shares which are held for three years.

For the operation of the AIP in 2019, 40% of the financial measures was based on adjusted operating cash flow (AOCF), 40% was based on adjusted operating profit (AOP) and 20% was based on cost efficiency, with targets aligning to the Group Annual Plan. AOCF of £2,058 million was required for target achievement and £2,264 million was required for maximum. The threshold level was £1,852 million. AOCF of £1,830 million was generated in 2019, resulting in an outcome of below threshold for this element of the AIP.

AOP of £1,575 million was required for target achievement and £1,733 million was required for maximum. The AOP result for 2019 was £901 million, below the threshold level of £1,418 million, resulting in a zero outcome for this element of the AIP.

Cost efficiency of £300 million was required for target achievement and £330 million was required for maximum. Cost efficiency of £315 million was generated in 2019 resulting in an outcome midway between target and maximum for this element of the AIP.

The Committee carefully assessed performance against the measures and targets that had been set for the AIP in 2019. Individual achievement against stretching personal strategic objectives was also considered. However, taking into account overall shareholder experience across the year the Committee concluded that irrespective of the formulaic outcome, it was not appropriate to make an annual bonus payment to any of the Executives for the year. Therefore, all AIP bonus payments were reduced to zero.

At this point in the report, we would typically provide a detailed evaluation of individual achievement against strategic objectives. The objectives for each Executive included both financial and non-financial measures. Highlights included strong customer account growth, improvements in brand NPS and materially reduced customer complaints. Our process safety performance remained at top quartile levels and occupational safety targets were met or exceeded in the majority of business units. However, whilst the significant contribution of management over the year was recognised by the Committee, the financial performance of the business and the shareholder experience outweighed the progress made, and the Committee therefore exercised discretion resulting in a zero outcome across all measures including the individual strategic objectives.

Long-term incentive awards due to vest in 2020

Performance conditions

The performance conditions relating to the three-year period ending in 2019 are set out below, together with an explanation of the achievement against these performance conditions. The chart on page 85 under long-term incentive outcome indicates the extent of achievement against each measure.

LTIP performance conditions

Vesting criteria	Performance conditions over three-year period
1/3 based on EPS growth over the 3-year period 2017/19	Full vesting for EPS growth of 24% or more Zero vesting if EPS growth does not exceed 9% Vesting increases on a straight-line basis between these points
1/3 based on absolute aggregate EP over the 3-year period 2017/19	Full vesting for aggregate EP of £3,500 million Zero vesting if aggregate EP is below £1,500 million Vesting increases on a straight-line basis between these points
1/3 based on non-financial KPI dashboard over the 3-year period 2017/19	As disclosed below

Performance outcome

Adjusted earnings per share (EPS)

EPS is the Company's basic earnings per share adjusted for exceptional items and certain re-measurements net of taxation.

EPS growth during the three-year period ending with 2019 did not exceed RPI growth by 9%. Consequently, the EPS portion of the 2017 LTIP award will not vest.

Economic profit (EP)

EP is the adjusted operating profit (after share of joint venture interest) less a tax charge based on the tax rate relevant to the different business segments and after deduction of a capital charge. The capital charge is calculated as capital employed multiplied by the Group's weighted average cost of capital. Where appropriate, expenditure on assets (and related costs) that are not yet in use (pre-productive capital) is excluded from capital employed.

Aggregate EP achieved during the three-year period ending with 2019 was £1,243 million when compared to a threshold level of £1,500 million and a maximum level of £3,500 million. Consequently, the EP portion of the 2017 LTIP award will not vest.

LTIP non-financial KPI dashboard

Performance against five equally weighted KPIs is measured each year. Achievement against each target determines the performance zone outcome. The KPI dashboard comprises results over a three-year period.

Throughout each three-year performance period, for each median performance zone outcome, 5% of the KPI portion of the award will be forfeited and for each low performance zone outcome, 10% of the KPI portion of the award will be forfeited.

- High performance zone
- Median performance zone
- Low performance zone

Non-financial KPI update for long-term incentive plans vesting in 2020

KPI performance under the LTIP

Set out below is the achievement against the KPI dashboard for the LTIP awards granted in 2017.

Measure	Performance period – LTIP awards granted in 2017 and due to vest in 2020			2019 performance (compared with 2018)
	Year 1	Year 2	Year 3	
Lost time injury frequency rate (LTIFR)	●	●	●	worsened from 0.49 to 0.58
Significant process safety events (Tier 1)	●	●	●	improved from 1 to 0
British Gas net promoter score (NPS) ⁽¹⁾	●	●	●	worsened from +2 to -5.7
Direct Energy NPS ⁽¹⁾	●	●	●	worsened from +41 to +40
Employee engagement ⁽¹⁾	●	●	●	worsened from 64% to 55%

(1) NPS and employee engagement measures disclosed on this page are part of the non-financial KPI dashboard used for the LTIP and are calculated using historical methodology and business areas which were set at the time that the Remuneration Policy was approved. They differ from the new NPS and employee engagement metrics referenced elsewhere in the Annual Report and Accounts 2019.

Performance against the non-financial KPI dashboard during the three-year performance period resulted in 40% of the KPI portion of the 2017/19 LTIP award vesting.

Based on achievement against the LTIP performance conditions over the three-year performance period, as set out above, an overall vesting level of 13% of the original award was reached.

However, as the financial performance targets were not met, the Committee decided to exercise its discretion and reduce the overall vesting level of the 2017 LTIP to zero.

Pension

With effect from 1 June 2019, it was agreed that the pension contributions for existing Executives would reduce to a maximum of 15% to move towards alignment with the wider UK workforce. Prior to June, the pension contribution for the CEO was 30%, for other Executives recruited prior to 2018 it was 25% and for Executives recruited in 2018 it was 20%.

Iain Conn elected to receive a salary supplement in lieu of participating in a Centrica pension plan. Richard Hookway and Chris O'Shea participated in the Centrica Unapproved Pension Scheme defined contribution section (CUPS DC).

Notional contributions to the CUPS DC scheme have been included in the single figure for total remuneration table as if it was a cash balance scheme and therefore notional investment returns for the year have been included. The notional pension fund balances for each Executive are disclosed below.

	Total notional pension fund as at 31 December 2019 £	Total notional pension fund as at 31 December 2018 £
CUPS DC Scheme ⁽¹⁾		
Richard Hookway ⁽²⁾	130,028	20,000
Chris O'Shea ⁽²⁾	146,170	38,233

(1) The retirement age for the CUPS DC scheme is 62.

(2) Richard Hookway joined Centrica on 1 November and Chris O'Shea joined on 10 September 2018.

	Accrued pension as at 31 December 2019 £	Accrued pension as at 31 December 2018 £
Centrica Pension Plan		
Sarwjit Sambhi ⁽¹⁾⁽²⁾	1,982	-

(1) Sarwjit Sambhi was appointed to the Board on 1 March 2019.

(2) The pension accrual rate for 2019 was 1.67% of final pensionable earnings.

Executive Director recruitment and terminations announced in 2019

Sarwjit Sambhi

Sarwjit Sambhi joined the Centrica Board as an Executive Director on 1 March 2019, in the position of CEO, Centrica Consumer. He has held a number of senior leadership positions with Centrica since 2001.

Sarwjit's remuneration package consists of base salary, benefits and incentive arrangements that are in line with our Remuneration Policy. There are no special arrangements in respect of his appointment. The key elements of the remuneration package are:

Base salary – £620,000

As part of an existing contractual arrangement, continued pension accrual in the CPP on the same basis as other plan members, subject to an earnings cap of £141,600, plus a salary supplement of 10% on the difference between capped salary and full base salary, also aligned with the defined contribution available to the wider workforce.

From the 2019 performance year, participation in the AIP and the LTIP, with the initial LTIP award pro-rated for the period served on the Board during the three-year performance period.

Iain Conn

In July it was announced that Iain Conn would step down as CEO and retire from the Board in 2020.

Iain's termination arrangements will be in line with the approved Policy and his service contract.

In order to support an orderly succession before stepping down, Iain will continue as CEO and his remuneration arrangements will continue in line with his existing service contract. He will receive salary, benefits and a pension salary supplement at the current levels. All LTIP awards which are unvested at the point that Iain leaves the Company will lapse in full and no further LTIP awards will be granted.

Sarwjit Sambhi has been employed by Centrica since 2001 and participates in the Centrica Pension Plan (CPP), in line with his existing contractual arrangement. The CPP is a registered defined benefit plan which is closed to new members. Sarwjit participates on the same basis as other plan members, subject to the CPP's earnings cap of £141,600. He receives a salary supplement of 10% of the difference between the CPP's earnings cap and his full base salary (10% is aligned to the employer contribution rate available for the majority of the wider workforce who participate in Centrica's defined contribution scheme).

The accrued pension disclosed below for Sarwjit Sambhi is that which would be paid annually on retirement at age 62, based on eligible service and pensionable earnings at 31 December 2019. He accrued benefits within the Company's defined benefit pension arrangements prior to 1 March 2019; however, the figures shown below relate only to benefits accrued after this date.

Minimum shareholding requirement for new and departing Executives

Executives are expected to build up and maintain a minimum shareholding in the Company equivalent in value to 300% of base salary, over a period of five years. Sarwjit Sambhi is subject to this requirement from March 2019, the date he was appointed to the Board.

Departing Executives are subject to a post-cessation shareholding requirement of 150% of base salary (or their actual holding if lower) for two years and this will apply to Iain Conn when he leaves the Group.

Directors' interests in shares (number of shares) (audited)

The table below shows the interests in the ordinary shares of the Company for all Directors on the Board at 31 December 2019. For Executives only, the minimum shareholding requirement is 300% of base salary. The achievement against the requirement is shown below.

Executives have a period of five years from appointment to the Board, or from any material change in the minimum shareholding requirement, to build up the required shareholding.

A post-cessation shareholding requirement of 50% of the full shareholding requirement (or full actual holding if lower) is applicable for two years post-cessation.

	Shares owned as at 31 December 2018 ⁽¹⁾	Shares owned as at 31 December 2019 ⁽¹⁾	Minimum shareholding guideline (% of salary)	Achievement as at 31 December 2019 (% of salary) ⁽²⁾	Shares owned (subject to continued service) as at 31 December 2019 ⁽³⁾
Executives					
Iain Conn	1,896,978	2,664,912	300	249	770
Richard Hookway	–	37,886	300	6	264
Chris O'Shea	219,000	385,399	300	56	264
Sarwjit Sambhi	n/a	398,995	300	57	–

	Shares owned as at 31 December 2018 ⁽¹⁾	Shares owned as at 31 December 2019 ⁽¹⁾	Minimum shareholding guideline (% of salary)	Achievement as at 31 December 2019 (% of salary)	Shares owned (subject to continued service) as at 31 December 2019
Non-Executives					
Charles Berry	–	40,000	–	–	–
Joan Gillman	–	–	–	–	–
Stephen Hester	20,700	20,700	–	–	–
Pam Kaur	–	–	–	–	–
Kevin O'Byrne	–	40,000	–	–	–
Carlos Pascual	–	–	–	–	–
Steve Pusey	65,917	71,780	–	–	–
Scott Wheway	10,187	10,187	–	–	–

(1) These shares are owned by the Director or a connected person and they are not, save for exceptional circumstances, subject to continued service or the achievement of performance conditions. They include for Executives shares purchased in April 2016, 2017 and 2019 with deferred AIP funds which have mandatory holding periods of three and four years and which will be subject to tax at the end of the holding periods.

(2) The share price used to calculate the achievement against the guideline was 89.3 pence, the price on 31 December 2019.

(3) Shares owned subject to continued service include SIP matching shares that have not yet been held for the three-year holding period.

Executives' interests in shares (number of shares) subject to Company performance conditions

The table below shows the performance share awards that were granted in 2017 and 2018 to Executives under the LTIP. These

awards are subject to the achievement of Company performance conditions before vesting and there is a mandatory two-year holding period following the vesting date before the shares can be released.

	Plan	Number of shares	Vesting date	Release date
Iain Conn	LTIP	1,270,953	April 2020	April 2022
	LTIP	1,700,803	April 2021	April 2023
Richard Hookway	LTIP	878,009	Nov 2021	Nov 2023
Chris O'Shea	LTIP	979,818	Sept 2021	Sept 2023

Share awards granted in 2019 (audited)

The table below shows the performance share awards that were granted to Executives under the LTIP in 2019. These awards are

subject to the achievement of Company performance conditions before vesting and there is a mandatory two-year holding period following the vesting date before the shares can be released.

LTIP awards granted in 2019⁽¹⁾

	Number of shares ⁽²⁾⁽³⁾	Value £000	Salary multiple	Vesting date	Release date
Iain Conn	2,057,900	2,394	250%	April 2022	April 2024
Richard Hookway	1,289,546	1,500	250%	April 2022	April 2024
Chris O'Shea	1,332,530	1,550	250%	April 2022	April 2024
Sarwjit Sambhi	1,258,501	1,464	236%	April 2022	April 2024

(1) The performance conditions relating to these awards are set out below. The performance period is 1 January 2019 to 31 December 2021.

(2) The share price used to calculate the number of shares granted was 116.32 pence, being the average closing share price over five business days immediately preceding the grant date of 1 April 2019.

(3) The award for Sarwjit Sambhi was pro-rated based on the date he was appointed to the Board.

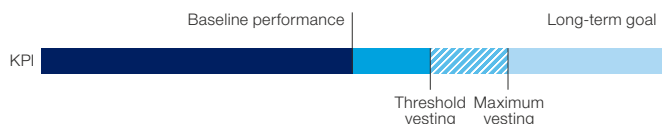
LTIP performance conditions

Measures	Weightings	Targets	
		Threshold (25%)	Maximum (100%)
Relative TSR	33.3%	FTSE 100 median	FTSE 100 upper quartile
UAOCF growth	22.2%	CAGR 2% ⁽¹⁾	CAGR 5% ⁽¹⁾
Absolute aggregate EP	22.2%	£1,625m	£2,125m
Non-financial KPI improvement	22.2%	See below	See below

(1) Compound annual growth rate.

Vesting between stated points will be on a straight-line basis.

KPI improvement relates to closure of the gap between performance at the start of the period (baseline performance) and our long-term aspirational goals which are generally aligned with upper quartile market performance:



For each LTIP cycle we expect the KPI performance gap to close by 25% for threshold vesting and 50% for maximum vesting. The KPI measures and targets for the 2019/21 cycle are:

	Baseline performance	Targets		
		Threshold	Maximum	Long-term goal
Safety				
Total recordable injury frequency rate (TRIFR) ⁽¹⁾	1.02	0.83	0.45	0.25
Tier 1 and Tier 2 process safety event frequency rate ⁽¹⁾	0.06	0.12	0.1	0.1
Customer satisfaction				
Aggregate brand NPS across our customer businesses weighted by customer numbers	+10	+12.05	+15	+20
Complaints per 100,000 customers across our customer businesses weighted by customer accounts	3,453	3,059	2,665	1,877
Employee engagement				
	55	60.5	66.0	77

(1) Per 200,000 hours worked.

Comparison of the Group Chief Executive's (CEO's) remuneration with other employees

The chart below shows the percentage change in base salary, taxable benefits and bonus (annual incentive) payments between 2018 and 2019 for Iain Conn, compared with a comparator group of UK employees over the same period of time.

Change in Group Chief Executive's remuneration	Change in employee remuneration
Salary and fees ↑ 1.88%	Salary and fees ↑ 2.76%
Taxable benefits → 0.00%	Taxable benefits → 0.00%
Annual incentive ↓ -100%	Annual incentive ↓ -27.23%

The percentage change in annual incentive for Iain Conn between 2018 and 2019 reflects the fact that he will not receive an annual bonus payment relating to 2019 performance.

The comparator group includes management and technical or specialist employees based in the UK in Level 2 to Level 6 (where Level 1 is the CEO). The employees selected have been employed in their role throughout 2018 and 2019 to give a meaningful comparison. The group has been chosen because the employees have a remuneration package with a similar structure to the CEO, including base salary, benefits and annual bonus.

The chart below shows the ratio of remuneration of the CEO to the average UK employee of the Group for 2018 and 2019.

CEO Pay Ratio	25th percentile	50th percentile	75th percentile
2019	34:1	29:1	22:1
2018	72:1	59:1	44:1

The Company has used its gender pay gap data (Option B in the Directors' Reporting Regulations) to determine the employees whose remuneration packages sit at the lower, median and upper quartile positions across the UK workforce. This is deemed the most appropriate methodology for Centrica given the different pension and benefit arrangements across the diverse UK workforce. To ensure this data accurately reflects individuals at each quartile position, a sensitivity analysis has been performed. The approach has been to review the total pay and benefits for a number of employees immediately above and below the identified employee at each quartile within the gender pay gap analysis.

The annual remuneration relating to 2018 and 2019 for the three identified employees has been calculated on the same basis as the CEO's total remuneration for 2018 and 2019 in the single figure table on page 86 to produce the ratios.

The lower ratios in 2019 compared with 2018 reflect the fact that Iain Conn's total remuneration for 2019 does not include an annual bonus or the value of a long-term share award vest.

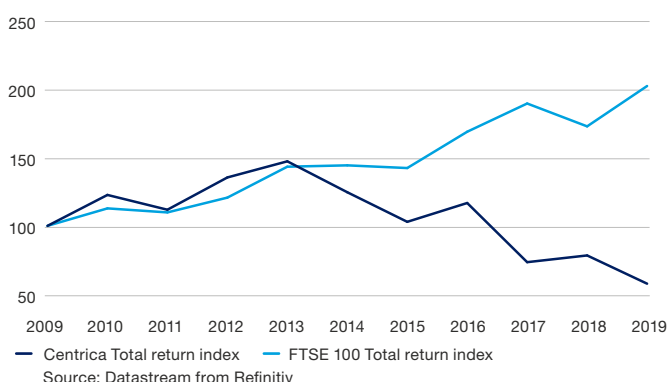
Pay for performance

The table below shows the CEO's total remuneration over the last ten years and the achieved annual short-term and long-term incentive pay awards as a percentage of the plan maximum.

	Group Chief Executive single figure for total remuneration £000	Annual short-term incentive payout against max opportunity %	Long-term incentive vesting against max opportunity %
Iain Conn			
2019	1,186	0	0
2018	2,335	41	18
2017	1,678	0	26
2016	4,040	82	0
2015	3,025	63	0
Sam Laidlaw			
2014	3,272	34	35
2013	2,235	50	0
2012	5,709	61	67
2011	5,047	50	59
2010	5,322	91	62

The performance graph below shows Centrica's TSR performance against the performance of the FTSE 100 Index over the ten-year period to 31 December 2019. The FTSE 100 Index has been chosen as it is an index of similar-sized companies and Centrica has been a constituent member throughout the period.

Total return indices – Centrica and FTSE 100



Fees received for external appointments of Executive Directors

In 2019, Iain Conn received £114,744 (£124,000 in 2018) as a non-executive director of BT Group plc.

Richard Hookway represents Centrica as a non-executive director of EDF Energy Nuclear Generation Group Limited and Sarwjit Sambhi represents Centrica as a director of Energy UK.

Neither Executive receives any fees or remuneration relating to these external appointments.

Relative importance of spend on pay

The following table sets out the amounts paid in dividends and staff and employee costs for the years ended 31 December 2018 and 2019.

	2019 £m	2018 £m	% Change
Dividends	471	551	-14
Staff and employee costs ⁽¹⁾	2,027	2,019	-4

(1) Staff and employee costs are as per note 5 in the Notes to the Financial Statements.

Payments to past Directors (audited)

During 2019, no payments were made to past Directors with the exception of the payments disclosed in the single figure for total remuneration table on page 86.

Funding of share schemes in 2019

During 2019, market purchased shares, held in an employee benefits trust, were used to satisfy outstanding allocations under the Restricted Share Scheme (a conditional share plan for Centrica employees below the executive level). Treasury shares were used to satisfy the release of awards or the exercise of options under the Deferred and Matching Share Scheme, the Long Term Incentive Scheme, the On Track Incentive Plan and Centrica's all-employee share plans. At 31 December 2019, 10,241,808 shares were held in treasury (2018: 31,277,124), following the share repurchase programme throughout 2013 and 2014.

Advice to the Remuneration Committee

Following a competitive tender process, PwC was appointed as independent external adviser to the Committee in May 2017.

PwC also provided advice to Centrica globally during 2019 in the areas of employment taxes, regulatory risk and compliance issues and additional consultancy services.

PwC's fees for advice to the Committee during 2019 amounted to £87,600 which included the preparation for and attendance at Committee meetings. The fees were charged on a time spent basis in delivering advice that materially assisted the Committee in its consideration of matters relating to executive remuneration.

The Committee takes into account the Remuneration Consultants Group's (RCG) Code of Conduct when dealing with its advisers. PwC is a member of the RCG and the Committee is satisfied that the advice it received during the year was objective and independent and that the provision of any other services by PwC in no way compromises their independence.

Statement of voting

Shareholder voting on the resolutions to approve the Directors' Remuneration Policy, put to the 2018 AGM, and the Directors' Remuneration Report, put to the 2019 AGM, was as follows:

Directors' Remuneration Policy

Votes for	%	Votes against	%
3,378,407,618	95.43	161,656,874	4.57

1,705,945 votes were withheld.

Directors' Remuneration Report

Votes for	%	Votes against	%
3,048,524,287	85.27	526,724,546	14.73

31,937,839 votes were withheld.

Implementation in the next financial year

Base salaries for Executives were reviewed in January 2020 and the Committee determined that current salaries were competitive when compared against the market data. The Committee therefore agreed that there would be no salary increases for Executives in 2020.

No changes to benefits for Executives are anticipated.

AIP awards will be in line with the limits set out in the Remuneration Policy table, not exceeding 200% of base salary. 75% of the award will be based on a mix of financial measures based on Centrica's priorities for the forthcoming year and 25% will be based on personal objectives.

For the operation of the AIP in 2020, 50% of the financial measures will be based on adjusted operating profit, 30% of the financial measures will be based on free cash flow and 20% of the financial measures will be based on cost efficiency, with targets aligning to the Group Annual Plan. The targets are considered commercially sensitive until the year end and will therefore be disclosed retrospectively in the Remuneration Report for 2020.

LTIP awards will be granted to three Executives, based on 250% of base salary. This is below the maximum award level of 300% of base salary set out in the Remuneration Policy. Iain Conn will not receive an LTIP award as he will be leaving Centrica in 2020.

The performance measures will consist of relative total shareholder return (TSR) with a weighting of 33.3%, underlying adjusted operating cash flow (UACOF) growth with a weighting of 22.2%, economic profit (EP) with a weighting of 22.2% and non-financial KPIs with a weighting of 22.2%.

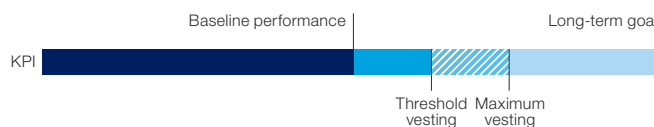
It is proposed that the following financial targets will apply to the 2020 LTIP awards:

Measures	Weightings	Targets	
		Threshold (25%)	Maximum (100%)
Relative TSR	33.3%	FTSE 100 median	FTSE 100 upper quartile
UACOF growth	22.2%	CAGR 2% ⁽¹⁾	CAGR 5% ⁽¹⁾
Absolute aggregate EP	22.2%	£1,542m	£2,042m
Non-financial KPI improvement	22.2%	See below	See below

(1) Compound annual growth rate.

Vesting between stated points will be on a straight-line basis.

KPI improvement relates to closure of the gap between performance at the start of the period (current performance) and our long-term aspirational goals which are generally aligned with upper quartile market performance:



For each LTIP cycle we expect the KPI performance gap to close by 25% for threshold vesting and 50% for maximum vesting.

The KPI measures and targets are:

	Current performance	Targets		
		Threshold	Maximum	Long-term goal
Safety				
Total recordable injury frequency rate (TRIFR) ⁽¹⁾	1.06	0.86	0.45	0.25
Tier 1 and Tier 2 process safety event frequency rate ⁽¹⁾	0.08	0.073	0.065	0.05
Customer satisfaction				
Aggregate brand NPS across our customer businesses weighted by customer numbers	+15.1	+16.33	+17.55	+20
Complaints per 100,000 customers across our customer businesses weighted by customer accounts	3,429	3,041	2,653	1,877
Employee engagement	43%	51.5%	60.0%	77%

(1) Per 200,000 hours worked.

Changes since 1 January 2020

Share Incentive Plan

During the period from 1 January 2020 to 12 February 2020 Iain Conn, Richard Hookway and Chris O'Shea each acquired 384 shares through the SIP.

The Remuneration Report has been approved by the Board of Directors and signed on its behalf by:

Justine Campbell

Group General Counsel & Company Secretary
12 February 2020

Remuneration Policy

Set out over the following pages is a summary of the Remuneration Policy (Policy) that was approved by shareholders on 14 May 2018. The full Policy can be found at centrica.com

Executive Directors' remuneration

The Committee believes that the remuneration arrangements are aligned with the organisation's strategic goals as well as the experience and expectation of shareholders.

The Policy closely aligns the interests of the Executive Directors (Executives) with the delivery of long-term shareholder value through returns and growth whilst ensuring behaviours remain consistent with the governance and values of the business.

Objectives

The Policy aims to deliver remuneration arrangements that:

- attract and retain high calibre Executives in a challenging and competitive global business environment;
- place strong emphasis on both short-term and long-term performance;
- are strongly aligned to the achievement of strategic objectives and the delivery of sustainable long-term shareholder value through returns and growth; and
- seek to avoid creating excessive risks in the achievement of performance targets.

Remuneration framework

The design of the remuneration framework for Executives ensures that a substantial portion of the maximum opportunity is dependent upon performance and delivered in shares over a three to five-year period.

Total remuneration comprises fixed pay and variable performance-related pay, which is further divided into short-term incentive (with a one-year performance period) and long-term incentive (with a three-year performance period).

Fixed remuneration includes base salary, benefits and pension. Short-term incentive is delivered through the Annual Incentive Plan (AIP) which is described on page 95. Long-term incentive is delivered through the Long Term Incentive Plan (LTIP) which is described on page 96. Both plans are underpinned by stretching performance measures and targets that closely link to our strategy.

Performance measures

The Committee believes that the performance measures selected will help drive our customer-focused strategy, allowing us to deliver for our customers, our employees and our shareholders.

How the LTIP measures link to our strategy

The chart below shows our revised Group Priorities linked to the LTIP measures. Our business model and Group Priorities are set out in more detail on page 14.

Centrica's strategy/Group priorities

Customer obsession
Empowered colleagues
Operational excellence
Most competitive provider
Cash flow growth



LTIP measures

- 22.2% Non-financial KPIs
- 33.3% Relative total shareholder return (TSR)
- 22.2% Underlying adjusted operating cash flow (UACOF) growth
- 22.2% Economic profit (EP)

Centrica's financial framework

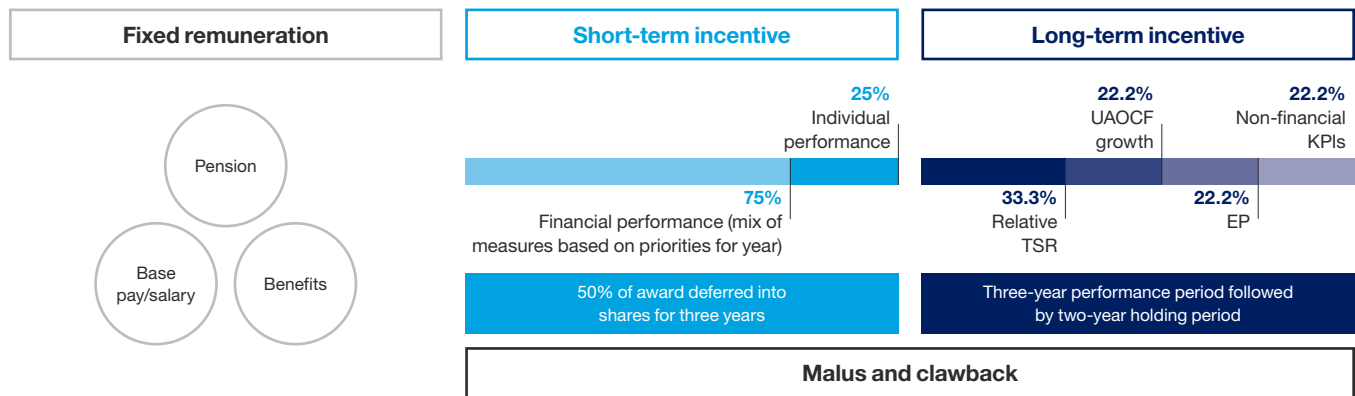
Measure	Target
AOCF	Growth over the medium term
Dividend	Progressive from 2019 rebased level linked to growth in earnings and AOCF
Controllable costs	£1bn of cost efficiency delivery over 2019-22
Capital re-discipline	Annual capital expenditure of around £500m post Spirit Energy and Nuclear disposals
Credit rating	Strong investment grade ratings
Return on average capital employed (ROACE)	At least 10-12%



LTIP measures

- 33.3% Relative TSR
- 22.2% UACOF growth
- 22.2% EP
- 22.2% Non-financial KPIs

Summary of Policy design



Remuneration Policy table

The table below sets out the separate components of the Policy that applies to Executives.

Purpose and link to strategy	Operation and clawback	Maximum opportunity	Performance measures
<p>Base pay/salary</p> <p>Reflects the scope and responsibility of the role and the skills and experience of the individual.</p> <p>Salaries are set at a level sufficient for the Group to compete for international talent and to attract and retain Executives of the calibre required to develop and deliver our strategy.</p>	<p>Base salaries are reviewed annually, taking into account individual and business performance, market conditions and pay in the Group as a whole. Changes are usually effective from 1 April each year.</p>	<p>Ordinarily, base salary increases in percentage terms will be in line with increases awarded to other employees of the Group.</p> <p>Increases may be made above this level to take account of individual circumstances such as a change in responsibility, progression/development in the role or a significant increase in the scale or size of the role.</p> <p>The base salary for an Executive will not exceed £1 million per annum.</p> <p>This is consistent with the previously approved policy.</p>	<p>Not applicable.</p>
<p>Short-term incentive plan</p> <p>Designed to incentivise and reward the annual performance of individuals and teams in the delivery of short-term financial and non-financial metrics.</p> <p>Performance measures are linked to the delivery of the Group's long-term financial goals and key Group priorities.</p>	<p>In line with the Group's annual performance management process, each Executive has an agreed set of stretching individual objectives each year.</p> <p>Following measurement of the individual and Company financial performance outcome AIP awards are made. Half of the AIP awards are made. Half of the AIP award is paid in cash. The other half is required to be deferred into shares which are held for three years, to further align the interests of Executives with the long-term interests of shareholders.</p> <p>Dividends are payable on the shares during the holding period.</p> <p>If overall business performance is not deemed satisfactory, an individual's AIP payment for the year may be reduced or forfeited, at the discretion of the Committee.</p> <p>Malus and clawback apply to the cash and share awards (see policy table notes).</p>	<p>Maximum of 200% of base salary. Half the maximum is payable for on-target performance.</p> <p>This is consistent with the previously approved policy.</p>	<p>75% based on a mix of financial performance measures aligned to Centrica's priorities for the forthcoming year and 25% based on individual objectives aligned to the Group's priorities and strategy.</p> <p>Under the previously approved policy, 62.5% was based on adjusted operating cash flow and 37.5% was based on individual objectives.</p> <p>Performance is assessed over one financial year.</p>

Purpose and link to strategy	Operation and clawback	Maximum opportunity	Performance measures
<p>Long-term incentive</p> <p>Designed to retain Executives and to encourage sustainable high performance.</p> <p>Provides an incentive that aligns with the Group's strategy to deliver long-term shareholder value through returns and growth.</p> <p>Provides a direct link between executive remuneration and the Group's long-term financial goals and priorities.</p>	<p>Long Term Incentive Plan (LTIP) awards are granted to Executives each year based on a percentage of base salary at the point of award. Shares vest at the end of a three-year performance period, depending on the achievement against the performance targets, but are not released until the fifth anniversary of the award date.</p> <p>LTIP awards are usually delivered as conditional shares.</p> <p>Awards may also be granted as nil-cost options with a seven-year exercise period.</p> <p>It is a requirement of the LTIP that the net shares are held for a further two years following the vesting date. Malus applies to the shares during the three-year performance period and clawback applies to the shares during the two-year holding period (see policy table notes).</p> <p>Dividend equivalents are calculated at the end of the performance period on any conditional LTIP share awards or nil-cost options. Dividend equivalents are paid as additional shares or as cash.</p> <p>If overall performance is not deemed satisfactory, the award for any year may be reduced or forfeited, at the discretion of the Committee.</p>	<p>Maximum of 300% of base salary plus dividend equivalents.</p> <p>This is consistent with the previously approved policy.</p> <p>The amount payable for achieving the minimum level of performance is 5.55% of award. Under the previously approved policy, the minimum level was 0%.</p>	<p>33.3% based on relative total shareholder return (TSR) with the remainder equally weighted and based on UAOCF growth, absolute aggregate economic profit (EP) and non-financial KPIs, all measured over a three-year performance period.</p> <p>Under the previously approved policy, performance measures were equally weighted and based on earnings per share (EPS), absolute aggregate EP and non-financial KPIs, measured over a three-year performance period.</p>
<p>Pension</p> <p>Positioned to provide a market-competitive post-retirement benefit, in a way that manages the overall cost to the Company.</p>	<p>Executives are entitled to participate in a Company money purchase pension arrangement or to take a fixed salary supplement (calculated as a percentage of base salary, which is excluded from any bonus calculation) in lieu of pension entitlement.</p> <p>The Group's policy is not to offer defined benefit arrangements to new employees at any level, unless this is specifically required by applicable legislation or an existing contractual agreement.</p>	<p>The maximum benefit is 25% of base salary.</p>	<p>Not applicable.</p>

Purpose and link to strategy	Operation and clawback	Maximum opportunity	Performance measures
	<p>Executives appointed prior to 2015 are entitled to participate in a Centrica pension arrangement or to receive a fixed salary supplement in lieu of pension entitlement in accordance with the terms of their contracts.</p> <p>We would only continue to honour defined benefit pension arrangements in the event of an individual being promoted to the Board who retains a contractual entitlement to such benefit.</p> <p>In late 2018, it was agreed that the pension contributions for existing Executives would reduce to a maximum of 15% with effect from 1 June 2019 to move towards alignment with the wider UK workforce.</p>		
<p>Benefits</p> <p>Positioned to support health and wellbeing and to provide a competitive package of benefits that is aligned with market practice.</p>	<p>The Group offers Executives a range of benefits including some or all of:</p> <ul style="list-style-type: none"> • a company-provided car and fuel, or a cash allowance in lieu; • life assurance and personal accident insurance; • health and medical insurance for the Executive and their dependants; • health screening and wellbeing services; and • a contribution towards financial planning advice. 	<p>Cash allowance in lieu of company car – £22,000 per annum.</p> <p>The benefit in kind value of other benefits will not exceed 5% of base salary.</p> <p>This is consistent with the previously approved policy.</p>	<p>Not applicable.</p>
<p>Relocation and expatriate assistance</p> <p>Enables the Group to recruit or promote the appropriate individual into a role, to retain key skills and to provide career opportunities.</p>	<p>Assistance may include (but is not limited to) removal and other relocation costs, housing or temporary accommodation, education, home leave, repatriation and tax equalisation.</p>	<p>Maximum of 100% of base salary.</p> <p>This is consistent with the previously approved policy.</p>	<p>Not applicable.</p>
<p>All-employee share plans</p> <p>Provides an opportunity for employees to voluntarily invest in the Company.</p>	<p>Executives are entitled to participate in all-employee share plans on the same terms as all other eligible employees.</p>	<p>Maximum contribution limits are set by legislation or by the rules of each plan. Levels of participation apply equally to all participants.</p> <p>This is consistent with the previously approved policy.</p>	<p>Not applicable.</p>

Policy table notes

The Committee reserves the right to make any remuneration payments and payments for loss of office, notwithstanding that they are not in line with the summary Policy set out above, where the terms of the payment were agreed before the Policy came into effect, at a time when the relevant individual was not an Executive of the Company or, in the opinion of the Committee, the payment was not in consideration for the individual becoming an Executive of the Company. For these purposes payments include the amounts paid in order to satisfy awards of variable remuneration and, in relation to an award over shares, the terms of the payment are agreed at the time the award is granted.

The Committee may make minor amendments to the Policy (for regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation) without obtaining shareholder approval for that amendment.

Performance measures

We continue to be committed to full transparency and disclosure. We will disclose all targets as soon as any commercial sensitivity falls away. At the latest, this will be at the end of the performance period.

Relative total shareholder return (TSR)

Compares Centrica's TSR (share price growth plus dividends) for the performance period with the TSR ranking of the other companies in the FTSE 100 Index.

The FTSE 100 Index has been chosen as it is a broad equity index of which Centrica is a constituent member and it reflects the investment interests of our UK shareholder base.

UAOCF growth

Growth in net cash flow from operating activities (which includes taxes paid) adjusted to include dividends received from joint ventures and associates and to exclude payments relating to exceptional items, UK defined benefit pension deficit contributions and movements in variation margin and cash collateral that are included in net debt.

This is adjusted for the impact of commodity price movements in Exploration & Production/Nuclear, foreign exchange movements and any material one-off working capital items to give a measure of underlying growth.

Economic profit (EP)

EP is adjusted operating profit (after share of joint venture interest) less a tax charge based on the tax rate relevant to the different business segments and after deduction of a capital charge. The capital charge is calculated as capital employed multiplied by the Group's weighted average cost of capital.

Further details of these performance measures are provided in notes 2, 4 and 10 of the Financial Statements. In addition, see page 223 for an explanation of UAOCF.

Non-financial KPIs

Based on the Group's non-financial KPIs, using three-year targets for improvement.

Malus and clawback

The Committee can apply malus (that is reduce the number of shares in respect of which an award vests) or delay the vesting of awards if it considers it appropriate where a participant has engaged in gross misconduct or displayed inappropriate management behaviour which fails to reflect the governance and values of the business or where the results for any period have been restated or appear inaccurate or misleading.

Where an award has vested, the resulting shares will generally be held for a period during which they may be subject to clawback in the event that the Committee determines that one or more of the circumstances above has occurred.

Pension arrangements applying to Executives

All registered scheme benefits are subject to HMRC guidelines and the Lifetime Allowance.

The Centrica Unapproved Pension Scheme (CUPS) defined contribution (DC) section provides benefits for individuals not eligible to join the CUPS defined benefit (DB) section and for whom registered scheme benefits are expected to exceed the Lifetime Allowance. The CUPS DC section is offered as a direct alternative to a cash salary supplement.

The CUPS DB section was closed to new members in October 2002.

CUPS is unfunded but the benefits are secured by a charge over certain Centrica assets. An appropriate provision in respect of the accrued value of these benefits has been made in the Company's balance sheet.

The Centrica Pension Plan (CPP) is a registered defined benefit plan which is closed to new members.

Non-Executive Directors' remuneration

Remuneration Policy

Centrica's policy on Non-Executive Directors' (Non-Executives) fees takes into account the need to attract the high calibre individuals required to support the delivery of our strategy.

Terms of appointment

Non-Executives, including the Chairman, do not have service contracts. Their appointments are subject to Letters of Appointment and the Articles of Association. All Non-Executives are required to be re-elected at each AGM.

Remuneration Policy table

Purpose and link to strategy	Operation and clawback	Maximum opportunity	Performance measures
<p>Chairman and Non-Executive Director fees</p> <p>Sufficient level to secure the services of individuals possessing the skills, knowledge and experience to support and oversee the Executive Directors in their execution of the Board's approved strategies and operational plans.</p> <p>Fees reflect market practice as well as the responsibilities and time commitment required by our Non-Executives.</p>	<p>The fee levels for the Chairman are reviewed every two years by the Remuneration Committee.</p> <p>The fee levels of the Non-Executives are reviewed every two years by the Executive Committee.</p> <p>Non-Executives are paid a base fee for their services. Where individuals serve as Chairman of a Committee of the Board, additional fees are payable. The Senior Independent Director also receives an additional fee.</p> <p>Current fee levels (applying from 1 January 2016):</p> <p>Chairman of the Board – up to £495,000 per annum.</p> <p>Base fee for Non-Executives – £72,500 per annum. The following additional fees apply:</p> <ul style="list-style-type: none"> • Chairman of Audit Committee – £25,000 per annum; • Chairman of Remuneration Committee – £20,000 per annum; • Chairman of Safety, Health, Environment, Security and Ethics Committee – £20,000 per annum; and • Senior Independent Director – £20,000 per annum. 	<p>The maximum level of fees payable to Non-Executives, in aggregate, is set out in the Articles of Association.</p>	<p>Not applicable.</p>
	<p>The Company reserves the right to pay a Committee membership fee in addition to the base fees.</p> <p>Non-Executives are able to use 50% of their fees, after appropriate payroll withholdings, to purchase Centrica shares. Dealing commission and stamp duty is paid by the Non-Executive.</p> <p>The Non-Executives, including the Chairman, do not participate in any of the Company's share schemes, incentive plans or pension schemes.</p> <p>Non-Executives will be reimbursed for business expenses relating to the performance of their duties including travel, accommodation and subsistence. In certain circumstances these, or other incidental items, may be considered a 'benefit in kind' and if so may be grossed up for any tax due.</p>		

Recruitment policy

The policy on the recruitment of new Non-Executives during the policy period would be to apply the same remuneration elements as for the existing Non-Executives. It is not intended that variable pay, day rates or benefits in kind be offered, although in exceptional circumstances such remuneration may be required in currently unforeseen circumstances. The Committee will include in future Remuneration Reports details of the implementation of the policy as utilised during the policy period in respect of any such recruitment to the Board.

Other Statutory Information

The Directors submit their Annual Report and Accounts for Centrica plc, together with the consolidated Financial Statements of the Centrica group of companies, for the year ended 31 December 2019. The Directors' Report required under the Companies Act 2006 comprises this Directors' and Corporate Governance Report (pages 55 to 102) including the Delivering our Responsible Business Ambitions section for disclosure of our carbon emissions in the Strategic Report (pages 48 to 54). The management report required under Disclosure Guidance and Transparency Rule 4.1.5R comprises the Strategic Report (pages 2 to 54) (which includes the risks relating to our business), Shareholder Information (page 222) and details of acquisitions and disposals made by the Group during the year in note 12 (pages 140 to 141). This Directors' and Corporate Governance Report fulfils the requirements of the corporate governance statement required under Disclosure Guidance and Transparency Rule 7.2.1.

Articles of Association (Articles)

The Company's Articles were adopted at the 2019 AGM. They may only be amended by a special resolution of the shareholders.

Centrica shares

Substantial shareholdings

At 31 December 2019, Centrica had received notification of the following interests in voting rights pursuant to the Disclosure and Transparency Rules:

	% of share capital ⁽¹⁾
Schroders Investment Management Limited	10.53
BlackRock, Inc.	6.59
Majedie Asset Management Limited	4.99
Newton Investment Management Limited	4.99

(1) Percentages are shown as a percentage of the Company's issued share capital when the Company was notified of the change in holding. On 27 January 2020, Standard Life Aberdeen notified the Company of its interest in 5.06% of the voting rights of the issued share capital. On 4 February 2020, Schroders Investment Management Limited notified the Company that it had increased its interest in the voting rights of the issued share capital to 11.033%. As at 12 February 2020, there were no further changes notified to the Company.

Share capital

The Company has a single share class which is divided into ordinary shares of 6¹⁴/₈₁ pence each. The Company was authorised at the 2019 AGM to allot up to 1,899,045,361 ordinary shares as permitted by the Act. A renewal of a similar authority will be proposed at the 2020 AGM. The Company's issued share capital as at 31 December 2019, together with details of shares issued during the year, is set out in note 25 to the Financial Statements.

Rights attaching to shares

Each ordinary share of the Company carries one vote. Further information on the voting and other rights of shareholders is set out in the Articles and in explanatory notes which accompany notices of general meetings, all of which are available on our website.

Repurchase of shares

As permitted by the Articles, the Company obtained shareholder authority at the 2019 AGM to purchase its own shares up to a maximum of 569,713,608 ordinary shares. No shares were purchased under this authority in 2019. As at 31 December 2019, 10,241,808 shares were held as treasury shares. These shares held in treasury represent 0.17% of the Company's issued share capital. Dividends are waived in respect of shares held in the treasury share account.

Shares held in employee benefit trusts

The Centrica plc Employee Benefit Trust (EBT) is used to purchase shares on behalf of the Company for the benefit of employees, in connection with the Deferred and Matching Share Scheme, and the Restricted Share Scheme. The Centrica plc Share Incentive Plan Trust (SIP Trust) is used to purchase shares on behalf of the Company for the benefit of employees, in connection with the SIP. Both the Trustees of the EBT and the SIP Trust, in accordance with best practice, have agreed not to vote any unallocated shares held in the EBT or SIP Trust at any general meeting and dividends are waived in respect of these shares. In respect of allocated shares in both the EBT and the SIP Trust, the Trustees shall vote in accordance with participants' instructions. In the absence of any instruction, the Trustees shall not vote.

Scrip Dividend Programme termination

Historically, the vast majority of shareholders have chosen to receive dividends in cash. Many of these shareholders have advised the Company that they were concerned that the issue of new shares under the Scrip Dividend Programme had a dilutive effect on their shareholdings. The Company listened to shareholders' concerns and, having taken the feedback into account, took the decision to terminate the Scrip Dividend Programme with effect from the 2019 interim dividend. More information, including frequently asked questions, can be found on our website.

Index to Directors' Report and other disclosures

68	AGM
100	Articles of Association
104	Audit Information
58 to 61	Board of Directors
14 to 15	Business Model
50 to 51	Carbon emissions
65	Conflicts of Interest
101	Directors' indemnities and insurance
61 and 65	Directors' service contracts and letters of appointment
90	Directors' share interests
102	Disclosure required under Listing Rule 9.8.4R
52	Diversity
Note 11 Page 39	Dividends
Note 26 Page 161	Events after the balance sheet date
Notes 19, S2 and S6 on pages 149, 163 and 182	Financial instruments
2 to 54	Future developments
101	Human rights
70	Internal control over financial reporting
100	Material shareholdings
52	People
101	Political donations and expenditure
Note S8 Page 186	Related party transactions
49 to 50	Research and development activities
2	Results
34	Risk management
12	Section 172(1) statement (Directors' Duty)
100	Share capital
48	Sustainability

Employee participation in share schemes

The Company's all-employee share schemes are a long-established and successful part of our total reward package, encouraging the involvement of UK employees in the Company's performance through employee share ownership. We offer tax-advantaged Sharesave (SAYE) schemes in the UK and Ireland, and a Share Incentive Plan (SIP) in the UK, with good levels of take-up for all share plans across the Group. Currently, 42% of eligible employees participate in Sharesave and 30% of eligible employees participate in the SIP.

Workforce

Directors' indemnities and insurance

In accordance with the Articles, the Company has granted a deed of indemnity, to the extent permitted by law, to Directors and members of the Executive Committee for each company in the Group. Qualifying third-party indemnity provisions (as defined by section 234 of the Act) were in force during the year ended 31 December 2019 and remain in force. The Company also maintains directors' and officers' liability insurance for its Directors and officers.

Employee involvement

We remain committed to employee involvement throughout the Group. Employees are kept well informed of the performance and strategy, including financial and economic, of the Group and other matters of concern through personal briefings, regular meetings, town halls, email and broadcasts by the Group Chief Executive and members of the Board at key points in the year.

Equal opportunities

The Group is committed to an active equal opportunities policy from recruitment and selection, through training and development, performance reviews and promotion to retirement. It is our policy to promote an environment free from discrimination, harassment and victimisation, where everyone receives equal treatment regardless of gender, colour, ethnic or national origin, disability, age, marital status, sexual orientation or religion. All decisions relating to employment practices will be objective, free from bias and based solely upon work criteria and individual merit.

Employees with disabilities

It is our policy that people with disabilities should have full and fair consideration for all vacancies. During the year we continued to demonstrate our commitment to interviewing those people with disabilities who fulfil the minimum criteria and we endeavour to retain employees in the workforce if they become disabled during employment. This commitment was recognised in January 2018 by our achievement of level 1 Disability Confident Status and in 2017 we launched a Disability and Wellbeing Network to help employees impacted by disability to access the support they need to thrive at work. We are proud to support The Valuable 500 initiative and champion disability inclusion throughout Centrica. Launched at the World Economic Forum's Annual Summit this year, The Valuable 500 seeks 500 global businesses to place disability inclusion on their board agenda as the first step to full inclusion for disabled people in business.

Human rights

As an international company we have a responsibility and are committed to upholding and protecting the human rights of individuals working for us in the communities and societies where we operate. We take steps to ensure that our people working in countries with a high risk of human rights abuses are safeguarded, as set out in Our Code. We also recognise the opportunity we have to contribute positively to global efforts to ensure human rights are understood and observed.

Other information

Political donations

The Company operates on a politically neutral basis. No political donations were made by the Group for political purposes during the year. However, in accordance with the United States Federal Election Campaign Act, a Political Action Committee (PAC) called Direct Energy Employee Political Action Committee (DEEPAC) was formed to facilitate voluntary political contributions by its US employees. DEEPAC is controlled by neither the Company nor Direct Energy but instead by a governing board of individual employee members of DEEPAC on a voluntary basis. Direct Energy, as authorised by law, has provided limited administrative support to DEEPAC. DEEPAC has been organised to provide a vehicle to dispense voluntary contributions from eligible employees. Participation in DEEPAC is entirely voluntary for eligible employees, and political donations from DEEPAC are determined by a governing board of DEEPAC members. In 2019, contributions to DEEPAC by employees amounted to \$37,106, and DEEPAC made 63 political donations totalling \$48,640.

Significant agreements – change of control

There are a number of agreements to which the Company is party that take effect, alter or terminate upon a change of control of the Company following a takeover bid. The significant agreements of this kind relate to 2009, when the Company entered into certain transactions with EDF Group in relation to an investment in the former British Energy Group, which owned and operated a fleet of nuclear power stations in the UK. The transactions include rights for EDF Group and the Company to offtake power from these nuclear power stations. As part of the arrangements, on a change of control of the Company, the Group loses its right to participate on the boards of the companies in which it has invested. Furthermore, where the acquirer is not located in certain specified countries, EDF Group is able to require Centrica to sell out its investments to EDF Group.

Payments policy

We recognise the importance of good supplier relationships to the overall success of our business. We manage dealings with suppliers in a fair, consistent and transparent manner.

Disclosures required under Listing Rule 9.8.4R

The Company is required to disclose certain information under Listing Rule 9.8.4R in the Directors' Report or advise where such relevant information is contained. All such disclosures are included in this Directors' and Corporate Governance Report, other than the following sections of the 2019 Annual Report and Accounts:

Information	Location in Annual Report	Page(s)
Directors' compensation	Remuneration Report	82 to 99
Capitalised interest (borrowing costs)	Financial Statements	134, note 8
Details of long-term incentive schemes	Remuneration Report	96

Directors' statements

Accounting standards require that Directors satisfy themselves that it is reasonable for them to conclude whether it is appropriate to prepare the Financial Statements on a going concern basis. The Group's business activities, together with factors that are likely to affect its future development and position, are set out in the Group Chief Executive's Statement on pages 6 to 11 and the Business Reviews on pages 20 to 28. After making enquiries, the Board has a reasonable expectation that Centrica and the Group as a whole have adequate resources to continue in operational existence and meet their liabilities as they fall due, for the foreseeable future. For this reason, the Board continues to adopt the going concern basis in preparing the Financial Statements. Additionally, the Directors' Viability Statement – which assesses the prospects for the Group over a longer period than the 12 months required for the going concern assessment – is set out on pages 44 to 45. Further details of the Group's liquidity position are provided in notes 24 and S3 to the Financial Statements.

Statement of Directors' responsibilities

The Directors, who are named on pages 58 to 61, are responsible for preparing the Annual Report, the Remuneration Report, the Strategic Report and the Financial Statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare financial statements for each financial year. Accordingly, the Directors have prepared the Group Financial Statements in accordance with International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) and have elected to prepare the Company Financial Statements in accordance with UK Generally Accepted Accounting Practice including FRS 101 'Reduced Disclosure Framework' (United Kingdom Accounting Standards

and applicable law). Under company law, the Directors must not approve the Financial Statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and the Company and of the profit or loss of the Group for that period. In preparing these Financial Statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether IFRS as adopted by the EU and applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the Group and Company Financial Statements respectively; and
- prepare the Financial Statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and the rest of the Group and enable them to ensure that the Financial Statements and the Remuneration Report comply with the Act and, as regards the Group Financial Statements, Article 4 of the IAS Regulation. They are also responsible for safeguarding the assets of the Company and the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Furthermore, the Directors are responsible for the maintenance and integrity of the Company's website. Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

The Directors consider that the Annual Report and Accounts 2019, when taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy.

Each of the Directors confirms that to the best of their knowledge:

- the Group Financial Statements, which have been prepared in accordance with IFRS as adopted by the EU, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group;
- the Strategic Report contained on pages 2 to 54, together with the Directors' and Corporate Governance Report on pages 55 to 102, includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal risks and uncertainties that it faces;
- there is no relevant audit information of which Deloitte LLP are unaware; and
- they have taken all the steps that they ought to have taken as a Director in order to make themselves aware of any relevant audit information and to establish that the Company's auditors are aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of section 418 of the Companies Act 2006.

Deloitte LLP have expressed their willingness to continue in office as auditors and a resolution to re-appoint them will be proposed at the forthcoming AGM.

By order of the Board

Justine Campbell

Group General Counsel & Company Secretary

12 February 2020

Financial Statements

104	Independent Auditor's Report
114	Group Income Statement
115	Group Statement of Comprehensive Income
116	Group Statement of Changes in Equity
117	Group Balance Sheet
118	Group Cash Flow Statement
119	Notes to the Financial Statements
196	Company Financial Statements
198	Notes to the Company Financial Statements
208	Gas and Liquids Reserves (Unaudited)
210	Ofgem Consolidated Segmental Statement

Independent Auditor's Report

Report on the audit of the financial statements

Opinion

In our opinion:

- the Financial Statements of Centrica plc (the 'parent company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the parent company's affairs as at 31 December 2019 and of the Group's loss for the year then ended;
- the Group Financial Statements have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union;
- the parent company Financial Statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 "Reduced Disclosure Framework"; and
- the Financial Statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group Financial Statements, Article 4 of the IAS Regulation.

We have audited the Financial Statements which comprise:

- the Group Income Statement;
- the Group Statement of Comprehensive Income;
- the Group and Company Balance Sheets;
- the Group and Company Statements of Changes in Equity;
- the Group Cash Flow Statement; and
- the related notes 1 to 26 and the supplementary notes S1 to S11 of the Group Financial Statements and notes I to XVIII of the Company Financial Statements.

The financial reporting framework that has been applied in the preparation of the Group Financial Statements is applicable law and IFRSs as adopted by the European Union. The financial reporting framework that has been applied in the preparation of the parent company Financial Statements is applicable law and United Kingdom Accounting Standards, including FRS 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the Financial Statements section of our report.

We are independent of the Group and the parent company in accordance with the ethical requirements that are relevant to our audit of the Financial Statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. The non-audit services provided to the Group and parent company for the year are disclosed in note S9 to the Financial Statements. We confirm that the non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the parent company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Summary of our audit approach

Key audit matters

The key audit matters that we identified in the current year were:

- Presentation of the Group Income Statement;
- Impairment of long-life assets;
- Revenue and cost recognition for derivatives; and
- Estimation of accrued energy revenue.

All key audit matters are consistent with the prior year.

Materiality

The materiality that we used for the Group Financial Statements was £42 million which was determined on the basis of 5% of forecast 2019 pre-tax profit, adjusted for exceptional items and certain re-measurements as defined in note 7 to the Financial Statements. Our materiality represents 6.5% of the final pre-tax profit adjusted for exceptional items and certain re-measurements.

Scoping

All components of the Group have been subject to a full scope audit using a component materiality level relevant to the size and risk associated with that component other than Centrica Business Solutions (within the Centrica Business segment) and Direct Energy Services (US and Canada) within the Centrica Consumer segment, both of which were subject to specified audit procedures.

Significant changes in our approach

- There are no significant changes in our approach for 2019.

Conclusions relating to going concern, principal risks and viability statement

Going concern

We have reviewed the Directors' statement on page 245 to the Financial Statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them and their identification of any material uncertainties to the Group's and company's ability to continue to do so over a period of at least 12 months from the date of approval of the Financial Statements.

We considered as part of our risk assessment the nature of the Group, its business model and related risks including where relevant the impact of Brexit, the requirements of the applicable financial reporting framework and the system of internal control. We evaluated the Directors' assessment of the Group's ability to continue as a going concern, including challenging the underlying data and key assumptions used to make the assessment, and evaluated the Directors' plans for future actions in relation to their going concern assessment.

We are required to state whether we have anything material to add or draw attention to in relation to that statement required by Listing Rule 9.8.6R(3) and report if the statement is materially inconsistent with our knowledge obtained in the audit.

Principal risks and viability statement

Based solely on reading the Directors' statements and considering whether they were consistent with the knowledge we obtained in the course of the audit, including the knowledge obtained in the evaluation of the Directors' assessment of the Group's and the Company's ability to continue as a going concern, we are required to state whether we have anything material to add or draw attention to in relation to:

- the disclosures on pages 34-43 that describe the principal risks, procedures to identify emerging risks, and an explanation of how these are being managed or mitigated;
- the Directors' confirmation on page 37 that they have carried out a robust assessment of the principal and emerging risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity; or
- the Directors' explanation on page 44 as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We are also required to report whether the Directors' statement relating to the prospects of the Group required by Listing Rule 9.8.6R(3) is materially inconsistent with our knowledge obtained in the audit.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the Financial Statements for the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit, and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Going concern is the basis of preparation of the Financial Statements that assumes an entity will remain in operation for a period of at least 12 months from the date of approval of the Financial Statements.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

Viability means the ability of the Group to continue over the time horizon considered appropriate by the Directors.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

Key audit matter description

How the scope of our audit responded to the key audit matter

Presentation of the Group Income Statement

The Group Income Statement set out on page 124 of the Annual Report & Accounts segregates Business performance from Exceptional items and certain re-measurements (the 'Middle column') in arriving at the results for the year with additional information disclosed in Note 7. The Group's policy on the presentation of exceptional items and certain re-measurements can be found in notes 2(a) and 2(b). The Audit Committee also discuss this area in their report on pages 70 to 75.

Business performance is a critical measure for stakeholders and underpins the Group's segmental analysis and description of business results, and therefore the classification of items between Business performance and the Middle column is important for users of the accounts.

The key items included within the Middle column are as follows:

- Re-measurement and settlement of certain energy contracts (£646 million);
- Impairment of certain assets (£925 million);
- Restructuring costs (£356 million);
- Pension change costs and credits (£152 million);
- Net gain on disposals programmes (£35 million); and
- Related tax charges and credits (£217 million).

The Group has an established policy which governs which items should be recognised in the Middle column. However, judgement is applied in the application of this policy. This is a key area of focus for our audit. We identified a potential fraud risk in respect of the presentation of exceptional items, in particular restructuring costs.

The valuation and recording of the impairment of certain assets and the valuation and recording of the re-measurement of certain energy contracts are separate key audit matters. Please see pages 107 and 108 for further detail. The presentation of these items within either Business performance or the Middle column is, however, addressed within this key audit matter.

Significant restructuring costs were incurred in 2019 in relation to Group's strategic review and efficiency programme as set out on page 30. The costs of restructuring arising from the strategic review are included within the Middle Column.

The presentation of the Group's revenue and cost of sales in the results for the period column has been amended and the comparative period results have been represented to comply with the requirements of the IFRIC agenda decision on the Physical Settlement of Contracts to Buy or Sell a non-Financial Item which was issued in March 2019. Please see pages 121 and 163 for further details.

Audit procedures applicable to all items

- We obtained an understanding of key controls around the presentation of items within either Business performance or the Middle column.
- We evaluated the Group's policy on the recording of items within Business performance or the Middle column and considered whether that policy was appropriate. We also evaluated the Group's policy against guidance issued by the Financial Reporting Council (FRC) and the European Securities and Markets Authority (ESMA).
- We challenged Management on the presentation of items within the Middle column and whether these items had been correctly presented within the appropriate column and properly disclosed in line with the Group's policy.

Audit procedures applicable to specific items

- On impairment of certain assets, we challenged Management on the factors that caused any significant movement in value on each asset by interrogating the underlying impairment models and whether the impairment had been recorded within the correct column.
- For restructuring costs we evaluated the costs recorded by Management within the Middle column and challenged whether those costs were being correctly reported in line with the Group's policy.
- We evaluated the income statement amendments and the presentation of certain revenue streams following the IFRIC agenda decision on the recycling of derivative movements.
- We reviewed the presentation and disclosure of Management's conclusions in the Annual Report & Accounts to assess whether the disclosures are fair, balanced and understandable and consistent with the Group's policy and relevant accounting standards.

Key observations

- The exploration and production assets impairments arise from both operating performance of certain projects and a reduction in forecast energy prices, and are material in size, while the Nuclear impairments arise from changes in forecast future energy prices therefore under the Group's policy these impairments are appropriately recorded within the Middle column.
- Where the impairment involves a change in forecast future energy prices combined with factors such as operational performance or available reserves, a judgement is taken by the Group whether this should be reported in the Middle column. We believe these judgements are reasonable.
- The majority of restructuring costs relate to clearly defined projects (see 30). However, there are certain smaller costs incurred in the year which relate to restructuring activities in other areas of the business, and which have been treated as exceptional items and presented within the Middle column in the income statement. Whilst the treatment of these costs as exceptional is subjective, the costs incurred are not material to the Financial Statements.
- We are satisfied with the income statement amendments and the presentation of certain revenue streams following the IFRIC agenda decision.



Key audit matter description



How the scope of our audit responded to the key audit matter

Impairment of long-life assets

The total book value of exploration and production assets is £2,396 million and the total book value of the investment in Nuclear is £1,289 million. Management have recorded a pre-tax impairment charge of £848 million for these assets, including £476 million on exploration and production assets and £372 million on the investment in Nuclear, primarily due to lower forecast long term prices and operational performance, as disclosed in note 7. Further details on the key sources of estimation certainty underpinning the impairment of long life assets can be found in note 3(b). Details on the sensitivity of the above impairment reviews to changes in key assumptions such as commodity prices are disclosed in Note 7(d). The matter is also considered by the Audit Committee in their report on pages 69 to 75.

The Group owns significant upstream exploration and production assets and certain power generation assets, which are required to be reviewed for indicators of impairment and tested for impairment as appropriate.

These assets are subject to the greatest estimation uncertainty, as set out below. Consequently they represent the highest risk of impairment. We therefore identified a risk of material misstatement that these long-life assets are not recoverable. The impairments recorded in the year were primarily because of a change in the estimation of long term commodity prices.

The impairment assessment involves management judgement in considering whether the carrying value of those assets or cash generating units are recoverable. The key assumptions and judgements underpinning the impairment reviews include:

- forecast future cash flows;
- forecast future production or generation profiles;
- forecast future commodity prices;
- estimates of oil and gas reserves;
- availability forecast;
- useful life estimates and life extensions; and
- determining an appropriate discount rate.

Procedures on the overall impairment review

- We have understood management's process for identifying indicators of impairment and for performing their impairment assessment. We assessed and obtained an understanding of the key controls relating to the asset impairment models, the underlying forecasting process and the impairment reviews performed.
- We evaluated and challenged the key assumptions and inputs into the impairment models, which included performing sensitivity analysis, to evaluate the impact of selecting alternative assumptions. We evaluated the current year changes to the key assumptions and retrospectively assessed whether prior year assumptions were appropriate.
- We audited the arithmetical accuracy of the impairment models. We recalculated the impairment charges and headroom and agreed these to financial records.
- We evaluated the impairment judgements taken, with reference to our assessment of the key assumptions as outlined above and the outcome of the sensitivities performed.

Procedures relating to forecast future cash flows

- We confirmed that forecast cash flows were consistent with Board approved forecasts, and analysed reasonably possible downside sensitivities.
- We validated production profiles to external reserve and operator estimates and agreed these to the cash flow forecast assumptions.
- We confirmed estimates of oil and gas reserves to third party reserve reports, assessing the skills, qualifications and independence of those third party experts.
- We evaluated the Group's determination of future commodity prices using our own internal experts, who benchmarked against externally available future commodity price estimates and performed sensitivity analysis with alternative future prices.
- We assessed the reasonableness of the nuclear plants' availability forecast and life extensions and sensitised the impact of change in assumptions on the overall impairment charge.

Procedures relating to the discount rate

- We involved our internal valuation specialists to evaluate management's discount rates, which involved benchmarking against available market views and analysis.



Key observations

- We are satisfied that the key assumptions used to determine the recoverable amount of long-life assets are appropriate, including estimates of reserves, production and generation profiles.
- We are also satisfied that the Group's discount rate assumptions are determined based on acceptable valuation methodologies. These assumptions are towards the higher end when compared to the ranges determined by our internal valuation specialists but are considered reasonable, consistent with the prior year.
- The Group's future commodity price estimates are within the middle of the acceptable range of external sources. In the prior year the Group's future commodity price estimates were towards the higher end of the acceptable range.
- Based on the procedures performed we are satisfied that the Group's impairment charge is appropriate.

Key audit matter description

How the scope of our audit responded to the key audit matter

Revenue and cost recognition for derivatives

Details on the Group's derivative activities can be found in note 19 and note S3 (a). The key sources of estimation uncertainty associated with derivatives can be found in note 3(b) with further details on the presentation of certain re-measurement arising on derivatives disclosed in note 2(b). The matter is also considered by the Audit Committee in their report on pages 69 to 75. As disclosed in note 7 to the Financial Statements, certain re-measurements of £647 million pre-tax have been recognised in the current year. The critical accounting judgement in respect of Liquefied Natural Gas ('LNG') is disclosed in note 3(a) and the long term LNG commitments are disclosed in note 23.

In addition to proprietary trading activities, the Group enters into forward commodity contracts to optimise the value of its production, generation and transportation assets as well as to meet the future needs of its customers. Certain of these arrangements are accounted for as derivative financial instruments and are recorded at fair value. We identified the following risks in respect of commodity trades, all of which were identified as fraud risks:

Valuation of complex trades

- Judgement is required in valuing derivative contracts, particularly where there is optionality in a contract that requires modelling on a bespoke basis (Level 2 or 3 in accordance with IFRS 13 Fair Value Measurement). As such we identified a risk relating to the valuation of complex trades.

Own-use treatment and accruals accounting

- Certain commodity contracts have been entered into for the purposes of securing commodities for the energy supply businesses. Where contracts have been entered into to satisfy Centrica's normal business activities, these have been determined to be own-use contracts and consequently are not recorded at fair value. Due to the size and value of these contracts we have identified the appropriateness of the own-use treatment as a key audit matter.
- The Group does not consider its long term LNG supply contracts to be derivatives because of a lack of market liquidity and the inability or lack of history of net settlement. Such contracts are therefore not marked to market. These contracts are significant commitments and therefore this judgement is important to the Group's Financial Statements.

Allocation of optimisation and hedging trading activity in the Middle column

- Where the Group enters into trades that give rise to an accounting mismatch between accrual accounted assets, contracts and demand and the marked to market accounted forward commodity contracts, the fair values of those contracts are accounted for separately as 'certain re-measurements' within the Middle column of the Group's Income Statement and are excluded from Business performance.

We have understood the Group's processes and controls for authorising and recording commodity trades.

In the Group's Energy, Marketing and Trading ('EM&T') business, we used data analytics to trace commodity trades from initiation through to confirmation, settlement (where relevant) and recording in the Group's accounting systems. This included an assessment of whether the accounting recognition was in line with the Group's accounting policies and relevant accounting standards.

Valuation of complex trades

- We used financial instrument specialists to assist the audit team in valuing material complex trades, which included auditing the Group's valuation models by creating an independent valuation, or by assessing the inputs, verifying the reasonableness of the model methodology and assessing the movement in the fair value from the change in significant inputs.

Own-use treatment

- We reviewed all the Group's material 'own use' contracts which were entered into during the year to determine whether the application of the own-use treatment was appropriate.
- We assessed whether there is liquidity in the LNG market or the Group has the ability or practice of net settling of contracts, including reviewing contractual terms.
- We audited the prospective and retrospective demand tests performed by the Group to determine whether the contract volumes exceed the amount of estimated own-use demand in the relevant periods, including an evaluation of the contracts for net settlement activity.

Allocation of optimisation and hedging trading activity in the Middle column

- We audited the principles management use to determine whether a trade should be recognised as part of on-going business performance or presented separately. We evaluated whether those agreed principles had been applied consistently by reviewing key contracts and testing a sample of trades to confirm that the accounting treatment was appropriate.
- We also verified that trades within certain re-measurements were entered into at market prices where the counter-party was another Group business, to determine whether profits and losses within the Middle column reflect only market-related movements.

Key observations

- We are satisfied that commodity trades are valued on a reasonable basis and that the accounting classification and valuation of trades is appropriate.
- We are satisfied with the appropriateness of the Group's own use accounting.
- We agree with the conclusion that LNG contracts should not be accounted for at fair value.



Key audit matter description



How the scope of our audit responded to the key audit matter

Estimation of accrued energy revenue

Details on the Group's accrued energy income can be found in note 17. Total accrued energy income at 31 December 2019 was £1,342 million (2018: £1,542 million). The key source of estimation uncertainty associated with accrued energy income is disclosed in note 3(b). The matter is also considered by the Audit Committee in their report on pages 69 to 75.

The recognition of energy supply revenue requires the Group to estimate customer energy usage between the date of the last meter read and the year end, known as accrued or unbilled energy revenue.

Our risk was focused on the accuracy and valuation of accrued energy revenue in the UK and North American Home and Business, being the businesses with the most significant accrued energy revenue. We have pinpointed the risk to the estimates underpinning the recognition and valuation of accrued energy revenue and the potential for management override of related controls. We also identified this as a fraud risk.

Our audit approach for unbilled revenue was a combination of tests of internal control and data analytics work, together with substantive analytical procedures. This included understanding controls in the UK and North American revenue processes, from meter reading to cash collection, and controls over the period end revenue reconciliation process. In the UK, we tested the key controls relied on to estimate accrued energy revenue.

- We used data analytics in UK Home and Business to reperform the calculation of the accrued energy revenue estimate generated by the billing systems for each customer account, in addition to auditing key manual adjustments made by management, and the key assumption, being the value of energy consumed since the last meter read.
- In North America, we focused on creating an independent estimate of accrued energy revenue and compared this to the estimate determined by management.
- In the UK and North America we assessed the accuracy of the estimates made by management in prior periods. Any differences as a result of the work performed were investigated and challenged.



Key observations

- We are satisfied that the estimation of the Group's accrued energy revenue is materially correct. We were able to rely on certain controls around the estimation process in the UK and whilst some improvements were made to processes in North America, the controls are not yet at a stage where we were able to rely on them. This is discussed further in the Audit Committee's report on pages 69 to 75.

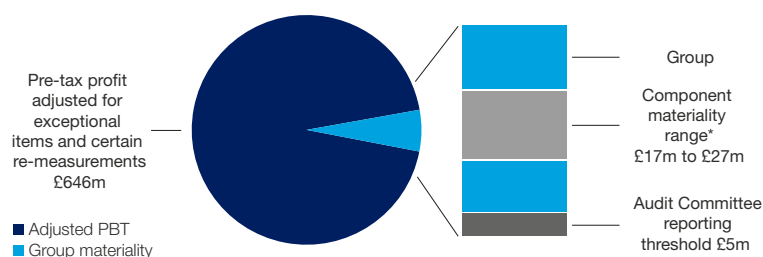
Our application of materiality

Materiality

We define materiality as the magnitude of misstatement in the Financial Statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the Financial Statements as a whole as follows:

	Group Financial Statements	Parent company Financial Statements
Materiality	£42 million (2018: £60 million)	£40 million (2018: £50 million)
Basis for determining materiality	We determined Group materiality on the basis on 5% of forecast 2019 pre-tax profit, adjusted for exceptional items and certain re-measurements as defined in note 7 to the Financial Statements (2018 - 5%). Our materiality represents 6.5% of the final pre-tax profit adjusted for exceptional items and certain re-measurements (2018: 5.4%).	We determined company materiality based on 1% (2018: 1%) of estimated net assets. Our materiality represents 0.7% of final net assets (2018: 0.9%).
Rationale for the benchmark applied	Pre-tax profit adjusted for exceptional items and certain re-measurements was considered to be the most relevant benchmark as it is of most interest to stakeholders. Furthermore, exceptional items and certain re-measurements are volatile and materially impact the Group's performance each year due to events and transactions that are not part of the underlying activities of the Group, and excluding them enables a more consistent basis with which to consider the Group's performance on an ongoing basis.	We considered net assets to be the most appropriate benchmark given the primary purpose of the Company is a holding company.



*Component materiality range excludes parent company materiality

Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the Financial Statements as a whole. Group performance materiality was set at 70% of Group materiality for the 2019 audit (2018: 70%). In determining performance materiality, we considered factors including our ability to rely on internal controls across a number of areas of the audit including payroll, expenditure, meter to cash and revenue, and the willingness to make process improvements as well as management's willingness to correct errors identified and the stability of the finance team.

Error reporting threshold

We agreed with the Audit Committee that we would report to the Committee all individual audit differences in excess of £5 million (2018: £5 million) and collectively all other errors above £2 million (2018: £3 million) as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the Financial Statements.

An overview of the scope of our audit

Identification and scoping of components

The Group is organised by its different segments as outlined in note 4. These segments contain a number of individual businesses, and we use those businesses as the basis for our audit scope.

Our audit was scoped by obtaining an understanding of the Group and its environment, including Group-wide controls, and assessing the risks of material misstatement at the Group level. Having performed this assessment it was concluded that the following components were considered to be the most significant and were subject to full scope audits:

Centrica Consumer

- UK Home
- North America Home
- Connected Home Solutions
- Ireland

Centrica Business

- UK Business
- North America Business
- Energy Marketing & Trading
- Central Power Generation

Upstream

- Spirit Energy
- Centrica Storage
- Nuclear

Centrica Business Solutions (within the Centrica Business segment) and Direct Energy Services US and Direct Energy Services Canada (within the Centrica Consumer segment) were individually not financially significant and as such we performed specified audit procedures over relevant audit risks.

This scoping resulted in 96% of Group revenue, 90% of Group profit before tax and 95% of Group net assets being subject to audit.

The materiality levels of the components ranged from £17 million to £27 million (excluding parent company materiality) depending on the contribution of the component's operations to the Group and our assessment of risk relevant to each location.

Working with other auditors

All components except for North America Home, North America Business and Ireland are audited from the United Kingdom and hence we oversee these component audits through regular meetings and direct supervision. For the overseas components, each was visited throughout the year by the lead audit partner or other senior members of the engagement team. Throughout the year, the Group audit team has been directly involved in overseeing the component audit planning and execution, through frequent conversations, team meetings, debate, challenge and review of reporting and underlying work papers. In addition to our direct interactions, we sent detailed instructions to our component audit teams, attended audit closing meetings, and reviewed their audit working papers. We are satisfied that the level of involvement of the lead audit partner and team in the component audits has been extensive, and has enabled us to conclude that sufficient appropriate audit evidence has been obtained in support of our opinion on the Group Financial Statements as a whole.

Other information

The Directors are responsible for the other information. The other information comprises the information included in the annual report, other than the Financial Statements and our auditor's report thereon.

Our opinion on the Financial Statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

In connection with our audit of the Financial Statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Financial Statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the Financial Statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

In this context, matters that we are specifically required to report to you as uncorrected material misstatements of the other information include where we conclude that:

- **Fair, balanced and understandable** – the statement given by the Directors that they consider the annual report and Financial Statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy, is materially inconsistent with our knowledge obtained in the audit; or
- **Audit Committee reporting** – the section describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee; or
- **Directors' statement of compliance with the UK Corporate Governance Code** – the parts of the Directors' statement required under the Listing Rules relating to the Company's compliance with the UK Corporate Governance Code containing provisions specified for review by the auditor in accordance with Listing Rule 9.8.10R(2) do not properly disclose a departure from a relevant provision of the UK Corporate Governance Code.

We have nothing to report in respect of these matters.

Responsibilities of Directors

As explained more fully in the Directors' responsibilities statement, the Directors are responsible for the preparation of the Financial Statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of Financial Statements that are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, the Directors are responsible for assessing the Group's and the parent company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the parent company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements.

Details of the extent to which the audit was considered capable of detecting irregularities, including fraud and non-compliance with laws and regulations are set out below.

A further description of our responsibilities for the audit of the Financial Statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Extent to which the audit was considered capable of detecting irregularities, including fraud

We identify and assess the risks of material misstatement of the Financial Statements, whether due to fraud or error, and then design and perform audit procedures responsive to those risks, including obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion.

Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, we considered the following:

- the nature of the industry and sector, control environment and business performance including the design of the Group's remuneration policies, key drivers for Directors' remuneration, bonus levels and performance targets;
- Group's own assessment of the risks that irregularities may occur either as a result of fraud or error that was approved by those charged with governance on 11 February 2019 and 10 February 2020;
- results of our enquiries of management, internal audit and the Audit Committee about their own identification and assessment of the risks of irregularities;
- any matters we identified having obtained and reviewed the Group's documentation of their policies and procedures relating to:
 - identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
 - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud;
 - the internal controls established to mitigate risks of fraud or non-compliance with laws and regulations.
- the matters discussed among the audit engagement team including significant component audit teams and involving relevant internal specialists, including tax, valuations, pensions and IT regarding how and where fraud might occur in the Financial Statements and any potential indicators of fraud.

As a result of these procedures, we considered the opportunities and incentives that may exist within the organisation for fraud and identified the greatest potential for fraud in the following areas:

(i) The presentation of the Group income statement, (ii) Revenue and cost recognition for derivatives and (iii) Estimation of unbilled energy supply revenue. In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override.

We also obtained an understanding of the legal and regulatory framework that the Group operates in, focusing on provisions of those laws and regulations that had a direct effect on the determination of material amounts and disclosures in the Financial Statements. The key laws and regulations we considered in this context included the UK Companies Act, Listing Rules, Pensions and Tax legislation.

In addition, we considered provisions of other laws and regulations that do not have a direct effect on the Financial Statements but compliance with which may be fundamental to the Group's ability to operate or to avoid a material penalty. These included the Office of Gas and Electricity Markets (Ofgem) and Regulations levied by the UK Financial Conduct Authority and Prudential Regulatory Authority.

Audit response to risks identified

As a result of performing the above, we identified the presentation of the Group income statement, revenue and cost recognition for derivatives and estimation of unbilled energy supply revenue as key audit matters related to the potential risk of fraud. The key audit matters section of our report explains the matters in more detail and also describes the specific procedures we performed in response to those key audit matters.

In addition to the above, our procedures to respond to risks identified included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with relevant laws and regulations described above as having a different effect on the Financial Statements;
- enquiring of management, the Audit Committee and in-house legal counsel concerning actual and potential litigation and claims;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- reading minutes of meetings of those charged with governance, reviewing internal audit reports and reviewing correspondence with relevant authorities where matters identified were significant;
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams, and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Report on other legal and regulatory requirements

Opinions on other matters prescribed by the Companies Act 2006

In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Directors' Report for the financial year for which the Financial Statements are prepared is consistent with the Financial Statements; and
- the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and the parent company and their environment obtained in the course of the audit, we have not identified any material misstatements in the Strategic Report or the Directors' Report.

Matters on which we are required to report by exception

Adequacy of explanations received and accounting records

We have nothing to report in respect of these matters.

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent company Financial Statements are not in agreement with the accounting records and returns.

Directors' remuneration

We have nothing to report in respect of these matters.

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of Directors' remuneration have not been made or the part of the Directors' Remuneration Report to be audited is not in agreement with the accounting records and returns.

Other matters

Auditor tenure

Following the recommendation of the Audit Committee, we were appointed by the Shareholders on 13 May 2019 to audit the Financial Statements for the year ending 31 December 2019 and subsequent financial periods. The period of total uninterrupted engagement including previous renewals and reappointments of the firm is three years, covering the years ending 31 December 2017, 31 December 2018 and 31 December 2019.

Consistency of the audit report with the additional report to the Audit Committee

Our audit opinion is consistent with the additional report to the Audit Committee we are required to provide in accordance with ISAs (UK).

Use of our report

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

James Leigh FCA (Senior statutory auditor)

For and on behalf of Deloitte LLP

Statutory Auditor

London, United Kingdom
12 February 2020

Group Income Statement

Year ended 31 December	Notes	2019			2018 (restated) (i)		
		Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m	Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m
Group revenue ⁽ⁱⁱ⁾	4	26,825	(4,151)	22,674	27,381	(4,077)	23,304
Cost of sales ⁽ⁱⁱ⁾	5	(22,973)	7,178	(15,795)	(23,128)	6,808	(16,320)
Re-measurement and settlement of energy contracts ⁽ⁱⁱ⁾	7	–	(3,673)	(3,673)	–	(2,931)	(2,931)
Gross profit/(loss)		3,852	(646)	3,206	4,253	(200)	4,053
Operating costs before exceptional items and credit losses on financial assets	5	(2,742)	–	(2,742)	(2,721)	–	(2,721)
Credit losses on financial assets	5, 17	(197)	–	(197)	(143)	–	(143)
Exceptional items – (impairment)/write-back of retained exploration and production assets	7	–	(476)	(476)	–	90	90
Exceptional items – impairment of power assets and provision for onerous power contracts	7	–	(381)	(381)	–	(46)	(46)
Exceptional items – impairment of Centrica Home Solutions	7	–	(77)	(77)	–	–	–
Exceptional items – net gain/(loss) on disposal ⁽ⁱⁱ⁾	7	–	35	35	–	(16)	(16)
Exceptional items – net pension change credit/(cost)	7	–	152	152	–	(41)	(41)
Exceptional items – restructuring costs	7	–	(356)	(356)	–	(170)	(170)
Operating costs	5	(2,939)	(1,103)	(4,042)	(2,864)	(183)	(3,047)
Share of (losses)/profits of joint ventures and associates, net of interest and taxation	6, 7	(12)	(1)	(13)	3	(22)	(19)
Group operating profit/(loss)	4	901	(1,750)	(849)	1,392	(405)	987
Net finance cost	7, 8	(255)	–	(255)	(273)	(139)	(412)
Profit/(loss) before taxation		646	(1,750)	(1,104)	1,119	(544)	575
Taxation on profit/(loss)	7, 9	(218)	219	1	(461)	128	(333)
Profit/(loss) for the year		428	(1,531)	(1,103)	658	(416)	242
Attributable to:							
Owners of the parent		419	(1,442)	(1,023)	631	(448)	183
Non-controlling interests		9	(89)	(80)	27	32	59
Earnings per ordinary share				Pence			Pence
Basic	10			(17.8)			3.3
Diluted	10			(17.8)			3.2
Interim dividend paid per ordinary share	11			1.50			3.60
Final dividend proposed per ordinary share	11			3.50			8.40

(i) The Group has amended the presentation of energy derivative contracts following an IFRIC agenda decision in March 2019 and a review of its trading businesses. Prior year results have been restated accordingly. See note 1 for further details.

(ii) Gains and losses on disposals include any impairments and write-backs associated with the assets and businesses disposed of or classified as held for sale.

The notes on pages 119 to 195 form part of these Financial Statements.

Group Statement of Comprehensive Income

Year ended 31 December	Notes	2019 £m	2018 £m
(Loss)/profit for the year		(1,103)	242
Other comprehensive (loss)/income			
Items that will be or have been reclassified to the Group Income Statement:			
Impact of cash flow hedging (net of taxation)	S4	(4)	10
Exchange differences on translation of foreign operations		(126)	106
Exchange differences reclassified to Group Income Statement on disposal	12	(18)	–
Items that will not be reclassified to the Group Income Statement:			
Net actuarial (losses)/gains on defined benefit pension schemes (net of taxation)	S4	(387)	657
Gains/(losses) on revaluation of equity instruments measured at fair value through other comprehensive income (net of taxation)		2	(1)
Share of other comprehensive income/(loss) of joint ventures and associates, net of taxation	14, S4	29	(1)
Other comprehensive (loss)/income, net of taxation		(504)	771
Total comprehensive (loss)/income for the year		(1,607)	1,013
Attributable to:			
Owners of the parent		(1,511)	953
Non-controlling interests	S11	(96)	60

The notes on pages 119 to 195 form part of these Financial Statements.

Group Statement of Changes in Equity

	Share capital £m	Share premium £m	Retained earnings £m	Other equity £m	Total £m	Non-controlling interests £m	Total equity £m
1 January 2018	348	2,121	1,184	(950)	2,703	729	3,432
Adjustment on adoption of IFRS 9	–	–	28	(28)	–	–	–
Profit for the year	–	–	183	–	183	59	242
Other comprehensive income	–	–	–	770	770	1	771
Employee share schemes	–	–	3	27	30	–	30
Scrip dividend	6	119	–	–	125	–	125
Dividends paid to equity holders (note 11)	–	–	(673)	–	(673)	–	(673)
Other	–	–	–	7	7	14	21
31 December 2018	354	2,240	725	(174)	3,145	803	3,948
Loss for the year	–	–	(1,023)	–	(1,023)	(80)	(1,103)
Other comprehensive loss	–	–	–	(488)	(488)	(16)	(504)
Employee share schemes and other share transactions	–	–	(10)	53	43	–	43
Scrip dividend (note 11)	6	90	–	–	96	–	96
Dividends paid to equity holders (note 11)	–	–	(561)	–	(561)	–	(561)
Distributions to non-controlling interests	–	–	–	–	–	(124)	(124)
31 December 2019	360	2,330	(869)	(609)	1,212	583	1,795

The notes on pages 119 to 195 form part of these Financial Statements.

Group Balance Sheet

	Notes	31 December 2019 £m	31 December 2018 £m
Non-current assets			
Property, plant and equipment	13	3,133	4,124
Interests in joint ventures and associates	14	1,306	1,661
Other intangible assets	15	1,455	1,720
Goodwill	15	2,578	2,736
Deferred tax assets	16	553	532
Trade and other receivables, and contract-related assets	17	154	119
Derivative financial instruments	19	493	537
Retirement benefit assets	22	56	223
Securities	24	131	239
		9,859	11,891
Current assets			
Trade and other receivables, and contract-related assets	17	4,839	5,543
Inventories	18	431	459
Derivative financial instruments	19	1,320	1,141
Current tax assets		115	187
Securities	24	124	68
Cash and cash equivalents	24	1,342	1,268
		8,171	8,666
Assets of disposal groups classified as held for sale	12	124	–
		8,295	8,666
Total assets		18,154	20,557
Current liabilities			
Derivative financial instruments	19	(1,854)	(1,136)
Trade and other payables, and contract-related liabilities	20	(5,533)	(6,207)
Current tax liabilities		(339)	(360)
Provisions for other liabilities and charges	21	(284)	(305)
Bank overdrafts, loans and other borrowings	24	(857)	(374)
		(8,867)	(8,382)
Liabilities of disposal groups classified as held for sale	12	(18)	–
		(8,885)	(8,382)
Non-current liabilities			
Deferred tax liabilities	16	(151)	(384)
Derivative financial instruments	19	(291)	(430)
Trade and other payables, and contract-related liabilities	20	(152)	(191)
Provisions for other liabilities and charges	21	(2,175)	(2,540)
Retirement benefit obligations	22	(219)	(302)
Bank loans and other borrowings	24	(4,486)	(4,380)
		(7,474)	(8,227)
Total liabilities		(16,359)	(16,609)
Net assets			
Share capital	25	360	354
Share premium		2,330	2,240
Retained earnings		(869)	725
Other equity	S4	(609)	(174)
Total shareholders' equity		1,212	3,145
Non-controlling interests	S11	583	803
Total shareholders' equity and non-controlling interests		1,795	3,948

The Financial Statements on pages 114 to 195, of which the notes on pages 119 to 195 form part, were approved and authorised for issue by the Board of Directors on 12 February 2020 and were signed below on its behalf by:

Iain Conn
Group Chief Executive

Chris O'Shea
Group Chief Financial Officer

Group Cash Flow Statement

Year ended 31 December	Notes	2019 £m	2018 £m
Group operating (loss)/profit including share of results of joint ventures and associates		(849)	987
Add back share of losses of joint ventures and associates, net of interest and taxation	6	13	19
Group operating (loss)/profit before share of results of joint ventures and associates		(836)	1,006
Add back/(deduct):			
Depreciation, amortisation, write-downs, impairments and write-backs		2,299	1,019
Profit on disposals		(159)	(13)
Decrease in provisions		–	(29)
Cash contributions to defined benefit schemes in excess of service cost income statement charge		(493)	(34)
Employee share scheme costs	S4	41	43
Unrealised losses arising from re-measurement of energy contracts		432	241
Exceptional charges reflected directly in operating profit		237	56
Operating cash flows before movements in working capital relating to business performance and payments relating to taxes and exceptional charges		1,521	2,289
Increase in inventories		(14)	(43)
Decrease/(increase) in trade and other receivables and contract-related assets relating to business performance		518	(834)
(Decrease)/increase in trade and other payables and contract-related liabilities relating to business performance		(385)	831
Operating cash flows before payments relating to taxes and exceptional charges		1,640	2,243
Taxes paid	9	(92)	(61)
Payments relating to exceptional charges in operating costs		(298)	(248)
Net cash flow from operating activities		1,250	1,934
Purchase of businesses, net of cash acquired		(30)	(85)
Sale of businesses		236	20
Purchase of property, plant and equipment and intangible assets	4	(781)	(926)
Sale of property, plant and equipment and intangible assets		8	26
Investments in joint ventures and associates		(1)	(3)
Dividends received from joint ventures and associates	14	1	22
Receipt of sub-lease capital payments	24	3	–
Interest received		11	15
Sale/(purchase) of securities	24	50	(76)
Net cash flow from investing activities		(503)	(1,007)
Payments for own shares	S4	–	(11)
Proceeds from sale of forfeited share capital		2	–
Distribution to non-controlling interests		(124)	–
Financing interest paid	24	(243)	(305)
Repayment of borrowings and capital element of leases	24	(241)	(1,673)
Equity dividends paid		(471)	(551)
Net cash flow from financing activities		(1,077)	(2,540)
Net decrease in cash and cash equivalents		(330)	(1,613)
Cash and cash equivalents including overdrafts at 1 January		1,128	2,737
Effect of foreign exchange rate changes		(4)	4
Cash and cash equivalents including overdrafts at 31 December	24	794	1,128
Included in the following line of the Group Balance Sheet:			
Cash and cash equivalents		1,342	1,268
Overdrafts included within current bank overdrafts, loans and other borrowings		(548)	(140)

The notes on pages 119 to 195 form part of these Financial Statements.

Notes to the Financial Statements

Notes to the Financial Statements provide additional information required by statute, accounting standards or Listing Rules to explain a particular feature of the consolidated Financial Statements.

The notes to these Financial Statements focus on areas that are key to understanding our business. Additional information that we are required to disclose by accounting standards or regulation is disclosed in the Supplementary Information (notes S1 to S11).

In addition, for clarity, each note begins with a simple introduction outlining its purpose.

1. Basis of preparation and summary of significant new accounting policies and reporting changes

This section details new accounting standards, amendments to standards and interpretations, whether these are effective in 2019 or later years, and if and how these are expected to impact the financial position and performance of the Group.

The principal accounting policies applied in the preparation of these consolidated Financial Statements are set out below and in the Supplementary Information (note S2). Unless otherwise stated, these policies have been consistently applied to the years presented.

(a) Basis of preparation

The consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards (IFRS) adopted by the European Union (EU) and therefore comply with Article 4 of the EU IAS Regulation and those parts of the Companies Act 2006 applicable to companies reporting under IFRS.

The consolidated Financial Statements have been prepared on the historical cost basis except for: certain oil and gas inventory, derivative financial instruments, financial instruments designated at fair value through profit or loss on initial recognition or required to be measured at fair value through profit or loss or other comprehensive income on initial recognition, and the assets of the Group's defined benefit pension schemes that have been measured at fair value; the liabilities of the Group's defined benefit pension schemes that have been measured using the projected unit credit valuation method; and the carrying values of recognised assets and liabilities qualifying as hedged items in fair value hedges that have been adjusted from cost by the changes in the fair values attributable to the risks that are being hedged.

The preparation of financial statements in conformity with IFRS, as adopted by the EU, requires the use of certain critical accounting estimates. It requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity and areas where assumptions and estimates are significant to the consolidated Financial Statements are described in notes 2 and 3.

(b) Standards, amendments and interpretations effective or adopted in 2019

From 1 January 2019, the following standards and amendments are effective in the Group's consolidated Financial Statements:

- IFRS 16: 'Leases';
- Amendments to IAS 19: 'Plan amendment, curtailment or settlement';

- Amendments to IFRS 9, IAS 39 and IFRS 7: 'Interest rate benchmark reform' (early adopted);
- Amendments to IFRS 9: 'Prepayment features with negative compensation';
- Amendments to IAS 28: 'Long-term interests in associates and joint ventures';
- Annual improvements to IFRS Standards 2015 – 2017 cycle; and
- IFRIC 23: 'Uncertainty over income tax treatments'.

The impact of adoption of IFRS 16 and the key changes to the accounting policies are disclosed below. Amendments to IAS 19 resulted in the re-measurement of pension scheme assets and liabilities subsequent to the plan amendments during the year, as reflected and detailed further in note 22.

Amendments to IFRS 9, IAS 39 and IFRS 7: 'Interest rate benchmark reform' was issued in September 2019 and endorsed by the EU on 16 January 2020. The amendments modify specific hedge accounting requirements to allow hedge accounting to continue for affected hedges during the period of uncertainty before the affected hedging instruments are amended as a result of the ongoing interest rate benchmark reforms. The amendment impacts only hedging instruments in fair value hedge relationships, as detailed further at note S5.

Other amendments effective during the year did not impact the consolidated Financial Statements.

IFRS 16

The Group adopted IFRS 16: 'Leases' from 1 January 2019. Adoption represents a significant change in accounting for lease arrangements in which the Group is a lessee as the standard mandates the on-balance sheet recognition of all lease liabilities and a corresponding right-of-use asset.

In accordance with the transition provisions of IFRS 16, for contracts entered into before 1 January 2019, the requirements of the standard have been applied only to contracts previously identified as leases in accordance with IAS 17: 'Leases' or IFRIC 4: 'Determining Whether an Arrangement Contains a Lease'. For contracts entered into or modified after that date, the definition of a lease in IFRS 16 has been applied.

On application of IFRS 16 comparative information has not been restated.

The Group utilised the recognition exemptions for both short-term leases applicable to machinery, property and exploration and production assets that have a lease term of 12 months or less and for leases of low value assets, including IT equipment. The lease payments associated with those leases are recognised as an expense on a straight-line basis over the lease term. The Group has also applied wherever applicable the following transition allowances:

- C10(a) application of a single discount rate to a portfolio of leases with reasonably similar characteristics;
- C10(b) reliance on previous assessment of whether leases are onerous in accordance with IAS 37: 'Provisions, Contingent Liabilities and Contingent Assets' immediately before the date of initial application as an alternative to performing an impairment review;
- C10(c) election not to apply the measurement requirements of the standard to leases where the term ends within 12 months of the date of initial application;
- C10(d) exclusion of initial direct costs from the measurement of the right-of-use asset at the date of initial application.

1. Basis of preparation and summary of significant new accounting policies and reporting changes

On transition, the Group measured lease liabilities for leases previously assessed as operating at the present value of the remaining lease payments and elected to measure the associated right-of-use assets at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments. For arrangements previously assessed as finance leases, the asset and liability balances at 31 December 2018 were carried forward as the opening IFRS 16 balances and subsequently measured in accordance with the new standard.

Application resulted in the recognition of total lease liabilities and right-of-use assets on 1 January 2019 of £620 million and £463 million respectively. £402 million of the lease liability is incremental to the IAS 17 position. An £8 million sub-lease asset was also recognised on transition.

Right-of-use assets are presented in Property, plant and equipment on the Group Balance Sheet. Lease liabilities are included in Current and Non-current Borrowings.

The difference between the value of the lease liability and the right-of-use asset predominantly relates to the Spalding tolling contract. The legacy finance lease position reflected a lease liability of £99 million and a fully impaired asset. An incremental £65 million lease liability was recognised post transition on re-measurement of the contract to reflect lease payments as defined under IFRS 16 and the associated asset impaired to its recoverable amount of £31 million. The current year impairment charge is offset by the release of the onerous contract provision previously recognised in respect of this arrangement.

A reconciliation of the operating lease commitment at 31 December 2018 to the opening IFRS 16 lease liability is shown below, along with a summary of the key judgements applied by the Group in determining these opening positions:

	£m
Operating lease commitment at 31 December 2018	343
Finance lease liabilities at 31 December 2018	218
Net extension and termination options reasonably certain to be exercised	(2)
Recognition of lease arrangements within joint operations	24
Re-measurement of Spalding tolling contract	65
	648
Effect of discounting	(28)
IFRS 16 lease liability at 1 January 2019	620

The weighted average incremental borrowing rate used by the Group for IFRS 16 is 2%.

Extension and termination options

The existence and assessment of whether a renewal or termination option is 'reasonably certain' to be exercised is particularly relevant to the Group's significant property portfolio. The Group considers, amongst other factors, the type of property and its purpose, the location of the property, the strategic direction of the business the property is used by and how far into the future the option arises when determining whether exercise is reasonably certain, along with consideration of whether economic incentive to exercise the option exists.

Where exercise of an option is considered to be reasonably certain, the termination period or renewal period is excluded or included in the lease term, respectively, when calculating the lease liability.

Identifying the customer for arrangements involving assets used in joint operations

The Group holds interests in a number of joint operations within its exploration and production business. The Group has applied judgement in identifying the customer where a lease arrangement is to be used by a jointly controlled operation.

If the leased asset is dedicated to a specific joint operation and its usage is dictated by the joint operating agreement, the joint operation is deemed the customer. In such instances:

- When the Group signs a lease agreement on behalf of a joint operation and has primary responsibility for payments to the lessor, the Group recognises 100% of the lease liability and a right-of-use asset on its balance sheet. When the partner is obliged to reimburse the Group for its share of lease payments, a sub-lease receivable is recognised and an equal adjustment to the right-of-use asset is made.
- When the partner has the primary responsibility for payments to the lessor and the Group is obliged to reimburse its share of the lease payments, a lease liability due to the partner and equal right-of-use asset are recognised.

If the leased asset is not dedicated to a specific joint operation or its usage is not dictated by the joint operating agreement of a joint operation to which it is dedicated, the signatory to the lease agreement is deemed the customer. If this is the Group, the lease liability and right-of-use asset are recognised in full. If it is the partner, no lease liability or right-of-use asset is recognised.

The comparative information continues to be reported in accordance with IAS 17 and IFRIC 4.

Significant changes in the Group's accounting policy applicable from 1 January 2019

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of right-of-use assets are determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain re-measurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate.

Lease payments included in the measurement of the lease liability comprise: fixed payments (including in-substance fixed payments), variable lease payments that depend on an index or a rate (initially measured using the index or rate as at the commencement date), amounts expected to be payable under a residual value guarantee, the exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early. Variable lease payments that do not depend on an index or rate are recognised in profit or loss in the period in which the event or condition that triggers those payments occurs.

1. Basis of preparation and summary of significant new accounting policies and reporting changes

The lease liability is subsequently measured at amortised cost using the effective interest method. It is re-measured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or if the Group changes its assessment of whether it will exercise a purchase, lease-term extension or termination option.

When the lease liability is re-measured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Group recognises the lease payments associated with short-term leases (leases expiring within twelve months from commencement) and leases of low value assets (underlying asset value less than £5,000) on a straight-line basis over the lease term.

(c) Standards and amendments that are issued but not yet applied by the Group

The Group has not applied the following standards and amendments in the consolidated Group Financial Statements as they are not yet effective, and have not yet been endorsed by the EU:

- IFRS 17: 'Insurance contracts', effective from 1 January 2021; and
- Amendments to IFRS 3: 'Business Combinations', effective 1 January 2020.

IFRS 17: 'Insurance contracts', issued in May 2017, will not be effective before 1 January 2021. The Group currently has fixed-fee service contracts that it accounts for as insurance contracts under IFRS 4: 'Insurance contracts'. Under IFRS 17, subject to certain conditions, there is an accounting policy choice to account for these contracts under IFRS 17 or IFRS 15, which is being evaluated as part of the implementation project. Work is ongoing to determine the full impact of application.

Management does not expect the future application of the IFRS 3 amendments, or other issued but not effective amendments to have a material impact on the consolidated Financial Statements.

(d) Restatements

In March 2019, the International Financial Reporting Interpretations Committee (IFRIC) issued an agenda decision on the Physical Settlement of Contracts to Buy or Sell a Non-Financial Item. The committee concluded that, for physical commodity trades within the scope of IFRS 9: 'Financial instruments', entities should not transfer previously recognised, unrealised marked-to-market movements to different income statement line items upon realisation. As the Group previously recognised fair value movements on the re-measurement of certain energy contracts net within cost of sales up to the point of realisation (when the underlying contract would be recognised, either in revenue or cost of sales), presentation of the Group's revenue and cost of sales in the results for the year column has been amended to comply with the requirements of the IFRIC agenda decision. Comparative results have been represented with no impact on gross profit.

The Group will continue to present the impact of realised positions (and any unrealised fair value movements on proprietary trades) in the scope of IFRS 9 in the business performance column as either revenue or cost of sales, as this better reflects the underlying economic performance of the Group's trading, however the effect of these positions will then be removed from revenue or cost of sales through a separate column (the exceptional items and certain

re-measurements column) and reflected instead in a new 'Re-measurement and settlement of energy contracts' line item.

In addition to the above, the new line item in the exceptional items and certain re-measurements column of the Income Statement includes fair value movements on those unrealised commodity derivative trades that are prohibited from being treated as 'own use' (primarily due to net settlement terms) but are economically related to our upstream assets, capacity/off-take contracts or downstream demand, in line with the policy detailed at note 2.

The effect of this re-presentation for 2018 is a reduction in revenue and cost of sales of £4.1 billion and £6.8 billion respectively. There is no impact on gross profit.

The exercise to determine the above restatement required the Group to perform a detailed review of revenue and cost of sales across its wider business. During this review, the Group specifically considered the presentation of certain European commodity trades in the business performance column. These trades (both purchases and sales) have historically been presented gross as revenue or cost of sales, however, as the primary purpose of the book is speculative, and to ensure consistency with other similar activities undertaken by the Group, net presentation is deemed more appropriate and accordingly, trades are now presented net within revenue in the business performance column. The prior year comparative has been restated and whilst there is no impact on gross profit, business performance revenue and business performance cost of sales have been reduced by £2.3 billion.

The restatement arising from the IFRIC determination has been applied to the business performance revenue and business performance cost of sales results as adjusted for the presentation of European commodity trades noted above.

The Group has redefined its operating segments during the year to reflect the way in which the business is now organised. Operating segments are now defined as:

- Centrica Consumer;
- Centrica Business; and
- Upstream.

The revised operating segments incorporate similar products and services, as well as the major factors that influence the performance of these products and services, such as regulatory environments within Centrica Consumer, and access to commodity markets and trading counterparties within Centrica Business, across different geographical locations in which the Group operates. Further information on the operating segments of the Group is shown at note 4.

2. Centrica specific accounting measures

This section sets out the Group's specific accounting measures applied in the preparation of the consolidated Financial Statements. These measures enable the users of the accounts to understand the Group's underlying and statutory business performance separately.

(a) Use of adjusted performance measures

The Directors believe that reporting adjusted measures (margin, profit, earnings per share and operating cash flow) provides additional useful information on business performance and underlying trends. These measures are used for internal performance purposes, are not defined terms under IFRS and may not be comparable with similarly titled measures reported by other companies.

Management uses adjusted gross margin and adjusted operating profit to evaluate segment performance. They are defined as gross margin/operating profit before:

- exceptional items; and
- certain re-measurements.

Exceptional items and certain re-measurements are excluded because these items are considered by the Directors to distort the Group's underlying business performance. See section (b) of this note for further details.

Adjusted earnings is defined as earnings before:

- exceptional items net of taxation; and
- certain re-measurements net of taxation.

A reconciliation of adjusted earnings and adjusted earnings per share is provided in note 10.

Adjusted operating cash flow is used by management to assess the cash generating abilities of each segment. Adjusted operating cash flow is defined as net cash flow from operating activities before:

- payments relating to exceptional items;
- deficit reduction payments made to the UK defined benefit pension schemes; and
- movements in variation margin and cash collateral that are included in net debt;

but including:

- dividends received from joint ventures and associates.

Deficit reduction payments and movements in variation margin and cash collateral are excluded because the Directors do not consider these to represent the operating cash flows generated by underlying business performance, as they are predominantly triggered by wider market factors and, in the case of variation margin and cash collateral, these represent timing differences. Dividends received from joint ventures and associates are considered by the Directors to represent operating cash flows generated by the Group's operations that are structured in this manner.

(b) Exceptional items and certain re-measurements

The Group reflects its underlying financial results in the business performance column of the Group Income Statement. To be able to provide users with this clear and consistent presentation, the effects of 'certain re-measurements' of financial instruments, and 'exceptional items', are reported in a different column in the Group Income Statement.

The Group is an integrated energy business. This means that it utilises its knowledge and experience across the gas and power (and related commodity) value chains to make profits across the core markets in which it operates. As part of this strategy, the Group enters into a

number of forward energy trades to protect and optimise the value of its underlying production, generation, storage and transportation assets and contracts (and similar capacity or off-take arrangements), as well as to meet the future needs of its customers (downstream demand). These trades are designed to reduce the risk of holding such assets, contracts or downstream demand and are subject to strict risk limits and controls.

Primarily because some of these trades include terms that permit net settlement, they are prohibited from being designated as 'own use' and so IFRS 9 requires them to be individually fair valued.

Fair value movements on these commodity derivative trades do not reflect the underlying performance of the business because they are economically related to our upstream assets, capacity/off-take contracts or downstream demand, which are typically not fair valued. Therefore, these certain re-measurements are reported separately and are subsequently reflected in business performance when the underlying transaction or asset impacts profit or loss.

The effects of these certain re-measurements are presented within either revenue or cost of sales when recognised in business performance depending on the nature of the contract. They are managed separately from proprietary energy trading activities where trades are entered into speculatively for the purpose of making profits in their own right. These proprietary trades are included in revenue in the business performance column of the Group Income Statement.

The Group's result for the year presents both realised and unrealised fair value movements on all derivative energy contracts within the 'Re-measurement and settlement of energy contracts' line item.

Exceptional items are those items that, in the judgement of the Directors, need to be disclosed separately by virtue of their nature, size or incidence. Again, to ensure the business performance column reflects the underlying results of the Group, these exceptional items are also reported in the separate column in the Group Income Statement. Items that may be considered exceptional in nature include disposals of businesses or significant assets, business restructurings (including property rationalisation costs), significant onerous contract charges/releases, debt repurchase costs, certain pension past service credits/costs, asset impairments/write-backs, the tax effects of these items and the effect of changes in UK upstream tax rates.

The Group distinguishes between business performance asset impairments/write-backs and exceptional impairments/write-backs on the basis of the underlying driver of the impairment, as well as the magnitude of the impairment. Drivers that are deemed to be outside of the control of the Group (e.g. commodity price changes) give rise to exceptional impairments. Additionally, impairment charges that are of a one-off nature (e.g. reserve downgrades or one-time change in intended use of an asset) and significant enough value to distort the underlying results of the business are considered to be exceptional. Other impairments that would be expected in the normal course of business, such as unsuccessful exploration activity (dry holes), are reflected in business performance.

3. Critical accounting judgements and key sources of estimation uncertainty

This section sets out the key areas of judgement and estimation that have the most significant effect on the amounts recognised in the consolidated Financial Statements.

(a) Critical judgements in applying the Group's accounting policies

In addition to the judgements described above, management has made the following key judgements in applying the Group's accounting policies that have the most significant effect on the consolidated Group Financial Statements.

Spirit Energy consolidation

During 2017, the Group acquired Bayerngas Norge's exploration and production business and combined this with the Group's existing exploration and production business to form the Spirit Energy business (SE). The Group, through its board majority, can control decisions that represent Board Reserved Matters and the Directors consider that these rights provide control over the relevant activities that most significantly influence the variable returns of the SE business. The Group has concluded that it controls SE and consequently SE is fully consolidated with a non-controlling interest of 31%.

Metering contracts

In 2015, as part of the smart meter roll-out, the Group renewed meter rental arrangements with third parties, with a further extension of one contract in 2018. The Group assessed that these were not leases under IAS 17 and IFRIC 4 because at inception of the contract there were no specified assets, the Group did not have the right to physically or operationally control the smart meters and other parties took more than an insignificant amount of the output from the assets. This assessment was grandfathered on adoption of IFRS 16.

One of the meter rental arrangements was renegotiated during 2019 and a reassessment of the contract was performed in accordance with IFRS 16. On the basis that the asset has a predetermined use and the Group neither has the right to operate the asset, nor was involved in its design, the conclusion that these arrangements are not leases continues to be appropriate.

LNG contracts

The Group is active in the liquefied natural gas (LNG) market, both procuring long-term LNG supply arrangements, and transacting in shorter-term LNG cargoes. Contracts to buy and sell LNG are not considered to meet the definition of a derivative as there is currently no active market for LNG and contracts are not capable of being net settled. As a result, they are accounted for on an accruals basis.

(b) Key sources of estimation uncertainty

Estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, including current and expected economic conditions, and, in some cases, actuarial techniques. Although these estimates and associated assumptions are based on management's best knowledge of current events and circumstances, actual results may differ.

Revenue recognition – unread gas and electricity meters

Revenue for energy supply activities includes an assessment of energy supplied to customers between the date of the last meter reading and the year end (known as unread revenue). Unread gas and electricity comprises both billed and unbilled revenue. It is estimated through the billing systems, using historical consumption patterns, on a customer-

by-customer basis, taking into account weather patterns, load forecasts and the differences between actual meter readings being returned and system estimates. Actual meter readings continue to be compared to system estimates between the balance sheet date and the finalisation of the accounts.

An assessment is also made of any factors that are likely to materially affect the ultimate economic benefits that will flow to the Group, including bill cancellation and re-bill rates. Estimated revenue is restricted to the amount the Group expects to be entitled to in exchange for energy supplied. The judgements applied, and the assumptions underpinning these judgements, are considered to be appropriate. However, a change in these assumptions would have an impact on the amount of revenue recognised. Unbilled revenue recognised on the Group Balance Sheet within Trade and other receivables at 31 December 2019 was £1,342 million (2018: £1,542 million).

Industry reconciliation process – cost of sales

Industry reconciliation procedures are required as differences arise between the estimated quantity of gas and electricity the Group deems to have supplied and billed customers, and the estimated quantity industry system operators deem the individual suppliers, including the Group, to have supplied to customers. The difference in deemed supply is referred to as imbalance. The reconciliation procedures can result in either a higher or a lower value of industry deemed supply than has been estimated as being supplied to customers by the Group, but in practice tends to result in a higher value of industry deemed supply. The Group reviews the difference to ascertain whether there is evidence that its estimate of amounts supplied to customers is inaccurate or whether the difference arises from other causes. The Group's share of the resulting imbalance is included within commodity costs charged to cost of sales. Management estimates the level of recovery of imbalance that will be achieved either through subsequent customer billing or through developing industry settlement procedures. The adjustments for imbalance at 31 December 2019 are not significant. Changes resulting from these management estimates can be material with adjustments of up to £30 million having been made in the last few years, although it could possibly be higher than these amounts in the future.

Decommissioning costs

The estimated cost of decommissioning at the end of the producing lives of gas and oil fields is reviewed periodically and is based on reserves, price levels and technology at the balance sheet date. Provision is made for the estimated cost of decommissioning at the balance sheet date. The payment dates of total expected future decommissioning costs are uncertain and dependent on the lives of the facilities, but are currently anticipated to be incurred until the 2040s.

The level of provision held is also sensitive to the discount rate used to discount the estimated decommissioning costs. The real discount rate used to discount the decommissioning liabilities at 31 December 2019 is unchanged at 1.2%. A 1% change in this discount rate would change the decommissioning liability by approximately £160 million.

Gas and liquids reserves

The volume of proven and probable (2P) gas and liquids reserves is an estimate that affects the unit of production method of depreciating producing gas and liquids property, plant and equipment (PP&E) as well as being a significant estimate affecting decommissioning and impairment calculations. The factors impacting gas and liquids estimates, the process for estimating reserve quantities and reserve recognition is described on page 208.

3. Critical accounting judgements and key sources of estimation uncertainty

The impact of a change in estimated 2P reserves is dealt with prospectively by depreciating the remaining book value of producing assets over the expected future production. If 2P reserves estimates are revised downwards, earnings could be affected by higher depreciation expense or an immediate write-down (impairment) of the asset's book value.

Determination of fair values – energy derivatives

Fair values of energy derivatives are estimated by reference in part to published price quotations in active markets and in part by using valuation techniques. More detail on the assumptions used in determining fair valuations of energy derivatives is provided in note S6 and of the sensitivities to these assumptions in note S3.

Impairment of long-lived assets

The Group makes judgements in considering whether the carrying amounts of its long-lived assets (principally Upstream gas and oil assets, Nuclear investment (20% economic interest accounted for as an investment in associate) and goodwill) or cash generating units (CGUs) are recoverable and estimates their recoverable amounts.

Upstream gas and oil assets

The recoverable amount of the Group's gas and oil assets is determined by discounting the post-tax cash flows expected to be generated by the assets over their lives taking into account those assumptions that market participants would consider when assessing fair value. The cash flows are derived from projected production profiles of each field, based predominantly on expected 2P reserves and take into account forward prices for gas and liquids over the relevant period. Where forward market prices are not available, prices are determined based on the median price of a collection of third-party comparator curves.

Further details of the assumptions used in determining the recoverable amounts, the impairments booked during the year and sensitivity to the assumptions are provided in note 7. Note that Spirit Energy was not considered to be an asset held for sale as at the reporting date as its disposal was not deemed to be highly probable within one year.

Nuclear investment

The recoverable amount of the Nuclear investment is based on the value of the existing UK nuclear fleet operated by EDF. The existing fleet value is calculated by discounting pre-tax cash flows derived from the stations based on forecast power generation and power prices, whilst taking account of outages and the possibility of life extensions. Further details of the methodology, assumptions, impairment booked during the year and related sensitivities are provided in note 7. Note that the Nuclear investment was not considered to be an asset held for sale as at the reporting date as its disposal was not deemed to be highly probable within one year.

Goodwill

Goodwill does not generate independent cash flows and accordingly is allocated at inception to specific CGUs or groups of CGUs for impairment testing purposes. The recoverable amounts of these CGUs are derived from estimates of future cash flows and hence the goodwill impairment tests are also subject to these key estimates. The results of these tests may then be verified by reference to external market valuation data.

Further details on the goodwill balances, assumptions used in determining the recoverable amounts and impairment booked during the year are provided in notes 7, 15(b) and S2. Sensitivity to the assumptions is also found in note 7 for goodwill allocated to impaired CGUs in the year.

Credit provisions for trade and other receivables

The methodology for determining provisions for credit losses on trade and other receivables and the level of such provision, along with associated sensitivities, are set out in note 17. Although the provisions recognised are considered appropriate, the use of different assumptions or changes in economic conditions could lead to movements in the provisions and therefore impact the Group Income Statement.

Pensions and other post-employment benefits

The cost of providing benefits under defined benefit schemes is determined separately for each of the Group's schemes under the projected unit credit actuarial valuation method. Actuarial gains and losses are recognised in full in the period in which they occur. The key assumptions used for the actuarial valuation are based on the Group's best estimate of the variables that will determine the ultimate cost of providing post-employment benefits. The Group is permitted to recognise a pension scheme asset because it has an unconditional right to a refund on any winding up of the schemes or if gradual settlement of liabilities over time is assumed. Further details, including sensitivities to these assumptions, are provided in note 22.

Brexit

The Group has considered the potential impact of a no-deal Brexit as noted in the Strategic Report on page 38. Economists have suggested that failure to agree a satisfactory trade deal could lead to lower base interest rates and higher inflation, following a likely weakening of sterling against other currencies. This would have an impact on the Group's pension scheme discount rate assumptions (if high quality corporate bond yields follow base rates) and could change forward energy prices (particularly in sterling terms). The sensitivity of the Group's pension schemes to a change in key assumptions is disclosed in note 22.

The sensitivity of a change in forward energy prices and the impact this would have on impairment of the Group's assets is disclosed in note 7. Macroeconomic impacts on existing trade receivable recoverability are expected to be immaterial but could have a greater impact on future trade receivable recoverability.

4. Segmental analysis

The Group's reporting segments are those used internally by management to run the business and make decisions. The Group's segments are based on products and services as well as the major factors that influence the performance of these products and services across the geographical locations in which the Group operates.

(a) Segmental structure

During the year the Group's reportable operating segments have been amended due to a change in the way management review and make decisions about the business. Previously reported segments have now been amalgamated into the higher-level Centrica Consumer, Centrica Business or Upstream areas (as shown below). The exception to this was Central Power Generation, where the Nuclear investment was reallocated to Upstream, whilst the Spalding power station tolling contract remained within Centrica Business.

The types of products and services from which each reportable segment derived its income during the year are detailed below. Income sources are reflected in Group revenue unless otherwise stated:

Segment	Description
Centrica Consumer	(i) The supply of gas and electricity to residential customers in the UK, North America and to residential and commercial and industrial customers in the Republic of Ireland; (ii) the installation, repair and maintenance of domestic central heating and cooling systems and related appliances in the UK, North America and the Republic of Ireland, and the provision of fixed-fee maintenance/breakdown service and insurance contracts in the UK and North America; (iii) power generation in the Republic of Ireland; and (iv) the supply of new technologies and energy efficiency solutions in all geographies in which the Group operates.
Centrica Business	(i) The supply of gas and electricity and provision of energy-related services to business customers and trading counterparties in the UK and North America; (ii) the supply of energy efficiency solutions, flexible generation and new technologies to commercial and industrial customers in all geographies in which the Group operates. Flexible merchant generation is also provided to the UK system operator; (iii) the generation of power from the Spalding combined cycle gas turbine tolling contract and other thermal assets in the UK; and (iv) the procurement, trading and optimisation of energy in the UK and North America. This income stream is included in re-measurement and settlement of energy contracts.
Upstream	(i) The production and processing of gas and oil and the development of new fields, principally within Spirit Energy, to maintain reserves in the UK and Europe; and (ii) the generation of power from nuclear assets in the UK.

(b) Revenue

Gross segment revenue includes revenue generated from the sale of products and services to other reportable segments of the Group. Group revenue reflects only the sale of products and services to third parties. Sales between reportable segments are conducted on an arm's length basis.

Year ended 31 December	2019			2018 (restated) (i)		
	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m
Centrica Consumer	11,956	–	11,956	11,870	–	11,870
Centrica Business	13,759	(217)	13,542	14,492	(211)	14,281
Upstream	2,290	(963)	1,327	2,648	(1,418)	1,230
Group revenue included in business performance	28,005	(1,180)	26,825	29,010	(1,629)	27,381
Less: revenue arising on contracts in scope of IFRS 9 included in business performance			(4,151)			(4,077)
Group Revenue			22,674			23,304

(i) Segmental revenues have been restated to reflect the new operating structure of the Group. Group revenue has been restated to exclude revenue from contracts in the scope of IFRS 9. Group revenue and group revenue included in business performance have also been restated to include the net result of certain commodity purchases and sales trades that are deemed to be speculative in nature. See note 1 for further details.

4. Segmental analysis

The table below shows the Group revenue arising from contracts with customers, and therefore in the scope of IFRS 15, and revenue arising from contracts in the scope of other standards. The key economic factors impacting the nature, timing and uncertainty of revenue and cash flows are considered to be driven by the type and broad geographical location of the customer. The analysis of IFRS 15 revenue below reflects these factors.

Year ended 31 December	2019				
	Revenue from contracts with customers in scope of IFRS 15 £m	Revenue from fixed-fee service and insurance contracts in scope of IFRS 4, and leasing contracts in scope of IFRS 16 £m	Group Revenue £m	Revenue in business performance arising from contracts in scope of IFRS 9 £m	Group Revenue included in business performance £m
Energy supply – UK and Republic of Ireland	7,398				
Energy supply – North America	2,307				
Energy services	1,023				
Centrica Consumer	10,728	1,110	11,838	118	11,956
Energy supply – UK and Republic of Ireland	1,574				
Energy supply – North America	6,927				
Energy sales to trading and energy procurement counterparties	1,237				
Other	300				
Centrica Business	10,038	19	10,057	3,485	13,542
Oil and gas production	779				
Upstream	779	–	779	548	1,327
	21,545	1,129	22,674	4,151	26,825

Year ended 31 December	2018 (restated) (i)				
	Revenue from contracts with customers in scope of IFRS 15 £m	Revenue from fixed-fee service and insurance contracts in scope of IFRS 4, and leasing contracts in scope of IFRS 16 £m	Group Revenue £m	Revenue in business performance arising from contracts in scope of IFRS 9 £m	Group Revenue included in business performance £m
Energy supply – UK and Republic of Ireland	7,416				
Energy supply – North America	2,079				
Energy services	1,011				
Centrica Consumer	10,506	1,134	11,640	230	11,870
Energy supply – UK and Republic of Ireland	1,421				
Energy supply – North America	7,449				
Energy sales to trading and energy procurement counterparties	1,565				
Other	236				
Centrica Business	10,671	9	10,680	3,601	14,281
Oil and gas production	984				
Upstream	984	–	984	246	1,230
	22,161	1,143	23,304	4,077	27,381

(i) Segmental revenues have been restated to reflect the new operating structure of the Group. Group revenue has been restated to exclude revenue from contracts in the scope of IFRS 9. Group revenue and group revenue included in business performance have also been restated to include the net result of certain commodity purchases and sales trades that are deemed to be speculative in nature. See note 1 for further details.

The Group applies the practical expedient in paragraph 121 of IFRS 15 and therefore does not disclose information related to the transaction price allocated to remaining performance obligations on the basis that the Group recognises revenue from the satisfaction of the performance obligations within energy supply contracts in accordance with Paragraph B16.

4. Segmental analysis

Geographical analysis of revenue and non-current assets

The Group monitors and manages performance by reference to its operating segments and not solely on a geographical basis. However, provided below is an analysis of revenue and certain non-current assets by geography.

Year ended 31 December	Group revenue (based on location of customer) (restated) (i)		Non-current assets (based on location of assets) (ii)	
	2019 £m	2018 £m	2019 £m	2018 £m
UK	10,437	10,494	4,860	5,814
Republic of Ireland	777	679	135	124
Norway	322	603	1,474	1,768
United States of America	8,613	8,918	1,524	1,774
Canada	1,272	1,170	379	360
Rest of the world	1,253	1,440	214	478
	22,674	23,304	8,586	10,318

(i) Prior year revenue has been restated to exclude revenue arising from contracts in the scope of IFRS 9 and to include the net result of certain commodity purchases and sales trades that are deemed to be speculative in nature. See note 1 for further details.

(ii) Non-current assets comprise goodwill, other intangible assets, PP&E, interests in joint ventures and associates and non-financial assets within trade and other receivables, and contract-related assets.

(c) Adjusted gross margin and adjusted operating profit

The measure of profit used by the Group is adjusted operating profit. Adjusted operating profit is operating profit before exceptional items and certain re-measurements. This includes business performance results of equity-accounted interests. This note also details adjusted gross margin. Both measures are reconciled to their statutory equivalents.

Year ended 31 December	Adjusted Gross Margin		Adjusted Operating Profit (restated) (i)	
	2019 £m	2018 £m	2019 £m	2018 £m
Centrica Consumer	2,315	2,606	505	750
Centrica Business	1,030	882	217	75
Upstream	507	765	179	567
Adjusted gross margin/adjusted operating profit	3,852	4,253	901	1,392
Certain re-measurements	(646)	(200)	(646)	(200)
Share of re-measurement of certain associates' energy contracts (net of taxation)	-	-	(1)	(20)
Gross profit	3,206	4,053		
Exceptional items in operating profit			(1,103)	(183)
Share of associates' exceptional operating cost (net of taxation)			-	(2)
Total exceptional items and certain re-measurements included in operating profit			(1,750)	(405)
Operating (loss)/profit after exceptional items and certain re-measurements			(849)	987

(i) Segmental results have been restated to reflect the new operating structure of the Group. See note 1 for further details.

4. Segmental analysis

(d) Included within adjusted operating profit

Presented below are certain items included within adjusted operating profit, including a summary of impairments of property, plant and equipment and write-downs relating to exploration and evaluation assets.

Year ended 31 December	Depreciation and impairments of property, plant and equipment		Amortisation, write-downs and impairments of intangibles	
	2019 £m	2018 (restated) (i) £m	2019 £m	2018 (restated) (i) £m
Centrica Consumer	(70)	(64)	(148)	(168)
Centrica Business	(69)	(21)	(76)	(73)
Upstream	(690)	(639)	(63)	(59)
Other⁽ⁱⁱ⁾	(51)	(12)	(39)	(22)
	(880)	(736)	(326)	(322)

(i) Segmental results been restated to reflect the new operating structure of the Group. See note 1 for further details.

(ii) The Other segment includes corporate functions, subsequently recharged.

(e) Capital expenditure

Capital expenditure represents additions, other than assets acquired as part of business combinations, to property, plant and equipment and intangible assets. Capital expenditure has been reconciled to the related cash outflow.

Year ended 31 December	Capital expenditure on property, plant and equipment (note 13)		Capital expenditure on intangible assets other than goodwill (note 15)	
	2019 £m	2018 (restated) (i) £m	2019 £m	2018 (restated) (i) £m
Centrica Consumer	35	45	512	469
Centrica Business	53	114	593	594
Upstream	328	367	218	118
Other	23	44	26	84
Capital expenditure	439	570	1,349	1,265
Capitalised borrowing costs	(11)	(14)	(2)	(4)
Inception of new leases and movements in payables and prepayments related to capital expenditure	(41)	18	(20)	(55)
Purchases of emissions allowances and renewable obligation certificates	-	-	(933)	(854)
Net cash outflow	387	574	394	352

(i) Segmental results have been restated to reflect the new operating structure of the Group. See note 1 for further details.

(f) Adjusted operating cash flow

Adjusted operating cash flow is used by management to assess the cash generating abilities of each segment. Adjusted operating cash flow is net cash flow from operating activities before payments relating to exceptional items, deficit payments to the UK defined benefit pension schemes, movements in variation margin and cash collateral that are included in net debt, but including dividends from joint ventures and associates. This measure is reconciled to the net cash flow from operating activities.

Year ended 31 December	2019 £m	2018 (restated) (i) £m
Centrica Consumer	913	1,019
Centrica Business	282	214
Upstream	635	1,012
Adjusted operating cash flow	1,830	2,245
Dividends received from joint ventures and associates	(1)	(22)
UK pension deficit payments (note 22)	(235)	(98)
Payments relating to exceptional charges	(298)	(248)
Movements in margin and cash collateral included in net debt (note 24)	(46)	57
Net cash flow from operating activities	1,250	1,934

(i) Segmental results have been restated to reflect the new operating structure of the Group. See note 1 for further details.

5. Costs of operations

This section details the types of costs the Group incurs and the number of employees in each of our operations.

(a) Analysis of costs by nature

Year ended 31 December	2019			2018		
	Cost of sales and settlement of certain energy contracts £m	Operating costs £m	Total costs £m	Cost of sales and settlement of certain energy contracts (restated) (i) £m	Operating costs (restated) (ii) £m	Total costs £m
Transportation, distribution, capacity market and metering costs	(5,228)	–	(5,228)	(4,671)	–	(4,671)
Commodity costs	(14,409)	–	(14,409)	(15,000)	–	(15,000)
Depreciation, amortisation, impairments and write-downs	(674)	(532)	(1,206)	(661)	(397)	(1,058)
Employee costs (i)	(597)	(1,291)	(1,888)	(689)	(1,265)	(1,954)
Other direct costs (ii)	(2,065)	(919)	(2,984)	(2,107)	(1,059)	(3,166)
Costs included within business performance before credit losses on financial assets	(22,973)	(2,742)	(25,715)	(23,128)	(2,721)	(25,849)
Credit losses on financial assets (net of recovered amounts) (note 17)	–	(197)	(197)	–	(143)	(143)
Total costs included within business performance	(22,973)	(2,939)	(25,912)	(23,128)	(2,864)	(25,992)
Adjustment for gross cost of settled energy contracts in the scope of IFRS 9 (i)	7,178	–	7,178	6,808	–	6,808
Exceptional items and re-measurement and settlement of energy contracts (note 7)	(3,673)	(1,103)	(4,776)	(2,931)	(183)	(3,114)
Total costs within Group operating profit	(19,468)	(4,042)	(23,510)	(19,251)	(3,047)	(22,298)

(i) Prior year results have been restated to exclude costs related to certain commodity trades that are deemed to be proprietary in nature. These costs are now presented net in revenue within business performance. Comparatives have also been restated to present net costs arising from the settlement of all energy contracts in the scope of IFRS 9 in the Group Income Statement and in the above analysis.

(ii) Employee costs and other direct costs have been restated to reflect amounts charged to exceptional items and amounts capitalised.

(b) Employee costs

Year ended 31 December	2019 £m	2018 (restated) (i) £m
Wages and salaries	(1,630)	(1,618)
Social security costs	(165)	(151)
Pension and other post-employment benefits costs	(191)	(207)
Share scheme costs (note S4)	(41)	(43)
	(2,027)	(2,019)
Capitalised employee costs	40	44
Employee costs included in exceptional items (ii)	99	21
Employee costs recognised in business performance in the Group Income Statement	(1,888)	(1,954)

(i) Employee costs have been restated to reflect amounts charged to exceptional items. As part of this exercise, the Group has also restated capitalised employee costs.

(ii) Employee costs included in exceptional items includes £65 million for one-off payments to facilitate pension scheme changes. See note 7.

(c) Average number of employees during the year

Year ended 31 December	2019 Number	2018 (restated) (i) Number
Consumer	21,127	23,521
Business	4,116	4,239
Upstream	909	913
Group Functions	2,995	3,107
	29,147	31,780

(i) Comparatives have been restated to reflect the new operating structure of the Group. See note 1 for further details.

6. Share of results of joint ventures and associates

Share of results of joint ventures and associates represents the results of businesses where we exercise joint control or significant influence and generally have an equity holding of up to 50%.

Share of results of joint ventures and associates

The Group's share of results of joint ventures and associates for the year ended 31 December 2019 principally arises from its interest in Nuclear - Lake Acquisitions Limited, an associate, reported in the Upstream segment.

Year ended 31 December	2019			2018		
	Share of business performance £m	Share of exceptional items and certain re-measurements £m	Share of results for the year £m	Share of business performance £m	Share of exceptional items and certain re-measurements £m	Share of results for the year £m
Income	505	–	505	489	–	489
Expenses before exceptional items and certain re-measurements	(508)	–	(508)	(486)	–	(486)
Exceptional items and re-measurement of certain contracts	–	(1)	(1)	–	(23)	(23)
Operating (loss)/profit	(3)	(1)	(4)	3	(23)	(20)
Financing costs	(10)	–	(10)	(3)	–	(3)
Taxation on profit/(loss)	1	–	1	3	1	4
Share of post-taxation results of joint ventures and associates	(12)	(1)	(13)	3	(22)	(19)

Further information on the Group's investments in joint ventures and associates is provided in notes 14 and S10.

7. Exceptional items and certain re-measurements

Exceptional items are those items that, in the judgement of the Directors, need to be disclosed separately by virtue of their nature, size or incidence. Items which may be considered exceptional in nature include disposals of businesses or significant assets, business restructurings, significant onerous contract charges and releases, pension change costs or credits, significant debt repurchase costs and asset write-downs/impairments and write-backs.

(a) Exceptional items

Year ended 31 December	2019 £m	2018 £m
(Impairment)/write-back of retained exploration and production assets ⁽ⁱ⁾	(476)	90
Impairment of power assets and provision for onerous power contracts ⁽ⁱⁱ⁾	(381)	(46)
Impairment of Centrica Home Solutions (formerly Connected Home) ⁽ⁱⁱⁱ⁾	(77)	–
Restructuring costs ^(iv)	(356)	(170)
Net pension change credit/(costs) ^(v)	152	(43)
Net gain/(loss) on significant disposals (including impairment of assets sold or held for sale) ^(vi)	35	(16)
Exceptional items included within Group operating profit	(1,103)	(185)
Debt repurchase costs included within financing costs	–	(139)
Exceptional items included within Group profit before taxation	(1,103)	(324)
Net taxation on exceptional items (note 9)	116	89
Net exceptional items after taxation	(987)	(235)

- (i) In the Upstream segment, impairments of exploration and production assets have been booked relating to the value of certain UK, Norwegian and Danish gas and oil fields. Predominantly due to the impact of a reduction in near-term liquid prices and long-term price forecasts, together with the conclusion that certain field reserve levels were not sufficient for development, there has been a write-off of £508 million (post-tax £406 million). Also included is the reduction of decommissioning provisions (pre-tax £32 million, post-tax £20 million) related to assets previously impaired through exceptional items. Separately, in the taxation line, the net write-off of a deferred tax asset associated with exploration and production investment allowance, decommissioning carry back and PRT has also been recorded (post-tax £35 million) related to these exceptional items.
- (ii) In the Upstream segment, an impairment of the nuclear investment has been booked as a result of a reduction in price forecasts, and availability issues at Hunterston and Dungeness. The pre and post-tax impact was £372 million. Similarly, in the Centrica Business segment, an impairment of a battery storage asset has also been recorded as a result of forecast price reductions. This gave rise to a charge of £9 million (post-tax £7 million).
- (iii) In the Consumer segment, following the strategic decision to refocus Centrica Home Solutions activity to the UK and Ireland and an updated profitability forecast, the Group has reflected a charge of £77 million, including inventory write-downs of £22 million, asset impairments (including goodwill) of £48 million and onerous contract provisions and other costs of £7 million. The post-tax impact was £69 million.
- (iv) The continuation of phase 2 of the Group's cost efficiency programme has seen the Group recognise restructuring costs principally related to redundancy (excluding pension strains), change resource, consultancy, property rationalisation and other transformational activity, including member compensation payments from renegotiating the UK defined benefit pension arrangements to update contribution rates, salary caps and benefits, in the first half of 2019. The post-tax impact was £288 million.
- (v) A pension past service credit of £260 million (post-tax £216 million) has been recognised predominantly related to a rule amendment to the UK defined benefit pension scheme arrangements to offer members an option to level up their ongoing pension if they retire before the statutory retirement age. This has been offset by pension strain costs associated with redundancy of £108 million (post-tax £89 million). In 2018, £2 million of the pension past service cost related to the Nuclear associate schemes.
- (vi) The disposals of Clockwork, and Valemon and Sindre, together with the King's Lynn power station transfer to held for sale, resulted in a net gain of £5 million (post-tax £13 million). Trinidad and Tobago exploration and production assets formerly owned by the Group have passed the final investment decision hurdle under their new owner. This has resulted in the receipt of previously unrecognised contingent consideration. The pre and post-tax impact was £30 million. See note 12 for further details.

7. Exceptional items and certain re-measurements

(b) Certain re-measurements

Certain re-measurements are the fair value movements on energy contracts entered into to meet the future needs of our customers or to sell the energy produced from our upstream assets. These contracts are economically related to our upstream assets, capacity/off-take contracts or downstream demand, which are typically not fair valued, and are therefore separately identified in the current period and reflected in business performance in future periods when the underlying transaction or asset impacts the Group Income Statement.

Year ended 31 December	2019 £m	2018 £m
Certain re-measurements recognised in relation to energy contracts:		
Net gains/(losses) arising on delivery of contracts	63	(127)
Net losses arising on market price movements and new contracts	(709)	(73)
Net re-measurements included within gross profit	(646)	(200)
Net losses arising on re-measurement of certain associates' contracts (net of taxation)	(1)	(20)
Net re-measurements included within Group operating profit	(647)	(220)
Taxation on certain re-measurements (note 9)	103	39
Net re-measurements after taxation	(544)	(181)

Year ended 31 December	2019 £m	2018 £m
Total re-measurement and settlement of derivative energy contracts	(3,673)	(2,931)
Less: IFRS 9 business performance revenue	(4,151)	(4,077)
Less: IFRS 9 business performance cost of sales	7,178	6,808
Unrealised certain re-measurements recognised in relation to energy contracts included in gross profit	(646)	(200)

(c) Impairment accounting policy, process and sensitivities

The information provided below relates to the assets and CGUs (or groups of CGUs) that have been subject to impairment during the year. Details of the Group's wider impairment assessment and measurement policy are provided in note S2.

Exceptional impairments of assets measured on a FVLCD basis

Segment	Asset/CGU (or group of CGUs)	Basis for impairment	Recoverable amount £m	FV hierarchy	Impairment £m
Upstream	UK Shale Assets and Danish fields	Further field development deemed uneconomic	–	N/A	310
	UK and Norwegian fields	Significant deterioration in forecast NBP	157	L3	198
	Valemon, Sindre ⁽ⁱ⁾	Reclassification to disposal group held for sale	33	N/A	49
Centrica Business	King's Lynn power station	Reclassification to disposal group held for sale	101	L2	14
Other	Property	Change in usage of assets (including right-of-use assets)	31	L2/L3	34
Centrica Consumer	Software intangible asset	Sale of business (Clockwork) to which intangible asset relates	5	L3	59

(i) The recoverable amounts are stated prior to disposal.

Fair value less costs of disposal (FVLCD) is determined by discounting the post-tax cash flows expected to be generated by the assets or CGU, net of associated selling costs, taking into account those assumptions that market participants would use in estimating fair value. Post-tax cash flows used in the FVLCD calculation are based on the Group's Board-approved business plans and strategic shape assumptions, together with, where relevant, long-term production and cash flow forecasts.

Upstream oil and gas assets

For Upstream oil and gas assets post-tax cash flows are derived from projected production profiles of each field, taking into account forward prices for gas and liquids over the relevant period. Where forward market prices are not available (i.e. outside the active period for each commodity), prices are determined based on the median of third-party market comparator curves. The date of cessation of production depends on the interaction of a number of variables, such as the recoverable quantities of hydrocarbons, production costs, the contractual duration of the licence area and the selling price of the gas and liquids produced. As each field has specific reservoir characteristics and economic circumstances, the post-tax cash flows for each field are computed using individual economic models. Price assumptions are critical and use liquid market prices for 2020 to 2022, blended over a two-year period to long-term price forecasts. Long-term price assumptions derived from third-party market comparator median curves are deemed best aligned with pricing that a reasonable market participant would use, due to inclusion of certain data points, e.g. the impact of climate change.

The future post-tax cash flows are discounted using a post-tax nominal discount rate of 9.0% (2018: 9.5%).

7. Exceptional items and certain re-measurements

As forward commodity prices are a key assumption in the valuations, average prices and associated impairment sensitivities for the Group's upstream oil and gas assets for the relevant periods are shown below.

	Five-year liquid and blended-period price (i)		Ten-year long-term average price (i)		Change in post-tax headroom/(impairment) (ii)			
	2020 – 2024		2025 – 2034		+10%		-10%	
	2019	2018	2019	2018	2019 £m	2018 £m	2019 £m	2018 £m
NBP (p/th)	43	53	58	67	180	128	(197)	(97)
Brent (\$/bbl)	62	62	81	96				

(i) Prices are shown in real terms.

(ii) Sensitivity relates to Upstream exploration and production assets and CGUs, there is no impact on goodwill.

Exceptional impairments of assets measured on a VIU basis

Segment	Asset/CGU (or group of CGUs)	Basis for impairment	Recoverable amount £m	Impairment (i) £m
Upstream	Nuclear	Reduction in baseload power prices and outages at Hunterston/Dungeness	1,289	372
Centrica Consumer	Centrica Home Solutions	Strategic refocusing of activity onto UK and Ireland and reduction in profitability	123	48
Centrica Business	Battery storage	Decline in forecast prices	20	9

(i) Impairment of Centrica Home Solutions CGU includes £31 million impairment of goodwill.

Nuclear

A VIU calculation has been used to determine the recoverable amount of the Group's investment in Nuclear. The post-tax cash flows incorporated in the valuation are derived from board approved forecasts, based on the expected generation profile of the fleet for its remaining life. Assumptions include forward commodity prices, capacity rates, transportation and fuel costs and balancing system charges. Price assumptions are based on liquid market prices for 2020 to 2022 and then blended over a two-year period to long-term price forecasts. Long-term price assumptions derived from third-party market comparator median curves are used due to alignment with pricing that a reasonable market participant would use, and the inclusion of certain data points (e.g. impact of climate change).

The VIU calculation assumes that the life of Sizewell is extended to 2055, reflecting a 20-year extension. In the absence of this extension, the Group's investment in Nuclear would be impaired by a further £311 million.

The asset is particularly sensitive to changes in commodity price and the table below details average prices for the relevant periods and associated sensitivities.

	Five-year liquid and blended-period price (i)		Ten-year long-term average price (i)		Change in pre/post-tax headroom/(impairment)			
	2020 – 2024		2025 – 2034		+10%		-10%	
	2019 £/MWh	2018 £/MWh	2019 £/MWh	2018 £/MWh	2019 £m	2018 £m	2019 £m	2018 £m
Baseload power	47	51	59	63	376	365	(376)	(365)

(i) Prices are shown in real terms.

The VIU calculation is also sensitive to changes in output assumptions. A 1% increase in unplanned outages across the nuclear fleet would increase impairment by £32 million.

The future pre-tax cash flows generated by the investment in the associate are discounted using a pre-tax nominal discount rate of 8.4% (2018: 9.2%).

Centrica Home Solutions

The VIU calculation for the Centrica Home Solutions CGU incorporates growth assumptions to generate positive cash inflows of £21 million in 2024, and includes a terminal value based on this final year. If the 2024 cash flow reduced by 10%, with a consequent fall in terminal value, a further impairment of £14 million would be required.

The discount rate and inflation rate used in the above calculations are determined in the same manner as the rates used in the VIU calculations described in note S2.

Other impairments

Other impairments totalling £99 million (2018: £54 million) have been recognised in the business performance column of the Group Income Statement within the Upstream segment. These relate to oil and gas field impairments incurred in the ordinary course of business, such as dry hole write-offs, and fields where no further development is planned.

The recoverable amounts of these assets have been calculated as £nil on the basis of FVLCD.

8. Net finance cost

Financing costs mainly comprise interest on bonds and bank debt, the results of hedging activities used to manage foreign exchange and interest rate movements on the Group's borrowings, and notional interest arising on discounting of decommissioning provisions and pensions. An element of financing cost is capitalised on qualifying projects.

Investment income predominantly includes interest received on short-term investments in money market funds, bank deposits and government bonds.

Year ended 31 December	2019			2018		
	Financing costs £m	Investment income £m	Total £m	Financing costs £m	Investment income £m	Total £m
Cost of servicing net debt:						
Interest income	-	17	17	-	20	20
Interest cost on bonds, bank loans and overdrafts	(236)	-	(236)	(250)	-	(250)
Interest cost on lease liabilities (2018: finance leases)	(15)	-	(15)	(12)	-	(12)
	(251)	17	(234)	(262)	20	(242)
Net gains on revaluation	-	-	-	-	7	7
Notional interest arising from discounting	(34)	-	(34)	(56)	-	(56)
	(285)	17	(268)	(318)	27	(291)
Capitalised borrowing costs ⁽ⁱ⁾	13	-	13	18	-	18
Financing (cost)/income before exceptional items	(272)	17	(255)	(300)	27	(273)
Exceptional items (note 7)	-	-	-	(139)	-	(139)
(Cost)/income	(272)	17	(255)	(439)	27	(412)

⁽ⁱ⁾ Borrowing costs have been capitalised using an average rate of 4.77% (2018: 4.75%).

9. Taxation

The taxation note details the different tax charges and rates, including current and deferred tax arising in the Group. The current tax charge is the tax payable on this year's taxable profits together with amendments in respect of tax provisions made in earlier years. This tax charge excludes the Group's share of taxation on the results of joint ventures and associates. Deferred tax represents the tax on differences between the accounting carrying values of assets and liabilities and their tax bases. These differences are temporary and are expected to unwind in the future.

(a) Analysis of tax charge

Year ended 31 December	2019			2018		
	Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m	Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m
Current tax						
UK corporation tax	(37)	37	–	(44)	49	5
UK petroleum revenue tax	17	–	17	50	–	50
Non-UK tax	(147)	(32)	(179)	(278)	9	(269)
Adjustments in respect of prior years – UK ⁽ⁱ⁾	16	(34)	(18)	17	2	19
Adjustments in respect of prior years – non-UK ⁽ⁱⁱ⁾	(9)	–	(9)	(16)	1	(15)
Total current tax	(160)	(29)	(189)	(271)	61	(210)
Deferred tax						
Origination and reversal of temporary differences – UK	15	15	30	(70)	51	(19)
UK petroleum revenue tax	(5)	22	17	(1)	(14)	(15)
Origination and reversal of temporary differences – non-UK	(28)	163	135	(120)	32	(88)
Adjustments in respect of prior years – UK	(34)	34	–	(11)	(3)	(14)
Adjustments in respect of prior years – non-UK	(6)	14	8	12	1	13
Total deferred tax	(58)	248	190	(190)	67	(123)
Total taxation on profit/(loss)⁽ⁱⁱⁱ⁾	(218)	219	1	(461)	128	(333)

(i) The net adjustments in respect of prior years include uncertain tax provision credits of £nil (2018: £13 million).

(ii) Total taxation on profit/(loss) excludes taxation on the Group's share of profits of joint ventures and associates.

UK tax rates

Most activities in the UK are subject to the standard rate for UK corporation tax of 19% (2018: 19%). Upstream gas and oil production activities are taxed at a rate of 30% (2018: 30%) plus a supplementary charge of 10% (2018: 10%) to give an overall rate of 40% (2018: 40%). Certain upstream assets in the UK under the petroleum revenue tax (PRT) regime have a current rate of 0% (2018: 0%).

The UK corporation tax rate is scheduled to reduce to 17% from 1 April 2020. At 31 December 2019, the relevant UK deferred tax assets and liabilities included in these consolidated Group Financial Statements were based on this substantively-enacted reduced rate having regard to their reversal profiles.

Non-UK tax rates

Norwegian upstream profits are taxed at the standard rate of 22% (2018: 23%) plus a special tax of 56% (2018: 55%) resulting in an aggregate tax rate of 78% (2018: 78%). Profits earned in the US are taxed at a Federal rate of 21% (2018: 21%) together with state taxes at various rates dependent on the state. Taxation for other jurisdictions is calculated at the rate prevailing in those respective jurisdictions, with rates ranging from 12.5% in the Republic of Ireland to 50% in the Netherlands. The tax charges were not material in such jurisdictions.

Prior year adjustments reflect changes made to estimates or to judgements when further information becomes available.

Movements in deferred tax liabilities and assets are disclosed in note 16.

Tax on items taken directly to equity is disclosed in note S4.

9. Taxation

(b) Factors affecting the tax charge

The Group is expected to continue carrying out the majority of its business activities in the UK and accordingly considers the standard UK rate to be the appropriate reference rate.

The differences between the total taxation shown above and the amount calculated by applying the standard rate of UK corporation tax to the profit/(loss) before taxation are as follows:

Year ended 31 December	2019			2018		
	Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m	Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m
Profit/(loss) before taxation	646	(1,750)	(1,104)	1,119	(544)	575
Add back/(deduct) share of losses/(profits) of joint ventures and associates, net of interest and taxation	12	1	13	(3)	22	19
	658	(1,749)	(1,091)	1,116	(522)	594
Tax on profit at standard UK corporation tax rate of 19% (2018: 19%)	(125)	332	207	(212)	99	(113)
Effects of:						
Depreciation/impairment on non-qualifying assets (including write-backs)	(31)	(229)	(260)	(34)	(3)	(37)
Higher rates applicable to upstream profits/losses	(107)	42	(65)	(269)	6	(263)
Non-UK tax rates	15	112	127	(27)	4	(23)
Upstream investment incentives	37	(32)	5	47	33	80
Movements in uncertain tax provisions	8	–	8	(12)	–	(12)
Other	(15)	(6)	(21)	46	(11)	35
Taxation on profit/(loss)	(218)	219	1	(461)	128	(333)
Less: movement in deferred tax	58	(248)	(190)	190	(67)	123
Total current tax	(160)	(29)	(189)	(271)	61	(210)

The Group is subject to taxation in a number of jurisdictions. The complexity of applicable rules may result in legitimate differences of interpretation between the Group and taxing authorities (or between different taxing authorities) especially where an economic judgement or valuation is involved. Resolution of these differences typically takes many years. The uncertain tax provisions represent multiple layers of estimation for different time periods and different jurisdictions.

The Group has applied IFRIC 23: 'Uncertainty over income tax treatments' during the year. The interpretation requires consideration of the likelihood that the relevant taxing authority will accept an uncertain tax treatment in order to determine the measurement basis. The value is calculated in accordance with the rules of the relevant tax authority when acceptance is deemed probable.

The principal element of the Group's uncertain tax position relates to transfer pricing challenges in jurisdictions outside the UK. While the Group applies the arm's length principle to all intra-group transactions, taking OECD guidance into account, taxing authorities may take different views. The outcome of resolving any disputes is not predictable and therefore in order to reflect the effect of uncertainties, the provisions represent management's assessment of the most likely outcome of each issue. The assessment is reviewed and updated on a regular basis.

9. Taxation

(c) Factors that may affect future tax charges

The Group's effective tax rates are impacted by changes to the mix of activities and production across the territories in which it operates. Effective tax rates may also fluctuate where profits and losses cannot be offset for tax purposes. Losses realised in one territory cannot be offset against profits in another.

The Group's UK profits earned away from gas and oil production will benefit from reduced rates of corporation tax: 17% from 1 April 2020.

Profits from gas and oil production in the UK continue to be taxed at rates above the UK statutory rate (40% versus 19%). PRT is now set at 0% but may still give rise to historic refunds from the carry-back of excess reliefs (for example, from decommissioning).

Income earned in territories outside the UK, particularly in Norway, is generally subject to higher effective rates of tax than the current UK statutory rate.

The Group's US profits are subject to a Federal rate of 21% plus applicable state taxes.

Globally, tax reform has significant potential to change tax charges, particularly in relation to the OECD's Base Erosion and Profit Shifting (BEPS) project, which has widespread support. The Group does not expect its tax position to be impacted materially. Local tax laws and rates are subject to change, which may have a significant impact on the Group's future tax charges.

In the medium term, the Group's effective tax rate is expected to remain above the UK statutory rate, reflecting higher rates applicable to profits earned outside the UK. The mix of upstream/downstream activities across regimes continues to be influential on the effective tax rate.

(d) Relationship between current tax charge and taxes paid

Year ended 31 December	2019			2018		
	UK £m	Non-UK £m	Total £m	UK £m	Non-UK £m	Total £m
Current tax charge/(credit):						
Corporation tax	18	188	206	(24)	284	260
Petroleum revenue tax	(17)	–	(17)	(50)	–	(50)
	1	188	189	(74)	284	210
Taxes (refunded)/paid:						
Corporation tax	(43)	239	196	18	99	117
Petroleum revenue tax	(68)	–	(68)	(56)	–	(56)
	(111)	239	128	(38)	99	61
Included in the following lines of the Group Cash Flow Statement:						
Taxes paid in cash flows from operating activities			92			61
Sale of businesses in cash flows from investing activities			36			–

Differences between current tax charged and taxes paid arose principally due to the following factors:

- Corporation tax payments are generally made by instalment, based on estimated taxable profits, or the prior period's profits. Payments are made on account and the final liability is settled as the tax return is filed. Fluctuations in profits from year to year, one-off items and mark-to-market movements within the year may therefore give rise to divergence between the charge for the year and the taxes paid. In certain jurisdictions advance tax payments are required (based on estimated tax liabilities) which can result in overpayments. These are included as tax assets, to be refunded in a subsequent period (2018 and 2019 saw net refunds in the UK); and
- PRT refunds are based on results in the preceding six-monthly PRT period, therefore PRT cash movements will reflect refunds on a six-month delay.

10. Earnings per ordinary share

Earnings per share (EPS) is the amount of profit or loss attributable to each share. Basic EPS is the amount of profit or loss for the year divided by the weighted average number of shares in issue during the year. Diluted EPS includes the impact of outstanding share options.

Basic earnings per ordinary share has been calculated by dividing the loss attributable to equity holders of the Company for the year of £1,023 million (2018: £183 million profit) by the weighted average number of ordinary shares in issue during the year of 5,758 million (2018: 5,623 million). The number of shares excludes 22 million ordinary shares (2018: 40 million), being the weighted average number of the Company's own shares held in the employee share trust and treasury shares purchased by the Group as part of the share repurchase programme.

The Directors believe that the presentation of adjusted basic earnings per ordinary share, being the basic earnings per ordinary share adjusted for certain re-measurements and exceptional items, assists with understanding the underlying performance of the Group, as explained in note 2. Information presented for diluted and adjusted diluted earnings per ordinary share uses the weighted average number of shares as adjusted for 44 million (2018: 48 million) potentially dilutive ordinary shares as the denominator, unless it has the effect of increasing the profit or decreasing the loss attributable to each share.

Basic to adjusted basic earnings per share reconciliation

Year ended 31 December	2019		2018	
	£m	Pence per ordinary share	£m	Pence per ordinary share
Earnings – basic	(1,023)	(17.8)	183	3.3
Net exceptional items after taxation (notes 2 and 7) ⁽ⁱ⁾	862	15.0	266	4.7
Certain re-measurement losses after taxation (notes 2 and 7) ⁽ⁱ⁾	580	10.1	182	3.2
Earnings – adjusted basic	419	7.3	631	11.2
Earnings – diluted	(1,023)	(17.8)	183	3.2
Earnings – adjusted diluted	419	7.2	631	11.1

⁽ⁱ⁾ Net exceptional loss after taxation and certain re-measurement losses after taxation are adjusted to reflect the share attributable to non-controlling interests.

11. Dividends

Dividends represent the return of profits to shareholders and are paid twice a year, in June and November. Dividends are paid as an amount per ordinary share held. The Group retains part of the profits generated to meet future investment plans or to fund share repurchase programmes.

	2019			2018		
	£m	Pence per share	Date of payment	£m	Pence per share	Date of payment
Prior year final dividend ⁽ⁱ⁾	474	8.40	27 Jun 2019	470	8.40	28 Jun 2018
Interim dividend	87	1.50	21 Nov 2019	203	3.60	22 Nov 2018
	561			673		

(i) Included within the prior year final dividend are forfeited dividends of £5 million (2018: £1 million) older than 12 years that were written back in accordance with Group policy.

The Directors propose a final dividend of 3.50 pence per ordinary share (totalling £204 million) for the year ended 31 December 2019. The dividend will be submitted for formal approval at the Annual General Meeting to be held on 11 May 2020 and, subject to approval, will be paid on 22 June 2020 to those shareholders registered on 11 May 2020.

In prior years the Company offered a scrip dividend alternative to its shareholders. £96 million of the £474 million prior year final dividend was in the form of ordinary shares to shareholders opting in to the scrip dividend alternative. The market value per share at the date of payment was 94 pence per share resulting in the issue of 102 million new shares and £90 million of share premium. The scrip dividend alternative is no longer offered.

The Group has sufficient distributable reserves to pay dividends to its ultimate shareholders. Distributable reserves are calculated on an individual legal entity basis and so, despite the consolidated Group Balance Sheet containing negative retained earnings, the ultimate parent company, Centrica plc, currently has adequate levels of realised profits within its retained earnings to support dividend payments. Refer to the Centrica plc Company Balance Sheet on page 197. At 31 December 2019, Centrica plc's company-only distributable reserves were c.£2.7 billion. On an annual basis, the distributable reserve levels of the Group's subsidiary undertakings are reviewed and dividends paid up to Centrica plc to replenish its reserves.

12. Acquisitions, disposals and disposal groups classified as held for sale

This section details acquisitions and disposals made by the Group.

(a) 2019 business combinations and asset acquisitions

On 1 July 2019 the Group acquired SmartWatt Energy Inc., a leading energy services and solutions company in North America, for consideration of \$37 million (£29 million).

Acquisition-related costs have been charged to 'operating costs before exceptional items and credit losses on financial assets' in the Group Income Statement for an aggregated amount of £1 million.

(b) 2018 business combinations – measurement period adjustments

There have been no material updates to the fair value of assets and liabilities recognised for businesses acquired in 2018.

(c) Disposals

On 30 April 2019 the Group disposed of Clockwork Home Services in North America. The business comprised a series of franchises, company-owned stores and brands, including One Hour Heating & Air Conditioning, Benjamin Franklin Plumbing and Mister Sparky, to Apax Partners and was part of the Centrica Consumer segment.

Gross consideration of \$300 million (£231 million) has predominantly been reduced by working capital and transaction costs, to generate net consideration of \$279 million (£215 million). The cash inflow from the disposal is presented net of tax paid in the Group Cash Flow Statement.

	Clockwork Home Services £m
Property, plant and equipment	7
Brand intangible asset	12
Other net assets	9
Attributable goodwill	76
Net assets disposed of	104
Consideration received	215
	111
Recycling of foreign currency translation reserves on disposal	18
Impairment of intangible asset	(59)
Other directly-attributable costs of disposal	(2)
Profit on disposal before taxation	68
Taxation	(27)
Profit on disposal after taxation	41

The Group also disposed of Norwegian exploration and production assets, Valemon and Sindre, part of the Upstream segment, during the year. Proceeds of £33 million were equal to the carrying value of the assets disposed of subsequent to the recognition of a pre-tax impairment charge of £49 million. The impairment charge is included in net gain on significant disposals within exceptional items.

None of the disposals are shown as discontinued operations on the face of the Group Income Statement as they do not represent a separate major line of business or geographical area of operation that is material to the Group's results.

The Group received £30 million of previously unrecognised contingent consideration in respect of the historic disposal of Trinidad and Tobago assets.

There were no other material disposals.

12. Acquisitions, disposals and disposal groups classified as held for sale

(d) Assets and liabilities of disposal groups held for sale

On 23 December 2019 the Group agreed to sell its 382MW King's Lynn combined cycle gas turbine (CCGT) power station to RWE Generation for headline consideration of £105 million, adjusted for final working capital, based on a valuation date of 31 December 2019. These interests are currently reported in the Centrica Business segment. An impairment charge of £14 million was recorded against the assets of the disposal group and is included in net gain on significant disposals within exceptional items. The transaction completed on 12 February 2020.

Also included in assets and liabilities of disposal groups held for sale is a net amount of £5 million related to an exploration and production field.

	Exploration and production field £m	King's Lynn power station £m	Total £m
Non-current assets	11	111	122
Current assets	–	2	2
Assets of disposal groups classified as held for sale	11	113	124
Current liabilities	(1)	(5)	(6)
Non-current liabilities	(5)	(7)	(12)
Liabilities of disposal groups classified as held for sale	(6)	(12)	(18)
Net assets of disposal groups classified as held for sale	5	101	106

Assets and associated liabilities that are expected to be recovered principally through a sale have been classified as held for sale and are presented separately on the face of the Group Balance Sheet.

13. Property, plant and equipment

PP&E includes significant investment in power stations and gas and liquid production assets. Once operational, all assets are depreciated over their useful lives.

(a) Carrying amounts

	2019					2018				
	Land and buildings £m	Plant, equipment and vehicles £m	Power generation £m	Gas production and storage £m	Total £m	Land and buildings £m	Plant, equipment and vehicles £m	Power generation £m	Gas production and storage £m	Total £m
Cost										
1 January prior to adoption of IFRS 16	75	568	1,059	15,476	17,178	64	566	950	15,428	17,008
Right-of-use assets recognised on adoption of IFRS 16 (note 1)	254	26	65	33	378	–	–	–	–	–
Lease modifications and re-measurements	15	(39)	–	–	(24)	–	–	–	–	–
Additions and capitalised borrowing costs (note 4)	19	49	44	327	439	10	79	114	367	570
Acquisitions	1	–	–	–	1	–	2	–	3	5
Transfers	–	(24)	–	5	(19)	–	–	–	36	36
Disposals, retirements and transfers to disposal groups held for sale	–	(45)	(209)	(510)	(764)	–	(84)	(8)	(427)	(519)
Decommissioning liability and dilapidations revisions and additions (note 21)	1	–	–	(127)	(126)	–	–	2	44	46
Exchange adjustments	(4)	(7)	(6)	(278)	(295)	1	5	1	25	32
31 December	361	528	953	14,926	16,768	75	568	1,059	15,476	17,178
Accumulated depreciation and impairment										
1 January	23	211	782	12,038	13,054	21	179	761	11,915	12,876
Charge for the year	45	91	27	644	807	2	86	10	638	736
Impairments/(write-backs)	23	11	57	478	569	–	–	18	(105)	(87)
Disposals, retirements and transfers to disposal groups held for sale	–	(30)	(103)	(479)	(612)	–	(57)	(7)	(427)	(491)
Exchange adjustments	(1)	(4)	(1)	(177)	(183)	–	3	–	17	20
31 December	90	279	762	12,504	13,635	23	211	782	12,038	13,054
NBV at 31 December	271	249	191	2,422	3,133	52	357	277	3,438	4,124

(b) Assets in the course of construction included in above carrying amounts

	2019 £m	2018 £m
31 December		
Plant, equipment and vehicles	30	45
Gas production	177	605
Power generation	20	99

(c) Additional information relating to right-of-use assets included in the above

	2019 (i)					2018 (i)				
	Land and buildings £m	Plant, equipment and vehicles £m	Power generation £m	Gas production and storage £m	Total £m	Land and buildings £m	Plant, equipment and vehicles £m	Power generation £m	Gas Production and storage £m	Total £m
Additions	16	15	–	37	68	–	36	–	–	36
Depreciation charge for the year	(43)	(34)	(11)	(13)	(101)	–	24	–	15	39
NBV at 31 December	231	83	20	56	390	–	118	–	1	119

(i) 2019 reflects right-of-use assets recognised in accordance with IFRS 16. 2018 reflects assets held under finance leases in accordance with IAS 17 and to which title was restricted.

Further information on the Group's leasing arrangements is provided in note 23.

14. Interests in joint ventures and associates

Investments in joint ventures and associates represent businesses where we exercise joint control or significant influence and generally have an equity holding of up to 50%. These include the investment in Lake Acquisitions Limited, which owns the existing EDF UK nuclear power station fleet.

(a) Interests in joint ventures and associates

	2019	2018
	Investments in joint ventures and associates £m	Investments in joint ventures and associates £m
1 January	1,661	1,699
Impairment	(372)	–
Share of loss for the year	(13)	(19)
Share of other comprehensive income/(loss)	29	(1)
Dividends	(1)	(22)
Other movements	2	4
31 December	1,306	1,661

(b) Share of joint ventures' and associates' assets and liabilities

31 December	2019			2018
	Associates Nuclear £m	Other £m	Total £m	Total £m
Share of non-current assets	4,414	11	4,425	3,811
Share of current assets	684	13	697	660
	5,098	24	5,122	4,471
Share of current liabilities	(135)	(3)	(138)	(139)
Share of non-current liabilities	(2,716)	(1)	(2,717)	(2,082)
	(2,851)	(4)	(2,855)	(2,221)
Cumulative impairment	(958)	(3)	(961)	(589)
Interests in joint ventures and associates	1,289	17	1,306	1,661
Net cash included in share of net assets	56	–	56	83

Further information on the Group's investments in joint ventures and associates is provided in notes 6 and S10.

15. Other intangible assets and goodwill

The Group Balance Sheet contains significant intangible assets. Goodwill, customer relationships and brands usually arise when we acquire a business. Goodwill is attributable to enhanced geographical presence, cost savings, synergies, growth opportunities, the assembled workforce and also arises from items such as deferred tax. Goodwill is not amortised but is assessed for recoverability each year.

The Group uses European Union Allowances (EUAs) and Renewable Obligation Certificates/Renewable Energy Certificates (ROCs/RECs) to satisfy its related obligations.

Upstream exploration and evaluation expenditure is capitalised as an intangible asset until development of the asset commences, at which point it is transferred to PP&E or is deemed not commercially viable and is written down.

(a) Carrying amounts

	2019						2018					
	Customer relationships and brands £m	Application software (i) (ii) £m	EUA/ ROC/RECs £m	Exploration and evaluation expenditure £m	Goodwill £m	Total £m	Customer relationships and brands £m	Application software (i) (ii) £m	EUA/ ROC/RECs £m	Exploration and evaluation expenditure £m	Goodwill £m	Total £m
Cost												
1 January	830	1,837	321	304	3,298	6,590	749	1,570	323	324	3,212	6,178
Additions and capitalised borrowing costs (note 4(e))	–	200	933	216	–	1,349	12	281	854	118	–	1,265
Acquisitions	7	6	–	–	10	23	33	(7)	–	–	26	52
Disposals/retirements and surrenders	(43)	(28)	(1,068)	(14)	(76)	(1,229)	–	(26)	(869)	–	–	(895)
Write-downs	–	–	–	(178)	–	(178)	–	–	–	(102)	–	(102)
Transfers	–	24	–	(5)	–	19	–	–	–	(36)	–	(36)
Exchange adjustments	(30)	(18)	(7)	(3)	(61)	(119)	36	19	13	–	60	128
31 December	764	2,021	179	320	3,171	6,455	830	1,837	321	304	3,298	6,590
Accumulated amortisation												
1 January	596	859	–	117	562	2,134	514	659	–	117	562	1,852
Amortisation ⁽ⁱⁱ⁾	38	228	–	–	–	266	52	216	–	–	–	268
Disposals/retirements and surrenders	(31)	(22)	–	–	–	(53)	–	(23)	–	–	–	(23)
Impairments	–	76	–	–	31	107	–	–	–	–	–	–
Exchange adjustments	(23)	(9)	–	–	–	(32)	30	7	–	–	–	37
31 December	580	1,132	–	117	593	2,422	596	859	–	117	562	2,134
NBV at 31 December	184	889	179	203	2,578	4,033	234	978	321	187	2,736	4,456

(i) Application software includes assets under construction with a cost of £259 million (2018: £302 million).

(ii) The remaining amortisation period of individually material application software assets, which had a carrying value of £270 million (2018: £260 million), is between five and six years.

(iii) Amortisation of £266 million (2018: £268 million) has been recognised in operating costs before exceptional items.

15. Other intangible assets and goodwill

(b) Carrying amount of goodwill and intangible assets with indefinite useful lives allocated to CGUs

Goodwill acquired through business combinations, and indefinite-lived intangible assets, have been allocated for impairment testing purposes to individual CGUs or groups of CGUs, each representing the lowest level within the Group at which the goodwill or indefinite-lived intangible asset is monitored for internal management purposes.

31 December	Principal acquisitions to which goodwill and intangibles with indefinite useful lives relate	2019			2018		
		Carrying amount of goodwill £m	Carrying amount of indefinite-lived intangible assets (i) £m	Total £m	Carrying amount of goodwill £m	Carrying amount of indefinite-lived intangible assets (i) £m	Total £m
CGUs							
Centrica Consumer:							
UK Home (Residential energy and services)	AlertMe/Dyno-Rod	63	57	120	63	57	120
Ireland	Bord Gáis Energy	15	–	15	16	–	16
North America (Home energy and services)	Direct Energy/ATCO/CPL/WTU/FCP/Bounce/Residential Services Group/Clockwork/Astrum Solar ⁽ⁱ⁾	974	4	978	1,061	14	1,075
Centrica Home Solutions	AlertMe/FlowGem	–	–	–	31	–	31
Centrica Business:							
UK Business (Energy supply and services)	Enron Direct/Electricity Direct	181	–	181	181	–	181
North America Business (Energy supply and trading)	Direct Energy/ATCO/Strategic Energy/FCP/HEM	550	–	550	567	–	567
Centrica Business Solutions	ENER-G/Panoramic Power/REstore/SmartWatt	178	2	180	174	–	174
Energy Marketing & Trading	Neas Energy	142	–	142	151	–	151
Upstream:							
Exploration & Production	Newfield/Heimdal/Venture/Bayermgas	475	–	475	492	–	492
		2,578	63	2,641	2,736	71	2,807

(i) The indefinite-lived intangible assets relate mainly to the Dyno-Rod brand. In the prior year amounts also relate to the Mr Sparky and Benjamin Franklin brands acquired as part of the Clockwork business combination, which have now been disposed of.

16. Deferred tax assets and liabilities

Deferred tax is an accounting adjustment to provide for tax that is expected to arise in the future as a result of differences in the accounting and tax bases of assets and liabilities. The principal deferred tax assets and liabilities recognised by the Group relate to capital investments, decommissioning assets and provisions, tax losses, fair value movements on derivative financial instruments, PRT and pensions.

	Accelerated tax depreciation (corporation tax) £m	Net decommissioning (i) £m	Losses carried forward (ii) £m	Other timing differences £m	Marked to market positions £m	Net deferred PRT (iii) £m	Retirement benefit obligation and other provisions £m	Total £m
1 January 2018	(931)	864	335	8	(80)	136	62	394
(Charge)/credit to income	(115)	16	(12)	(29)	40	(9)	(14)	(123)
Credit/(charge) to equity	–	–	–	1	(2)	–	(135)	(136)
Disposal of businesses	(5)	–	–	–	–	–	–	(5)
Exchange and other adjustments	(5)	–	–	24	(1)	–	–	18
31 December 2018	(1,056)	880	323	4	(43)	127	(87)	148
Credit/(charge) to income	142	(2)	(70)	24	159	11	(74)	190
(Charge)/credit to equity	–	–	–	(1)	2	–	78	79
Disposal of businesses	(32)	–	–	–	–	–	–	(32)
Exchange and other adjustments	22	(11)	2	(12)	16	–	–	17
31 December 2019	(924)	867	255	15	134	138	(83)	402

(i) Net decommissioning includes deferred tax assets of £1,040 million (2018: £1,215 million) in respect of decommissioning provisions.

(ii) The losses arise principally from accelerated allowances for upstream investment expenditure, for which equivalent deferred tax liabilities are included under accelerated tax depreciation.

(iii) The deferred PRT amounts include the effect of deferred corporation tax as PRT is chargeable to corporation tax.

Certain deferred tax assets and liabilities have been offset where there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority.

31 December	2019		2018	
	Assets £m	Liabilities £m	Assets £m	Liabilities £m
Gross deferred tax balances	1,820	(1,418)	2,029	(1,881)
Offsetting deferred tax balances	(1,267)	1,267	(1,497)	1,497
Net deferred tax balances (after offsetting for financial reporting purposes)	553	(151)	532	(384)

Deferred tax assets arise typically on decommissioning provisions, trading losses carried forward, retirement benefit obligations and marked to market positions. Forecasts indicate that there will be suitable taxable profits to utilise those deferred tax assets not offset against deferred tax liabilities. Specific legislative provisions applicable to gas and oil production provide assurance that deferred tax assets relating to decommissioning costs and certain trading losses will be utilised.

At the balance sheet date, the Group had certain unrecognised deductible temporary differences of £3,537 million (2018: £3,165 million), of which £2,620 million (2018: £2,294 million) related to carried forward tax losses available for utilisation against future taxable profits. Some £44 million (2018: £59 million) of these losses will expire within one to five years. All other temporary differences have no expiry date.

No deferred tax asset has been recognised in respect of these temporary differences, due to the unpredictability of future profit streams.

At the balance sheet date, no taxable temporary differences existed in respect of the Group's overseas investments (2018: £nil).

17. Trade and other receivables, and contract-related assets

Trade and other receivables include accrued income, and are amounts owed by our customers for goods we have delivered or services we have provided. These balances are valued net of provisions for bad debt. Other receivables include payments made in advance to our suppliers. Contract-related assets are balances arising as a result of the Group's contracts with customers in the scope of IFRS 15.

31 December	2019		2018	
	Current £m	Non-current £m	Current £m	Non-current £m
Financial assets:				
Trade receivables	2,138	2	2,043	3
Unbilled downstream energy income	1,342	–	1,542	–
Other accrued energy income	1,003	–	1,323	–
Other accrued income	131	–	116	–
Cash collateral posted (note 24)	155	–	446	–
Other receivables (including loans and contract assets)	301	38	292	39
	5,070	40	5,762	42
Less: provision for credit losses	(589)	–	(569)	–
	4,481	40	5,193	42
Non-financial assets: prepayments, other receivables and costs to obtain or fulfill a contract with a customer	358	114	350	77
	4,839	154	5,543	119

The amounts above include gross amounts arising from the Group's IFRS 15 contracts with customers of £2,019 million (2018: £1,913 million).

Trade and other receivables include financial assets representing the contractual right to receive cash or other financial assets from residential customers, business customers and treasury, trading and energy procurement counterparties as follows:

31 December	2019		2018	
	Current £m	Non-current £m	Current £m	Non-current £m
Financial assets by class:				
Residential customers	1,722	12	1,700	8
Business customers	2,104	26	2,321	28
Treasury, trading and energy procurement counterparties	1,244	2	1,741	6
	5,070	40	5,762	42
Less: provision for credit losses	(589)	–	(569)	–
	4,481	40	5,193	42

Receivables from residential and business customers are generally considered to be credit impaired when the payment is past the contractual due date. Contractual due dates range from falling due upon receipt to falling due in 30 days from receipt.

The table below shows the change in gross receivables between credit impaired balances (those that are past due) and receivables that are not yet due and therefore not considered to be credit impaired.

Gross financial assets within trade and other receivables		2019 £m	2018 £m
31 December			
Balances that are not past due		3,718	4,418
Balances that are past due		1,352	1,344
		5,070	5,762

17. Trade and other receivables, and contract-related assets

The IFRS 9 impairment model is applicable to the Group's financial assets including trade receivables, contract assets and other financial assets as described in note S3. As the majority of the relevant balances are trade receivables and contract assets to which the simplified model applies, this disclosure focuses on these balances.

The provision for credit losses for trade receivables, contract assets and finance lease receivables is based on an expected credit loss model that calculates the expected loss applicable to the receivable balance over its lifetime. Credit losses on receivables due from treasury, trading and energy procurement counterparties are not significant (see note S3 for further analysis of this determination). For residential and business customers default rates are calculated initially by operating segment considering historical loss experience and applied to trade receivables within a provision matrix. The matrix approach allows application of different default rates to different groups of customers with similar characteristics. These groups will be determined by a number of factors including; the nature of the customer, the payment method selected and where relevant, the sector in which they operate. The characteristics used to determine the groupings of receivables are the factors that have the greatest impact on the likelihood of default. The rate of default increases once the balance is 30 days past due and subsequently in 30-day increments.

Receivables from residential and business customers are generally considered to be credit impaired when the payment is past the contractual due date. The Group applies different definitions of default for different groups of customers, ranging from 60 days past the due date to six to twelve months from the issuance of a final bill. Receivables are generally written off only once a period of time has elapsed since the final bill. Contractual due dates range from falling due upon receipt to falling due in 30 days from receipt.

The impairment charge in trade receivables is stated net of credits for the release of specific provisions made in previous years, which are no longer required. These relate primarily to residential customers in the UK. Movements in the provision for credit losses by class are as follows:

	2019				2018			
	Residential customers £m	Business customers £m	Treasury, trading and energy procurement counterparties £m	Total £m	Residential customers £m	Business customers £m	Treasury, trading and energy procurement counterparties £m	Total £m
1 January	(343)	(222)	(4)	(569)	(347)	(248)	(4)	(599)
Net impairment of trade receivables (predominantly related to credit impaired trade receivables) ^{(i) (ii) (iii)}	(145)	(58)	–	(203)	(85)	(64)	(1)	(150)
Receivables written off ^(iv)	101	82	–	183	89	90	1	180
31 December	(387)	(198)	(4)	(589)	(343)	(222)	(4)	(569)

(i) Includes £190 million (2018: £135 million) of credit losses related to trade receivables resulting from contracts in the scope of IFRS 15.

(ii) All loss allowances reflect the lifetime expected credit losses on trade receivables, contract assets and finance lease receivables.

(iii) Excludes recovery of previously written-off receivables of £6 million (2018: £7 million).

(iv) Materially all write-offs relate to trade receivables where enforcement activity is ongoing.

Enforcement activity continues in respect of balances that have been written off unless there are specific known circumstances (such as bankruptcy) that render further action futile.

Sensitivity to changes in assumptions

The most significant assumption included within the expected credit loss provisioning model that gives rise to estimation uncertainty is that future performance will be reflective of past performance and there will be no significant change in the payment profile or recovery rates within each identified group of receivables. To address this risk, the Group reviews and updates default rates, by group, on a regular basis to ensure they incorporate the most up to date assumptions along with forward-looking information where available and relevant. The Group also considers regulatory changes and customer segment specific factors that may have an impact, now or in the future, on recoverability of the balance. While forward-looking information is usually considered to be immaterial, the exception to this could be the forecast occurrence of a significant one-off event. The Group does not believe that Brexit will have a material impact on the outstanding receivables balance during the transition period or beyond.

This approach is considered appropriate as the Group's outstanding trade receivable balance is made up of a high volume of individually low value balances relative to the total outstanding debt. As a result, impairment losses on trade receivables are more sensitive to macroeconomic events, rather than customer specific future events, which are unlikely to have a material impact. The Group's receivables are predominantly short term and the rate of default increases significantly when a balance is more than 90 days past due. In order to test the sensitivity to changes in the debt profile, the Group has considered the impact of further credit deterioration of these balances and determined that if all balances were to remain unpaid for a further 30 days, the additional credit loss recognisable by the Group would be up to £35 million.

18. Inventories

Inventories represent assets that we intend to use in future periods, either by selling the asset itself (for example gas in storage) or by using it to provide a service to a customer.

31 December	2019 £m	2018 £m
Gas and oil in storage and transportation ⁽ⁱ⁾	157	210
Other raw materials and consumables	190	169
Finished goods and goods for resale	84	80
	431	459

(i) Includes oil inventory and gas in storage held at fair value of £43 million (2018: £76 million).

The Group consumed £854 million of inventories (2018: £768 million) during the year. Write-downs amounting to £28 million (2018: £8 million) were charged to the Group Income Statement in the year.

19. Derivative financial instruments

The Group uses derivative financial instruments to manage the risk arising from fluctuations in the value of certain assets or liabilities associated with treasury management, energy sales and procurement. These derivatives are held at fair value and are predominantly unrealised positions, expected to unwind in future periods. The Group also uses derivatives for proprietary energy trading purposes.

Purpose	Accounting treatment
Proprietary energy trading and treasury management	Carried at fair value, with changes in fair value recognised in the Group's business performance results for the year. ⁽ⁱ⁾
Energy procurement/optimisation	Carried at fair value, with changes in fair value reflected in certain re-measurements.

(i) With the exception of certain energy derivatives related to cross-border transportation and capacity contracts.

In cases where a derivative qualifies for hedge accounting, derivatives are classified as fair value hedges or cash flow hedges. Note S5 provides further detail on the Group's hedge accounting.

The carrying values of derivative financial instruments by product type for accounting purposes are as follows:

31 December	2019		2018	
	Assets £m	Liabilities £m	Assets £m	Liabilities £m
Derivative financial instruments – held for trading under IFRS 9:				
Energy derivatives – for procurement/optimisation	553	(1,245)	567	(704)
Energy derivatives – for proprietary trading	917	(769)	837	(787)
Interest rate derivatives	3	(23)	–	(26)
Foreign exchange derivatives	104	(104)	30	(38)
Derivative financial instruments in hedge accounting relationships:				
Interest rate derivatives	105	(2)	59	(10)
Foreign exchange derivatives	131	(2)	185	(1)
Total derivative financial instruments	1,813	(2,145)	1,678	(1,566)
Included within:				
Derivative financial instruments – current	1,320	(1,854)	1,141	(1,136)
Derivative financial instruments – non-current	493	(291)	537	(430)

19. Derivative financial instruments

The contracts included within energy derivatives are subject to a wide range of detailed specific terms, but comprise the following general components, analysed on a net carrying value basis:

31 December	2019 £m	2018 £m
Short-term forward market purchases and sales of gas and electricity:		
UK and Europe	249	(236)
North America	(165)	65
Other derivative contracts	(628)	84
Net total	(544)	(87)

Net (losses)/gains on derivative financial instruments due to re-measurement	2019		2018	
	Income Statement £m	Equity £m	Income Statement £m	Equity £m
31 December				
Financial assets and liabilities measured at fair value:				
Derivative financial instruments – held for trading	(551)	–	(144)	–
Derivative financial instruments in hedge accounting relationships	55	(53)	(60)	37
	(496)	(53)	(204)	37

20. Trade and other payables, and contract liabilities

Trade and other payables include accruals and are principally amounts we owe to our suppliers. Financial deferred income represents monies received from customers in advance of the delivery of goods or services that may be returned to the customer if future delivery does not occur. For example, downstream customers with a credit balance may request repayment of the outstanding amount in cash, rather than taking delivery of commodity. By contrast, contract liabilities arise when the Group receives consideration from a customer in advance of performance, and has a non-financial liability to deliver future goods or services in return.

31 December	2019		2018	
	Current £m	Non-current £m	Current £m	Non-current £m
Financial liabilities:				
Trade payables	(571)	(1)	(578)	–
Deferred income	(328)	–	(287)	–
Capital payables	(181)	(96)	(166)	(124)
Cash collateral received (note 24)	(35)	–	(157)	–
Other payables	(327)	(36)	(403)	(21)
Accruals:				
Commodity costs	(1,866)	–	(2,475)	–
Transportation, distribution and metering costs	(401)	–	(384)	–
Operating and other accruals	(783)	–	(825)	–
	(3,050)	–	(3,684)	–
	(4,492)	(133)	(5,275)	(145)
Non-financial liabilities:				
Other payables and accruals	(850)	(1)	(774)	(14)
Contract liabilities	(55)	(15)	(54)	(22)
Deferred income	(136)	(3)	(104)	(10)
	(5,533)	(152)	(6,207)	(191)

Maturity profile of financial liabilities within current trade and other payables

31 December	2019 £m	2018 £m
Less than 90 days	(4,245)	(5,005)
90 to 182 days	(140)	(165)
183 to 365 days	(107)	(105)
	(4,492)	(5,275)

21. Provisions for other liabilities and charges

Provisions are recognised when an obligation exists that can be reliably measured, but where there is uncertainty over the timing and/or amount of the payment. The main provisions relate to decommissioning costs for upstream assets we own, or have owned, which require restoration or remediation. Further provisions relate to sale and purchase contracts we have entered into that are now onerous, restructuring costs, and legal and regulatory matters.

	1 January 2019 £m	Acquisitions and disposals £m	Charged in the year £m	Notional interest £m	Unused and reversed in the year £m	Utilised (i) £m	Transfers (ii) £m	Exchange adjustments £m	31 December 2019 £m
Current									
Restructuring costs	(22)	–	(225)	–	16	66	111	(2)	(56)
Decommissioning costs (iii)	(194)	–	(2)	–	–	156	(113)	1	(152)
Sale/purchase contract loss provision (iv)	(40)	–	(14)	–	22	21	(18)	1	(28)
Other (v)	(49)	–	(158)	–	2	162	(5)	–	(48)
	(305)	–	(399)	–	40	405	(25)	–	(284)

	1 January £m	Acquisitions and disposals (vi) £m	Charged in the year £m	Notional interest £m	Unused and reversed in the year £m	Revisions and additions £m	Transfers (ii) £m	Exchange adjustments £m	31 December 2019 £m
Non-current									
Restructuring costs	(7)	–	(1)	–	–	–	–	–	(8)
Decommissioning costs (iii)	(2,401)	45	(11)	(31)	45	127	113	42	(2,071)
Sale/purchase contract loss provision (iv)	(75)	–	–	–	18	–	18	3	(36)
Other (v)	(57)	–	(6)	–	–	(1)	5	(1)	(60)
	(2,540)	45	(18)	(31)	63	126	136	44	(2,175)

Included within the above liabilities are the following financial liabilities:

Financial liabilities	2019		2018	
	Current £m	Non-current £m	Current £m	Non-current £m
31 December				
Restructuring costs	(56)	(8)	(22)	(7)
Provisions other than restructuring costs	(71)	(86)	(85)	(129)
	(127)	(94)	(107)	(136)

(i) Utilisation of provisions includes £88 million (2018: £145 million) of payments relating to exceptional charges. The remainder of the total £298 million (2018: £248 million) of payments relating to exceptional charges shown in the Group Cash Flow Statement was paid directly during the year, without first giving rise to a provision.

(ii) Includes transfers to/from other balance sheet accounts including post-retirement benefit obligations.

(iii) Provision has been made for the estimated net present cost of decommissioning gas production facilities at the end of their useful lives. The estimate has been based on 2P reserves, price levels and technology at the balance sheet date. The payment dates of decommissioning costs are dependent on the lives of the facilities, but utilisation of the provision is expected to occur until the 2040s.

(iv) The sale/purchase contract loss provision relates mainly to North America Business wind farm power purchase agreements. The majority of the provision is expected to be utilised by 2021.

(v) Other provisions have been made for dilapidations, insurance, legal and various other claims.

(vi) Includes amounts transferred to disposal groups held for sale.

22. Post-retirement benefits

The Group manages a number of final salary and career average defined benefit pension schemes. It also has defined contribution schemes. The majority of these schemes are in the UK.

(a) Summary of main post-retirement benefit schemes

Name of scheme	Type of benefit	Status	Country	Number of active members as at 31 December 2019	Total membership as at 31 December 2019
Centrica Engineers Pension Scheme	Defined benefit final salary pension	Closed to new members in 2006	UK	2,699	8,503
Centrica Pension Plan	Defined benefit career average pension	Open to service engineers only	UK	3,223	5,579
Centrica Pension Scheme	Defined benefit final salary pension	Closed to new members in 2003	UK	2,219	8,506
Centrica Pension Scheme	Defined benefit final salary pension	Closed to new members in 2003	UK	2	10,421
	Defined benefit career average pension	Closed to new members in 2008	UK	1,051	4,103
	Defined contribution pension	Open to new members	UK	12,873	19,204
Bord Gáis Energy Company Defined Benefit Pension Scheme	Defined benefit final salary pension	Closed to new members in 2014	Republic of Ireland	126	173
Bord Gáis Energy Company Defined Contribution Pension Plan	Defined contribution pension	Open to new members	Republic of Ireland	246	316
Direct Energy Marketing Limited Pension Plan	Defined benefit final salary pension	Closed to new members in 2004	Canada	6	361
Direct Energy Marketing Limited	Post-retirement benefits	Closed to new members in 2012	Canada	7	270

The Centrica Engineers Pension Scheme (CEPS), Centrica Pension Plan (CPP) and Centrica Pension Scheme (CPS) form the significant majority of the Group's defined benefit obligation and are referred to below as the 'Registered Pension Schemes'. The other schemes are individually, and in aggregate, immaterial.

Independent valuations

The Registered Pension Schemes are subject to independent valuations at least every three years, on the basis of which the qualified actuary certifies the rate of employer contributions, which together with the specified contributions payable by the employees and proceeds from the schemes' assets, are expected to be sufficient to fund the benefits payable under the schemes.

The latest full actuarial valuations were carried out at the following dates: the Registered Pension Schemes at 31 March 2018, the Bord Gáis Energy Company Defined Benefit Pension Scheme at 1 January 2017 and the Direct Energy Marketing Limited Pension Plan at 1 January 2018. These have been updated to 31 December 2019 for the purpose of meeting the requirements of IAS 19. Investments held in all schemes have been valued for this purpose at market value.

Governance

The Registered Pension Schemes are managed by trustee companies whose boards consist of both company-nominated and member-nominated Directors. Each scheme holds units in the Centrica Combined Common Investment Fund (CCCIF), which holds the majority of the combined assets of the Registered Pension Schemes. The board of the CCCIF is currently comprised of nine directors: three independent directors, three directors appointed by Centrica plc (including the Chairman) and one director appointed by each of the three Registered Pension Schemes.

Under the terms of the Pensions Act 2004, Centrica plc and each trustee board must agree the funding rate for its defined benefit pension scheme and a recovery plan to fund any deficit against the scheme-specific statutory funding objective. This approach was first adopted for the triennial valuations completed at 31 March 2006, and has been reflected in subsequent valuations, including the 31 March 2018 valuation.

22. Post-retirement benefits

(b) Risks

The Registered Pension Schemes expose the Group to the following risks:

Asset volatility

The pension liabilities are calculated using a discount rate set with reference to AA corporate bond yields. If the growth in plan assets is lower than this, this will create an actuarial loss within other equity. The CCCIF is responsible for managing the assets of each scheme in line with the risk tolerances (which were updated in 2019) that have been set by the trustees of the schemes, and invests in a diversified portfolio of assets. The schemes are relatively young in nature (the schemes opened in 1997 on the formation of Centrica plc on demerger from BG plc (formerly British Gas plc), and only took on past service liabilities in respect of active employees. The trustees have significantly reduced their risk tolerance in 2019, increasing inflation and interest rate hedges from one third to two thirds. This has resulted in a significant reduction of return-seeking assets within the portfolio, as well as a higher weighting to assets that better manage downside risk. This can be seen in the change of asset portfolio mix in section (f) of this note.

Interest rate

A decrease in the bond interest rate will increase the net present value of the pension liabilities. The relative immaturity of the schemes means that the duration of the liabilities is longer than average for typical UK pension schemes, resulting in a relatively higher exposure to interest rate risk. The trustees took action to materially reduce this risk in 2019.

Inflation

Pensions in deferment, pensions in payment and pensions accrued under the career average schemes increase in line with the Retail Prices Index (RPI) and the Consumer Prices Index (CPI). Therefore, scheme liabilities will increase if inflation is higher than assumed, although in some cases caps are in place to limit the impact of significant movements in inflation. Furthermore, a pension increase exchange (PIE) option implemented in 2015 is available to future retirees, which gives the choice to receive a higher initial pension in return for giving up certain future increases linked to RPI, again limiting the impact of significant movements in inflation.

Longevity

The majority of the schemes' obligations are to provide benefits for the life of scheme members and their surviving spouses; therefore increases in life expectancy will result in an increase in the pension liabilities. The relative immaturity of the schemes means that there is comparatively little observable mortality data to assess the rates of mortality experienced by the schemes, and means that the schemes' liabilities will be paid over a long period of time, making it particularly difficult to predict the life expectancy of the current membership. Furthermore, pension payments are subject to inflationary increases, resulting in a higher sensitivity to changes in life expectancy.

Salary

Pension liabilities are calculated by reference to the future salaries of active members, and hence salary rises in excess of assumed increases will increase scheme liabilities. During 2011, changes were introduced to the final salary sections of CEPS and CPP such that annual increases in pensionable pay are capped to 2%, resulting in a reduction in salary risk. During 2016, a salary cap on pensionable pay for the CPS career average and CPP schemes was implemented, and in 2019 a similar change took place for CEPS. All of the 2011, 2016 and 2019 changes result in a reduction in salary risk.

Foreign exchange

Certain assets held by the CCCIF are denominated in foreign currencies, and hence their values are subject to exchange rate risk.

The CCCIF has long-term hedging policies in place to manage interest rate, inflation and foreign exchange risks.

The table below analyses the total liabilities of the Registered Pension Schemes, calculated in accordance with accounting principles, by type of liability, as at 31 December 2019.

Total liabilities of the Registered Pension Schemes	2019
31 December	%
Actives – final salary – capped	18
Actives – final salary – uncapped and crystallised benefits	4
Actives – career average	6
Deferred pensioners	33
Pensioners	39
	100

22. Post-retirement benefits

(c) Accounting assumptions

The accounting assumptions for the Registered Pension Schemes are given below:

31 December	2019 %	2018 %
Major assumptions used for the actuarial valuation		
Rate of increase in employee earnings:		
Subject to 2% cap	1.6	1.7
Other not subject to cap	2.1	2.2
Rate of increase in pensions in payment	2.9	3.1
Rate of increase in deferred pensions:		
In line with CPI capped at 2.5%	1.9	2.0
In line with RPI	2.9	3.1
Discount rate	2.2	3.0

The assumptions relating to longevity underlying the pension liabilities at the balance sheet date have been based on a combination of standard actuarial mortality tables, scheme experience and other relevant data, and include an allowance for future improvements in mortality. The longevity assumptions for members in normal health are as follows:

31 December	2019		2018	
	Male Years	Female Years	Male Years	Female Years
Currently aged 65	22.6	24.1	22.9	24.5
Currently aged 45	23.9	25.6	24.3	26.0

The other demographic assumptions have been set having regard to the latest trends in scheme experience and other relevant data. The assumptions are reviewed and updated as necessary as part of the periodic actuarial valuations of the pension schemes.

For the Registered Pension Schemes, marginal adjustments to the assumptions used to calculate the pension liability, or significant swings in bond yields or stock markets, can have a large impact in absolute terms on the net assets of the Group. Reasonably possible changes as at 31 December to one of the actuarial assumptions would have affected the scheme liabilities as set out below:

31 December	2019		2018	
	Increase/ decrease in assumption	Indicative effect on scheme liabilities %	Increase/ decrease in assumption	Indicative effect on scheme liabilities %
Rate of increase in employee earnings subject to 2% cap	0.25%	+/-0	0.25%	+/-0
Rate of increase in pensions in payment and deferred pensions	0.25%	+/-5	0.25%	+/-5
Discount rate	0.25%	-/+6	0.25%	-/+6
Inflation assumption	0.25%	+/-5	0.25%	+/-5
Longevity assumption	1 year	+/-3	1 year	+/-3

The indicative effects on scheme liabilities have been calculated by changing each assumption in isolation and assessing the impact on the liabilities. For the reasonably possible change in the inflation assumption, it has been assumed that a change to the inflation assumption would lead to corresponding changes in the assumed rates of increase in uncapped pensionable pay, pensions in payment and deferred pensions.

The remaining disclosures in this note cover all of the Group's defined benefit schemes.

(d) Amounts included in the Group Balance Sheet

31 December	2019 £m	2018 £m
Fair value of plan assets	8,999	8,487
Present value of defined benefit obligation	(9,162)	(8,566)
Net liability recognised in the Group Balance Sheet	(163)	(79)
Pension liability presented in the Group Balance Sheet as:		
Retirement benefit assets	56	223
Retirement benefit liabilities	(219)	(302)

The Trust Deed and Rules for the Registered Pension Schemes provide the Group with a right to a refund of surplus assets assuming the full settlement of scheme liabilities. No asset ceiling restrictions have been applied in the consolidated Financial Statements.

22. Post-retirement benefits

(e) Movements in the year

	2019		2018	
	Pension liabilities £m	Pension assets £m	Pension liabilities £m	Pension assets £m
1 January	(8,566)	8,487	(9,337)	8,451
Items included in the Group Income Statement:				
Current service cost	(87)	–	(120)	–
Contributions by employer in respect of employee salary sacrifice arrangements ⁽ⁱ⁾	(29)	–	(29)	–
Total current service cost	(116)	–	(149)	–
Past service credit/(cost) ⁽ⁱⁱ⁾	260	–	(41)	–
Interest (expense)/income	(242)	241	(239)	218
Items included in the Group Statement of Comprehensive Income:				
Returns on plan assets, excluding interest income	–	204	–	(145)
Actuarial gain from changes to demographic assumptions	229	–	42	–
Actuarial (loss)/gain from changes in financial assumptions	(1,286)	–	912	–
Actuarial gain/(loss) from experience adjustments	388	–	(17)	–
Exchange adjustments	–	–	1	–
Items included in the Group Cash Flow Statement:				
Employer contributions	–	320	–	216
Contributions by employer in respect of employee salary sacrifice arrangements	–	29	–	29
Other movements:				
Benefits paid from schemes	285	(285)	277	(277)
Other	(3)	3	6	(5)
Transfers from provisions for other liabilities and charges	(111)	–	(21)	–
31 December	(9,162)	8,999	(8,566)	8,487

(i) A salary sacrifice arrangement was introduced on 1 April 2013 for pension scheme members. The contributions paid via the salary sacrifice arrangement have been treated as employer contributions and included within the current service cost, with a corresponding reduction in salary costs.

(ii) A £252 million past service credit was recognised in the year in relation to a rule amendment during December 2019 to the UK defined benefit pension scheme arrangements to offer members an option to level up their ongoing pension, if they retire before the statutory retirement age, and an £8 million past service credit was recognised in relation to changes made to future service benefits from June 2019. A £41 million past service cost was recognised in 2018 as a result of GMP equalisation.

In addition to current service cost on the Group's defined benefit pension schemes, the Group also charged £75 million (2018: £58 million) to operating profit in respect of defined contribution pension schemes, including a one-off defined contribution payment of £8 million, to facilitate scheme changes, part of restructuring costs in note 7. This included contributions of £20 million (2018: £17 million) paid via a salary sacrifice arrangement.

(f) Pension scheme assets

The market values of plan assets were:

	2019			2018		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
31 December						
Equities	188	346	534	1,991	351	2,342
Corporate bonds	2,646	–	2,646	1,118	–	1,118
High-yield debt	1,015	1,288	2,303	595	1,360	1,955
Liability matching assets	1,430	1,075	2,505	1,581	994	2,575
Property	–	316	316	–	395	395
Cash pending investment	695	–	695	102	–	102
	5,974	3,025	8,999	5,387	3,100	8,487

Unquoted assets are valued by the fund managers with reference to the expected cash flows associated with the assets. These valuations are reviewed annually as part of the CCCIF audit. Included within equities are £nil of ordinary shares of Centrica plc (2018: £1 million) via pooled funds that include a benchmark allocation to UK equities. Included within corporate bonds are £nil (2018: £nil) of bonds issued by Centrica plc held within pooled funds over which the CCCIF has no ability to direct investment decisions. Apart from the investment in the Scottish Limited Partnerships which form part of the asset-backed contribution arrangements described in section (g) of this note, no direct investments are made in securities issued by Centrica plc or any of its subsidiaries or property leased to or owned by Centrica plc or any of its subsidiaries.

22. Post-retirement benefits

Included within the Group Balance Sheet within non-current securities are £103 million (2018: £91 million) of investments, held in trust on behalf of the Group, as security in respect of the Centrica Unfunded Pension Scheme. Of the pension scheme liabilities above, £62 million (2018: £63 million) relate to this scheme. More information on the Centrica Unfunded Pension Scheme is included in the Remuneration Report on pages 82 to 93.

(g) Pension scheme contributions

The Group estimates that it will pay £67 million of ordinary employer contributions during 2020 for its defined benefit schemes, at an average rate of 19% of pensionable pay, together with £32 million of contributions paid via a salary sacrifice arrangement. At 31 March 2018 (the date of the latest full agreed actuarial valuations) the weighted average duration of the liabilities of the Registered Pension Schemes was 22 years.

For the Registered Pension Schemes the latest actuarial valuation as at 31 March 2018 has been finalised with the Pension Trustees. The technical provisions deficit was £1,402 million. The Group has committed to additional annual cash contributions to fund this pension deficit. The overall deficit contributions, including the previously disclosed asset-backed contribution arrangements, totalled £223 million in 2019, and will amount to £175 million per annum from 2020 to 2025, with a balancing payment of £93 million in 2026. The Group has paid £12 million of pension strains in 2019. For redundancies between 1 July 2019 and 30 June 2021, a deferral arrangement is in place, up to a limit of £240 million. As a result, there has also been a matching increase, to £1,235 million, of the security package over certain of the Group's assets, enforceable in the unlikely event the Group is unable to meet its obligations.

On a pure roll-forward basis, from 31 March 2018, using the same methodology and consequent assumptions, the technical provisions deficit would be c.£1.6 billion at the reporting date. Note that the next triennial review is scheduled for 31 March 2021, and the valuation methodology and assumptions may differ from those previously used.

23. Commitments and contingencies

(a) Commitments

Commitments are not held on the Group's Balance Sheet as these are executory arrangements, and relate to amounts that we are contractually required to pay in the future as long as the other party meets its contractual obligations.

The Group's commitments in relation to commodity purchase contracts disclosed below are stated net of amounts receivable under commodity sales contracts where there is a right of offset with the counterparty, and are based on the expected minimum quantities of gas and other commodities that the Group is contracted to buy at estimated future prices.

The commitments in this note differ in scope and in basis from the maturity analysis of energy derivatives disclosed in note S3, as only certain procurement and sales contracts are within the scope of IFRS 9 and included in note S3 and the volumes used in calculating the maturity analysis in note S3 are estimated using valuation techniques, rather than being based on minimum contractual quantities.

The Group's 20-year agreement with Cheniere to purchase 89bcf per annum of LNG volumes for export from the Sabine Pass liquefaction plant in the US commits the Group to capacity payments of £3.9 billion (included in 'LNG capacity' below) between 2019 and 2039. It also allows the Group to make up to £6.3 billion of commodity purchases based on market gas prices and foreign exchange rates as at the balance sheet date. The first commercial delivery was September 2019.

During 2019, the Group signed a 20-year agreement to purchase LNG volumes from Mozambique LNG1 Company. The commercial start date is 2025 and under this agreement the Group anticipates making £8.2 billion of commodity purchases, based on a mixture of market gas and oil prices.

23. Commitments and contingencies

31 December	2019 £m	2018 £m
Commitments in relation to the acquisition of property, plant and equipment:	299	392
Commitments in relation to the acquisition of intangible assets:		
Renewable obligation certificates	3,756	4,326
Other intangible assets	762	592
Other commitments:		
Commodity purchase contracts	46,411	48,055
LNG capacity	4,282	4,371
Transportation capacity	1,117	1,013
Other long-term commitments ⁽ⁱ⁾	747	669

(i) Other long-term commitments include amounts in respect of executory contracts, power station tolling fees and the smart meter roll-out programme.

The maturity analysis for commodity purchase contract commitments at 31 December is given below:

31 December	Commodity purchase contract commitments	
	2019 £billion	2018 £billion
<1 year	11.3	13.9
1–2 years	6.2	7.9
2–3 years	4.1	5.2
3–4 years	3.7	4.0
4–5 years	3.2	4.0
>5 years	17.9	13.1
	46.4	48.1

The Group enters into lease arrangements for assets including property, vehicles and assets used within the exploration and production business. Refer to note 1 for details.

The carrying amount, additions and depreciation charge associated with right-of-use assets is disclosed in note 13 and the interest expense arising on the Group's lease liability is disclosed in note 8. The total cash outflow in the year for lease arrangements was £240 million and the maturity analysis of cash flows associated with the Group's lease liability at the reporting date is shown in note S3.

The table below provides further information on amounts not included in the lease liability and charged to the Group Income Statement during the year.

Year ended 31 December	2019 £m	2018 £m
Expense related to short-term leases	47	N/A
Expense related to variable lease payments ⁽ⁱ⁾	23	59

(i) 2018 represents contingent rents paid.

During the year, the Group's expense related to short-term lease commitments predominantly related to the hire of LNG vessels and exploration and production drilling rigs. The commitment at the balance sheet date also relates to assets of a similar nature. The Group does not have any material sub-lease or sale and leaseback arrangements. The Group does not have any material arrangements in which it acts as a lessor.

23. Commitments and contingencies

(b) Guarantees and indemnities

This section discloses any guarantees and indemnities that the Group has given, where we may have to provide security in the future against existing and future obligations that will remain for a specific period.

In connection with the Group's energy trading, transportation and upstream activities, certain Group companies have entered into contracts under which they may be required to prepay, provide credit support or provide other collateral in the event of a significant deterioration in creditworthiness. The extent of credit support is contingent upon the balance owing to the third party at the point of deterioration.

As at 31 December 2019, £651 million (2018: £612 million) of letters of credit and on-demand payment bonds have been issued in respect of decommissioning obligations included in the Group Balance Sheet.

(c) Contingent liabilities

The Group has no material contingent liabilities.

24. Sources of finance

(a) Capital structure

The Group seeks to maintain an efficient capital structure with a balance of net debt and equity as shown in the table below:

31 December	2019 £m	2018 £m
Net debt	3,181	2,656
Shareholders' equity	1,212	3,145
Capital	4,393	5,801

Debt levels are restricted to limit the risk of financial distress and, in particular, to maintain a strong credit profile. The Group's credit standing is important for several reasons: to maintain a low cost of debt, limit collateral requirements in energy trading, hedging and decommissioning security arrangements, and to ensure the Group is an attractive counterparty to energy producers and long-term customers.

The Group monitors its current and projected capital position on a regular basis, considering a medium-term view of at least three years, and different stress case scenarios, including the impact of changes in the Group's credit ratings and significant movements in commodity prices. A number of financial ratios are monitored, including those used by the credit rating agencies.

The level of debt that can be raised by the Group is restricted by the Company's Articles of Association. Borrowings is limited to the higher of £10 billion and a gearing ratio of three times adjusted capital and reserves. The Group funds its long-term debt requirements through issuing bonds in the capital markets and taking bank debt. Short-term debt requirements are met primarily through commercial paper or short-term bank borrowings. The Group maintains substantial committed facilities and uses these to provide liquidity for general corporate purposes, including short-term business requirements and back-up for commercial paper.

British Gas Insurance Limited (BGIL) is required under PRA regulations to hold a minimum capital amount and has complied with this requirement in 2019 (and 2018). BGIL's capital management policy and plan is subject to review and approval by the BGIL board. Reporting processes provide relevant and timely capital information to management and the board. A medium-term capital management plan forms part of BGIL's planning and forecasting process, embedded into approved timelines, management reviews and board approvals.

(b) Liquidity risk management and going concern

The Group has a number of treasury and risk policies to monitor and manage liquidity risk. Cash forecasts identifying the Group's liquidity requirements are produced regularly and are stress-tested for different scenarios, including, but not limited to, reasonably possible increases or decreases in commodity prices and the potential cash implications of a credit rating downgrade. The Group seeks to ensure that sufficient financial headroom exists for at least a 12-month period to safeguard the Group's ability to continue as a going concern. It is the Group's policy to maintain committed facilities and/or available surplus cash resources of at least £1,200 million, raise at least 75% of its gross debt (excluding non-recourse debt) in the capital market and to maintain an average term to maturity in the recourse long-term debt portfolio greater than five years.

At 31 December 2019, the Group had undrawn committed credit facilities of £3,072 million (2018: £3,879 million) and £1,167 million (2018: £1,079 million) of unrestricted cash and cash equivalents. 95% (2018: 93%) of the Group's gross debt has been raised in the long-term debt market and the average term to maturity of the long-term debt portfolio was 10.6 years (2018: 11.1 years).

The Group's liquidity is impacted by the cash posted or received under margin and collateral agreements. The terms and conditions of these agreements depend on the counterparty and the specific details of the transaction. Cash is generally returned to the Group or by the Group within two days of trade settlement. Refer to section (c) of this note for the movement in cash posted or received as collateral.

The level of undrawn committed bank facilities and available cash resources has enabled the Directors to conclude that the Group has sufficient headroom to continue as a going concern. The statement of going concern is included in the Governance section – Other Statutory Information, on page 102.

24. Sources of finance

(c) Net debt summary

Net debt predominantly includes capital market borrowings offset by cash, cash posted or received as collateral, securities and certain hedging financial instruments used to manage interest rate and foreign exchange movements on borrowings.

Presented in the derivatives and current and non-current borrowings, leases and interest accruals columns shown below are the assets and liabilities that give rise to financing cash flows.

	Current and non-current borrowings, leases and interest accruals £m	Derivatives £m	Gross debt £m	Other assets and liabilities				Net debt £m
				Cash and cash equivalents, net of bank overdrafts (i) (ii) £m	Collateral posted/(received) £m	Current and non-current securities (iii) £m	Sub-lease assets £m	
1 January 2018	(6,171)	266	(5,905)	2,737	336	236	–	(2,596)
Net cash outflow from purchase of securities	–	–	–	(76)	–	76	–	–
Cash outflow from payment of capital element of finance leases	56	–	56	(56)	–	–	–	–
Cash outflow from repayment of borrowings	1,516	(38)	1,478	(1,617)	–	–	–	(139)
Remaining cash inflow and movement in cash posted/received under margin and collateral agreements	–	–	–	441	(57)	–	–	384
Revaluation	39	25	64	–	–	(6)	–	58
Financing interest paid	288	(20)	268	(305)	–	–	–	(37)
Increase in interest payable and amortisation of borrowings	(262)	–	(262)	–	–	–	–	(262)
New finance lease agreements	(36)	–	(36)	–	–	–	–	(36)
Exchange adjustments	(44)	–	(44)	4	11	1	–	(28)
31 December 2018	(4,614)	233	(4,381)	1,128	290	307	–	(2,656)
Incremental lease liability recognised on transition to IFRS 16 ^(iv)	(402)	–	(402)	–	–	–	–	(402)
Recognition of sub-lease asset on transition to IFRS 16 ^(iv)	–	–	–	–	–	–	8	8
1 January 2019 post-adoption of IFRS 16	(5,016)	233	(4,783)	1,128	290	307	8	(3,050)
Net cash inflow from sale and purchase of securities	–	–	–	50	–	(51)	–	(1)
Cash outflow from payment of capital element of leases	155	–	155	(155)	–	–	–	–
Cash outflow from repayment of borrowings	86	–	86	(86)	–	–	–	–
Remaining cash inflow and movement in cash posted/received under margin and collateral agreements	–	–	–	104	46	–	(3)	147
Revaluation	(57)	11	(46)	–	–	6	–	(40)
Financing interest paid	220	(10)	210	(243)	–	–	–	(33)
Increase in interest payable and amortisation of borrowings	(229)	–	(229)	–	–	–	–	(229)
New lease agreements and re-measurement of existing lease liabilities	(47)	–	(47)	–	–	–	–	(47)
Business disposals and asset purchases	3	–	3	–	–	(6)	–	(3)
Exchange adjustments	90	–	90	(4)	(10)	(1)	–	75
31 December 2019	(4,795)	234	(4,561)	794	326	255	5	(3,181)

(i) Cash and cash equivalents includes £175 million (2018: £189 million) of restricted cash. This includes cash totalling £48 million (2018: £100 million) within the Spirit Energy business that is not restricted by regulation but is managed by its own treasury department.

(ii) Cash and cash equivalents are net of £548 million bank overdrafts (2018: £140 million).

(iii) Securities balances include £124 million (2018: £126 million) of index-linked gilts which the Group uses for short-term liquidity management purposes. Securities balances also include £77 million (2018: £68 million) debt instruments and £54 million (2018: £45 million) equity instruments, all measured at fair value, as described in note 1. Securities include no deposits with maturities greater than three months (2018: £68 million).

(iv) Following the adoption of IFRS 16 on 1 January 2019, the Group has recognised incremental lease liabilities and sub-lease assets within net debt. See note 1 for further details.

24. Sources of finance

Collateral is posted or received to support energy trading and procurement activities. It is posted when contracts with marginable counterparties are out of the money and received when contracts are in the money. These positions reverse when contracts are settled and the collateral is returned. Collateral received or posted is included in the following lines of the Group Balance Sheet:

31 December	2019 £m	2018 £m
Collateral posted/(received) included within:		
Trade and other payables	(35)	(157)
Trade and other receivables	155	446
Net derivative liabilities	199	1
Inventories	7	–
Net collateral posted	326	290

(d) Borrowings, leases and interest accruals summary

31 December	Coupon rate %	Principal m	2019			2018		
			Current £m	Non-current £m	Total £m	Current £m	Non-current £m	Total £m
Bank overdrafts			(548)	–	(548)	(140)	–	(140)
Bank loans (> 5 year maturity)			–	(144)	(144)	–	(149)	(149)
Bonds (by maturity date):								
1 February 2019	3.213	€100	–	–	–	(90)	–	(90)
25 September 2020	Floating	US\$80	(60)	–	(60)	–	(63)	(63)
22 February 2022	3.680	HK\$450	–	(44)	(44)	–	(45)	(45)
10 March 2022 ⁽ⁱ⁾	6.375	£246	–	(254)	(254)	–	(255)	(255)
16 October 2023 ⁽ⁱⁱ⁾	4.000	US\$302	–	(234)	(234)	–	(237)	(237)
4 September 2026 ⁽ⁱⁱⁱ⁾	6.400	£52	–	(57)	(57)	–	(56)	(56)
16 April 2027	5.900	US\$70	–	(52)	(52)	–	(55)	(55)
13 March 2029 ^(iv)	4.375	£552	–	(574)	(574)	–	(553)	(553)
5 January 2032 ⁽ⁱⁱ⁾	Zero	€50	–	(59)	(59)	–	(60)	(60)
19 September 2033 ⁽ⁱ⁾	7.000	£770	–	(790)	(790)	–	(769)	(769)
16 October 2043	5.375	US\$367	–	(272)	(272)	–	(283)	(283)
12 September 2044	4.250	£550	–	(538)	(538)	–	(537)	(537)
25 September 2045	5.250	US\$50	–	(37)	(37)	–	(38)	(38)
10 April 2075 ⁽ⁱⁱⁱ⁾	5.250	£450	–	(460)	(460)	–	(449)	(449)
10 April 2076 ^(iv)	3.000	€750	–	(634)	(634)	–	(672)	(672)
			(60)	(4,005)	(4,065)	(90)	(4,072)	(4,162)
Obligations under lease arrangements			(166)	(337)	(503)	(59)	(159)	(218)
Interest accruals			(83)	–	(83)	(85)	–	(85)
			(857)	(4,486)	(5,343)	(374)	(4,380)	(4,754)

(i) Bonds or portions of bonds maturing in 2022, 2023, 2026, 2029, 2033 and 2075 have been designated in a fair value hedge relationship. See note S5 for details of hedge relationships.

(ii) €50 million of zero coupon notes have an accrual yield of 4.200%, which will result in a €14 million repayment on maturity.

(iii) The Group has the right to repay at par on 10 April 2025 and every interest payment date thereafter.

(iv) The Group has the right to repay at par on 10 April 2021 and every interest payment date thereafter.

25. Share capital

Ordinary share capital represents the total number of shares issued which are publicly traded. We also disclose the number of own and treasury shares the Company holds, which the Company has bought itself, principally as part of the share repurchase programme.

Allotted and fully paid share capital of the Company	2019	2018
31 December	£m	£m
5,829,597,044 ordinary shares of 6 ¹⁴ / ₈₁ pence each (2018: 5,727,912,880)	360	354

During the year 102 million new ordinary shares were issued at an average price of 94.4 pence for the scrip dividends, total value of £96 million. The closing price of one Centrica ordinary share on 31 December 2019 was 89.3 pence (2018: 134.9 pence). Centrica employee share ownership trusts purchase Centrica ordinary shares from the open market and receive treasury shares to satisfy future obligations of certain employee share schemes. The movements in own and treasury shares during the year are shown below:

	Own shares (i)		Treasury shares (i) (ii)	
	2019 million shares	2018 million shares	2019 million shares	2018 million shares
1 January	5.8	5.3	31.3	42.1
Shares purchased	1.6	8.2	–	–
Treasury shares placed into trust	1.0	1.1	(1.0)	(1.1)
Shares released to employees on vesting (ii)	(4.7)	(8.8)	(20.1)	(9.7)
31 December ⁽ⁱ⁾	3.7	5.8	10.2	31.3

(i) The closing balance in the treasury and own share reserve of own shares was £5 million (2018: £10 million) and treasury shares was £32 million (2018: £97 million).

(ii) Includes shares purchased by employees under share purchase schemes for a value of £1 million.

26. Events after the balance sheet date

The Group updates disclosures in light of new information being received, or a significant event occurring, in the period between 31 December 2019 and the date of this report.

Dividends

The Directors propose a final dividend of 3.50 pence per ordinary share (totalling £204 million) for the year ended 31 December 2019. The dividend will be submitted for formal approval at the Annual General Meeting to be held on 11 May 2020 and, subject to approval, will be paid on 22 June 2020 to those shareholders registered on 11 May 2020.

King's Lynn power station

On 23 December 2019, the Group agreed to sell its 382MW King's Lynn CCGT power station to RWE Generation for headline consideration of £105 million, adjusted for final working capital, based on a valuation date of 31 December 2019. The deal completed on 12 February 2020.

Supplementary information

Supplementary information includes additional information and disclosures we are required to make by accounting standards or regulation.

S1. General information

Centrica plc (the 'Company') is a public company limited by shares, domiciled and incorporated in the UK, and registered in England and Wales. The address of the registered office is Millstream, Maidenhead Road, Windsor, Berkshire, SL4 5GD. The Company, together with its subsidiaries comprise the 'Group'. The nature of the Group's operations and principal activities are set out in note 4(a) and on pages 2 to 54. The consolidated Financial Statements of Centrica plc are presented in pounds sterling. Operations and transactions conducted in currencies other than pounds sterling are included in the consolidated Financial Statements in accordance with the foreign currencies accounting policy set out in note S2.

S2. Summary of significant accounting policies

This section sets out the Group's significant accounting policies in addition to the critical accounting policies applied in the preparation of these consolidated Financial Statements. Unless otherwise stated, these accounting policies have been consistently applied to the years presented.

Basis of consolidation

The Group Financial Statements consolidate the Financial Statements of the Company and entities controlled by the Company. Subsidiaries are all entities (including structured entities) over which the Group has control. Control is exercised over an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases. Transactions with non-controlling interests that relate to their ownership interests and do not result in a loss of control are accounted for as equity transactions.

The results of subsidiaries acquired or disposed of during the year are consolidated from the effective date of acquisition (at which point the Group gains control over a business as defined by IFRS 3, and applies the acquisition method to account for the transaction as a business combination) or up to the effective date of disposal, as appropriate. Where necessary, adjustments are made to the Financial Statements of subsidiaries, associates and joint ventures to align the accounting policies with those used by the Group.

When the Group ceases to have control, any retained interest in the entity is re-measured to its fair value with the change in carrying amount recognised in profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as a joint venture, associate or financial asset.

Segmental reporting

The Group's operating segments are reported in a manner consistent with the internal reporting provided to and regularly reviewed by the Group's Executive Committee (which is the Group's Chief Operating Decision Maker as defined by IFRS 8: 'Operating segments') for the purposes of evaluating segment performance and allocating resources.

The Group redefined its operating segments during the year, to reflect the way the business is now organised. Information relating to the prior year has been represented in line with the new segmental structure.

Revenue

Energy supply to business and residential customers

The vast majority of contractual energy supply arrangements have no fixed duration, require no minimum consumption by the customer and can be terminated by either party at any time. No enforceable rights and obligations exist at inception of the contract and arise only once the cooling off period is complete and the Group is the legal supplier of energy to the customer. The performance obligation is the supply of energy over the contractual term; the units of supply represent a series of distinct goods that are substantially the same with the same pattern of transfer to the customer. The performance obligation is considered to be satisfied as the customer consumes based on the units of energy delivered. This is the point at which revenue is recognised. In respect of energy supply contracts, the Group considers that it has the right to consideration from the customer for an amount that corresponds directly with the invoiced value delivered to the customer through their consumption. The Group's assessment of the amount that it has a right to invoice includes an assessment of energy supplied to customers between the date of the last meter reading and the year end (known as unread revenue). Unread gas and electricity comprises both billed and unbilled revenue and is estimated through the billing systems, using historical consumption patterns, on a customer-by-customer basis, taking into account weather patterns, load forecasts and the differences between actual meter readings being returned and system estimates. Actual meter readings continue to be compared to system estimates between the balance sheet date and the finalisation of the accounts.

The Group holds a number of energy supply contracts that specify a minimum consumption volume over a specified contractual term. The transaction price for these contracts is the minimum supply volume multiplied by the contractually agreed price per unit of energy. Revenue from the sale of additional volumes is considered to be variable and not included in the transaction price. Revenue for these contracts continues to be recognised as invoiced.

S2. Summary of significant accounting policies

Energy services provided to business and residential customers

Energy services relate to the installation, repair and maintenance of central heating, ventilation and air conditioning systems.

In the UK, delivery of an item is considered a separate performance obligation to the installation of the item, both satisfied at a point in time. Delivery is the point at which control passes to the customer as the customer takes physical possession of the asset. It is also the point at which the Group has the right to consideration. Delivery and installation usually occur at the same point in time and consequently revenue is recognised for both performance obligations simultaneously.

Certain heating, ventilation and air conditioning (HVAC) system installations in North America are considered to be a single performance obligation satisfied over time, representing the Group's promise to deliver to the customer a functioning HVAC system. Revenue is recognised on an input basis with reference to costs incurred.

Sales of own gas and liquid production

Revenue arising from the sale of produced gas is recognised in a manner consistent with energy supply contracts with the revenue recognition profile reflecting the supply of gas to the customer. In respect of oil sales, each barrel of oil is considered a separate performance obligation satisfied at a point in time – on delivery.

The rights and obligations identifiable within a contract where the Group holds sellers' nomination rights are considered to be enforceable from inception of the contract. The transaction price for the contract will include variable consideration based on forecast production and market prices. The point at which the performance obligation is satisfied and revenue recognised is the point at which control of the commodity passes to the customer according to the contractual trading terms, usually on shipment or delivery to a specified location.

Revenue arising from contracts outside the scope of IFRS 15

Revenue from sources other than the Group's contracts with customers is recognised in accordance with the relevant standard, as detailed below:

Fixed-fee service and insurance contracts: revenue from these contracts is recognised in the Group Income Statement with regard to the incidence of risk over the life of the contract, reflecting the seasonal propensity of claims to be made under the contracts and the benefits receivable by the customer, which span the life of the contract as a result of emergency maintenance being available throughout the contract term.

Amounts paid in advance are treated as deferred income, with any amount in arrears recognised as accrued income.

Revenue from the production of natural gas, oil and condensates in which the Group has an interest with other producers is recognised based on the Group's working interest and the terms of the relevant production sharing arrangements (the entitlement method). Where differences arise between production sold and the Group's share of production, this is accounted for as an overlift or underlift (see separate accounting policy).

Cost of sales

Energy supply includes the cost of gas and electricity produced and purchased during the year for own-use contracts, taking into account the industry reconciliation process for total gas and total electricity usage by supplier and related transportation, distribution, royalty costs and bought-in materials and services.

Cost of sales relating to fixed-fee service and insurance contracts includes direct labour and related overheads on installation work, repairs and service contracts in the year.

Cost of sales relating to gas and oil production includes depreciation of assets used in production of gas and oil, royalty costs and direct labour costs.

Cost of sales within power generation businesses includes the depreciation of assets included in generating power, fuel purchase costs, direct labour costs and carbon emissions costs.

Re-measurement and settlement of energy contracts

Re-measurement and settlement of energy contracts includes both realised (settled) commodity sales and purchase contracts in the scope of IFRS 9, as well as unrealised (fair value changes) on active contracts, as detailed further in notes 1 and 2.

Financing costs

Financing costs that arise in connection with the acquisition, construction or production of a qualifying asset are capitalised and subsequently amortised in line with the depreciation of the related asset. Financing costs not arising in connection with the acquisition, construction or production of a qualifying asset are expensed.

Supplementary information continued

S2. Summary of significant accounting policies

Foreign currencies

The consolidated Financial Statements are presented in pounds sterling, the functional currency of the Company and the Group's presentational currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency. Transactions in foreign currencies are initially recorded in the functional currency of the entity at the exchange rate ruling at the date of the transaction.

Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency rate of exchange ruling at the balance sheet date and exchange movements included in the Group Income Statement for the period. In previous periods, the Group utilised net investment hedging and historic exchange differences will remain in equity until the disposal of the specific investments.

Non-monetary items that are measured at historical cost in a currency other than the functional currency of the entity concerned are translated using the exchange rate prevailing at the dates of the initial transaction.

For the purpose of presenting consolidated Financial Statements, the assets and liabilities of the Group's non-sterling functional currency subsidiary undertakings, joint ventures and associates are translated into pounds sterling at exchange rates prevailing at the balance sheet date. The monthly results of these (generally foreign) subsidiary undertakings, joint ventures and associates are translated into pounds sterling each month at the average rates of exchange for that month. The closing exchange rates, and the average of the rates used to translate the results of foreign operations to pounds sterling are shown below.

Exchange rate per pound sterling (£)	Closing rate at 31 December		Average rate for the year ended 31 December	
	2019	2018	2019	2018
US dollars	1.33	1.28	1.28	1.33
Canadian dollars	1.72	1.74	1.69	1.73
Euro	1.18	1.11	1.14	1.13
Norwegian krone	11.65	11.04	11.25	10.87
Danish krone	8.83	8.32	8.52	8.42

Exchange adjustments arising from the retranslation of the opening net assets and results of non-sterling functional currency operations are transferred to the Group's foreign currency translation reserve, a separate component of equity, and are reported in other comprehensive income. In the event of the disposal of a non-sterling functional currency subsidiary, the cumulative translation difference arising in the foreign currency translation reserve is charged or credited to the Group Income Statement on disposal.

Employee share schemes

The Group operates a number of employee share schemes, detailed in the Remuneration Report on pages 82 to 93, under which it makes equity-settled share-based payments to certain employees. Equity-settled share-based payments are measured at fair value at the date of grant (excluding the effect of non-market-based vesting conditions). The fair value determined at the grant date is expensed on a straight-line basis together with a corresponding increase in equity over the vesting period, based on the Group's estimate of the number of awards that will vest, and adjusted for the effect of non-market-based vesting conditions.

The majority of the share-based payment charge arises from the On Track Incentive Plan. This scheme is applicable to senior executives, and senior and middle management. Shares issued under the scheme vest subject to continued employment within the Group in two stages (half after two years and the other half after three years). Employees leaving prior to the vesting date will normally forfeit their rights to unvested share awards. The fair value of the awards is measured using the market value at the date of grant.

More information is included in the Remuneration Report on pages 82 to 93.

S2. Summary of significant accounting policies

Business combinations and goodwill

The acquisition of subsidiaries is accounted for using the acquisition method (at the point the Group gains control over a business as defined by IFRS 3). The cost of the acquisition is measured as the cash paid and the aggregate of the fair values, at the date of exchange, of other assets transferred, liabilities incurred or assumed, and equity instruments issued by the Group in exchange for control of the acquiree.

The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement at the acquisition date.

Acquisition-related costs are expensed as incurred. The identifiable assets, liabilities and contingent liabilities are recognised at their fair value at the acquisition date, except for non-current assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5: 'Non-current assets held for sale and discontinued operations'. The Group recognises any non-controlling interests in the acquiree either at fair value or at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets.

Goodwill arising on a business combination represents the excess of the consideration transferred, the amount of the non-controlling interests and the acquisition date fair value of any previously held interest in the acquiree over the Group's interest in the fair value of the identifiable net assets acquired. Goodwill arising on the acquisition of a stake in a joint venture or an associate represents the excess of the consideration transferred over the Group's interest in the fair value of the identifiable assets and liabilities of the investee at the date of acquisition. Goodwill is initially recognised as an asset at cost and is subsequently measured at cost less any accumulated impairment losses. The goodwill arising on an investment in a joint venture or in an associate is not recognised separately, but is shown under 'Interests in joint ventures and associates' in the Group Balance Sheet. If, after reassessment, the Group's interest in the net fair value of the acquiree's identifiable assets, liabilities and contingent liabilities exceeds the cost of the business combination, the excess is recognised immediately in the Group Income Statement.

Acquisitions of joint operations that meet the definition of a business as defined in IFRS 3 are accounted for as business combinations.

On disposal of a subsidiary, associate or joint venture entity, any amount of goodwill attributed to that entity is included in the determination of the profit or loss on disposal. A similar accounting treatment is applied on disposal of assets that represent a business.

Other intangible assets

Intangible assets acquired separately are measured on initial recognition at cost.

Capitalisation begins when expenditure for the asset is being incurred and activities necessary to prepare the asset for use are in progress and ceases when substantially all the activities that are necessary to prepare the asset for use are complete. Amortisation commences at the point of commercial deployment. The cost of intangible assets acquired in a business combination is their fair value as at the date of acquisition.

Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and any accumulated impairment losses. Intangible assets with finite lives are amortised over their useful lives and are tested for impairment annually and whenever there is an indication that the asset could be impaired. The amortisation period and method for an intangible asset are reviewed at each financial year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for on a prospective basis by changing the amortisation period or method, as appropriate, and treated as changes in accounting estimates.

Intangible assets are derecognised on disposal, or when no future economic benefits are expected from their use.

Intangible assets with indefinite useful lives are not amortised but tested for impairment annually, and whenever there is an indication that the intangible asset could be impaired, either individually or at the CGU level. The indefinite life assessment is reviewed annually and, if not supportable, the change in the useful life assessment from indefinite to finite is made on a prospective basis.

The useful economic lives for the principal categories of intangible assets are as follows:

Customer relationships and other contractual assets	Up to 20 years
Strategic identifiable acquired brands	Indefinite
Application software	Up to 15 years

Strategic identifiable acquired brands are deemed to have indefinite lives where evidence suggests that the brand will generate net cash inflows for the Group for an indefinite period.

EU Emissions Trading Scheme and renewable obligation certificates

Purchased carbon dioxide emissions allowances are recognised initially at cost (purchase price) within intangible assets. The liability is measured at the cost of purchased allowances up to the level of purchased allowances held, and then at the market price of allowances ruling at the balance sheet date, with movements in the liability recognised in operating profit.

Forward contracts for the purchase or sale of carbon dioxide emissions allowances are measured at fair value with gains and losses arising from changes in fair value recognised in the Group Income Statement. The intangible asset is surrendered and the liability is extinguished at the end of the compliance period to reflect the consumption of economic benefits.

Purchased renewable obligation certificates are recognised initially at cost within intangible assets. A liability for the renewables obligation is recognised based on the level of electricity supplied to customers, and is calculated in accordance with percentages set by the UK Government and the renewable obligation certificate buyout price for that period.

The intangible asset is surrendered and the liability is extinguished at the end of the compliance period to reflect the consumption of economic benefits. Any recycling benefit related to the submission of renewable obligation certificates is recognised in the Group Income Statement when received.

Supplementary information continued

S2. Summary of significant accounting policies

Exploration, evaluation, development and production assets

The Group uses the successful efforts method of accounting for exploration and evaluation expenditure. Exploration and evaluation expenditures associated with an exploration well, including acquisition costs related to exploration and evaluation activities are capitalised initially as intangible assets. Certain expenditures such as geological and geophysical exploration costs are expensed. If the prospects are subsequently determined to be successful on completion of evaluation, the relevant expenditure is transferred to PP&E. If the prospects are subsequently determined to be unsuccessful, the associated costs are expensed in the period in which that determination is made.

All field development costs are capitalised as PP&E. Such costs relate to the acquisition and installation of production facilities and include development drilling costs, project-related engineering and other technical services costs. PP&E, including rights and concessions related to production activities, are depreciated from the commencement of production in the fields concerned, using the unit of production method, based on all of the 2P reserves of those fields. Changes in these estimates are dealt with prospectively.

The net carrying value of fields in production and development is compared annually on a field-by-field basis with the likely discounted future net revenues to be derived from the remaining commercial reserves. An impairment loss is recognised where it is considered that recorded amounts are unlikely to be fully recovered from the net present value of future net revenues. Exploration assets are reviewed annually for indicators of impairment and production and development assets are tested annually for impairment.

Interests in joint arrangements and associates

The Group's joint ventures and associates (as defined in note 6) are accounted for using the equity method.

The Group's interests in joint operations (gas and oil exploration and production licence arrangements) are accounted for by recognising its assets (including its share of assets held jointly), its liabilities (including its share of liabilities incurred jointly), its revenue from the sale of its share of the output arising from the joint operation, its share of the revenue from the sale of the output by the joint operation and its expenses (including its share of any expenses incurred jointly).

Where the Group has an equity stake or a participating interest in operations governed by a joint arrangement for which it is acting as operator, an assessment is carried out to confirm whether the Group is acting as agent or principal. As the terms and conditions negotiated between business partners usually provide joint control to the parties over the relevant activities of the gas and oil fields that are governed by joint arrangements, the Group is usually deemed to be an agent when it is appointed as operator and not as principal (as the contracts entered into do not convey control to the parties). Accordingly, the Group recognises its interests in these arrangements as outlined above except that it presents gross liabilities and gross receivables of joint operations (including amounts due to or from non-operating partners) in the Group Balance Sheet in accordance with the netting rules of IAS 32: 'Financial instruments – presentation'.

Property, plant and equipment

PP&E is included in the Group Balance Sheet at cost, less accumulated depreciation and any provisions for impairment.

Subsequent expenditure in respect of items of PP&E, such as the replacement of major parts, major inspections or overhauls, are capitalised as part of the cost of the related asset where it is probable that future economic benefits will arise as a result of the expenditure and the cost can be reliably measured. All other subsequent expenditure is expensed as incurred.

Freehold land is not depreciated. Other PP&E, with the exception of upstream production assets (see above), are depreciated on a straight-line basis at rates sufficient to write off the cost, less estimated residual values, of individual assets over their estimated useful lives. The depreciation periods for the principal categories of assets are as follows:

Freehold and leasehold buildings	Up to 50 years
Plant	Five to 20 years
Equipment and vehicles	Three to 10 years
Power generation assets	Up to 30 years

The carrying values of PP&E are tested annually for impairment and are reviewed for impairment when events or changes in circumstances indicate that the carrying value may not be recoverable. Residual values and useful lives are reassessed annually and, if necessary, changes are accounted for prospectively.

S2. Summary of significant accounting policies

Impairment assumptions

The Group tests the carrying amounts of goodwill, PP&E and intangible assets (with the exception of exploration assets) for impairment at least annually. Interests in joint ventures and associates and exploration assets are reviewed annually for indicators of impairment and tested for impairment where such an indicator arises. Where an asset does not generate cash flows that are independent from other assets, the Group estimates the recoverable amount of the CGU to which the asset belongs. The recoverable amount is the higher of value in use (VIU) and fair value less costs of disposal (FVLCD).

At inception, goodwill is allocated to each of the Group's CGUs or groups of CGUs that expect to benefit from the business combination in which the goodwill arose. If the recoverable amount of an asset (or CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or CGU) is reduced to its recoverable amount. Any impairment is expensed immediately in the Group Income Statement. Any CGU impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the CGU and then to the other assets of the CGU pro rata on the basis of the carrying amount of each asset in the CGU.

Further information on the assumptions used in the VIU calculations and FVLCD calculations that resulted in impairment or impairment reversals during the year can be found at note 7.

VIU – Key assumptions used

Pre-tax cash flows used in the VIU calculations are derived from the Group's Board-approved business plans, and assumptions specific to the nature and life of the asset. The Group's business plans and assumptions are based on past experience and adjusted to reflect market trends, economic conditions and key risks. Commodity prices used in the planning process are based in part on observable market data and in part on estimates. Note S6 provides additional detail on the active period of each of the commodity markets in which the Group operates.

(a) VIU – Growth rates and discount rates

Unless stated otherwise in the table below, cash flows beyond the planned period have been extrapolated using long-term growth rates in the market where the CGU operates. Long-term growth rates are determined using a blend of publicly available historical data and long-term growth rate forecasts published by external analysts. Cash flows are discounted using a discount rate specific to each CGU. Discount rates reflect the current market assessments of the time value of money and are based on the estimated cost of capital of each CGU. Additionally, risks specific to the cash flows of the CGUs are reflected within cash flow forecasts. Each CGU's weighted average cost of capital is then adjusted to reflect the impact of tax in order to calculate an equivalent pre-tax discount rate.

Long-term growth rates and pre-tax discount rates used in the VIU calculations for each of the Group's CGUs are shown below.

	UK Home %	UK Business %	Ireland %	North America Home (i) %	North America Business (i) %	Centrica Home Solutions %	Centrica Business Solutions (turbines/engines /battery) (ii) %	Energy Marketing & Trading %	Nuclear (ii) %
2019									
Growth rate to perpetuity (including inflation)	2.0	2.0	1.2	2.1/2.0	2.1/2.0	2.0	N/A	2.0	N/A
Pre-tax discount rate	7.8	7.8	7.4	8.7	9.0	10.8	9.0	8.4	8.4
2018									
Growth rate to perpetuity (including inflation)	2.1	2.1	1.4	2.2/2.0	2.2/2.0	2.2/2.1	N/A	2.1	N/A
Pre-tax discount rate	8.2	8.2	7.8	9.1	11.0	12.3/11.1	8.2	9.9	9.2

(i) US/Canada respectively.

(ii) Cash flows arising after the plan period have been derived from forecasts to the end of the asset lives. Due to the nature of these finite-lived assets this provides a more appropriate valuation in later years.

(iii) US/UK respectively.

Supplementary information continued

S2. Summary of significant accounting policies**(b) VIU – Inflation rates**

Inflation rates used in the business plan were based on a blend of publicly available inflation forecasts and range from 1.1% to 2.2%.

(c) Key operating assumptions by CGUs using VIU

The key operating assumptions across all CGUs are gross margin, revenues and operating costs. These assumptions are tailored to the specific CGU using management's knowledge of the environment, as shown in the table below:

CGU	Gross margin	Revenues	Operating costs
All – base assumptions	Existing customers: based on contractual terms. Losses are forecast based on historic data and future expectations of the market. New customers and renewals: based on gross margins achieved in the period leading up to the date of the business plan. Both adjusted for current market conditions and cost of goods inflation. For the Services business, future sales and related gross margins are based on planned future product sales and contract losses based upon past performance and future expectations of the competitive environment.	Existing customers: based on contractual terms. Losses are forecast based on historic data and future expectations of the market. Adjusted for: growth forecasts which are based on sales and marketing activity, recent customer acquisitions and the current economic environment in the UK. Gas and electricity revenues based on forward market prices. Market share: percentage immediately prior to business plan.	Wages: projected headcount in line with expected efficiency programme. Salary increases based on inflation expectations. Credit losses: historical assumptions regarding realised cash losses have been updated to reflect the current environment.
North America Home (Residential energy supply and services)	Existing customers: gross margins achieved in the period leading up to the date of the business plan. Adjusted for: competitor data. For the Services business, adjustments are made for current economic conditions and the status of the housing market as appropriate.	Market share: average percentage immediately prior to business plan. For the Services business, the market share is based on historical growth trends and planned sales activities by individual market sectors. Adjusted for: expectations of growth or decline to reflect competitive differences. For the Services business, adjustments are made for new product offerings and continued penetration into new markets.	Customer acquisition: based on experience of costs required to support acquisition, renewal and other servicing activities.
North America Business (Business energy supply and trading)	New customers and renewals: based on gross margins achieved historically.	Market share: based on historical growth trends and planned sales activities by individual market sector. Adjusted for: prices based on contractual terms for fixed-price contracts and forward market curves for both gas and electricity in Canada and the US.	As above.

S2. Summary of significant accounting policies

CGU	Gross margin	Revenues	Operating costs
Energy Marketing & Trading	Trading business: Existing and new markets: management's estimate of future trading performance.	As above.	Future development: increase in costs to support growth forecasts, adjusted for planned business process efficiencies.
Centrica Business Solutions (turbines/ engines)	Based on forecast revenues, operations and maintenance costs, grid network and balancing system charges for the asset life.	Based on forward and contracted prices for commodity, capacity market and grid ancillary service contracts for the asset life. No capacity market revenue until October 2019, but resuming prospectively thereafter.	Based on run-rate and forecast changes, including expected inflation for the asset life.

FVLCD – key assumptions used

Centrica Business Solutions

A FVLCD calculation has been performed to value the customer CGU within Centrica Business Solutions. Post-tax cash flows used in the FVLCD calculation for the first five years are based on the Group's Board-approved business plans, and strategic shape assumptions and, thereafter, are based on long-term production and cash flow forecasts based on terminal values, which management believes reflects the assumptions of a market participant.

The future post-tax cash flows are discounted using a post-tax nominal discount rate of 7.5% (2018: 8.5%) to determine the FVLCD. The discount rate and inflation rate used in the FVLCD calculation are determined in the same manner as the rates used in the VIU calculations described above, with the exception of the adjustment required to determine an equivalent pre-tax discount rate.

Overlift and underlift

Off-take arrangements for gas and oil produced from joint operations are often such that it is not practical for each participant to receive or sell its precise share of the overall production during the period. This results in short-term imbalances between cumulative production entitlement and cumulative sales, referred to as overlift and underlift.

An overlift payable, or underlift receivable, is recognised at the balance sheet date within trade and other payables or trade and other receivables respectively, and is measured at market value, with movements in the period recognised within cost of sales.

Leases

Details of the Group's accounting policy in respect of the IFRS 16: Leases which applied from 1 January 2019 are given in note 1.

In the prior year the determination of whether an arrangement is, or contains, a lease required an assessment of whether the fulfilment of the arrangement was dependent on the use of a specific asset or assets and whether the arrangement conveyed a right to use the asset or assets. Leases were classified as finance leases whenever the terms of the lease transferred substantially all the risks and rewards of ownership to the lessee. All other leases were classified as operating leases. Assets held under finance leases were capitalised and included in PP&E at their fair value or, if lower, at the present value of the minimum lease payments, each determined at the inception of the lease. The obligations relating to finance leases, net of finance charges in respect of future periods, were included within bank loans and other borrowings, with the amount payable within 12 months included in bank overdrafts, loans and other borrowings within current liabilities.

Lease payments were apportioned between finance charges and the reduction of the finance lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges were charged directly against income.

Payments under operating leases were charged to the Group Income Statement on a straight-line basis over the term of the relevant lease.

Supplementary information continued

S2. Summary of significant accounting policies

Inventories

Inventories of finished goods are valued at the lower of cost (using weighted-average cost) or estimated net realisable value after allowance for redundant and slow-moving items. The cost of inventories includes the purchase price plus costs of conversion incurred in bringing the inventories to their present location and condition.

Inventory of gas in storage is valued either on a weighted-average cost basis or at fair value less any costs to sell depending on the business model for holding the inventory. Changes in fair value less costs to sell are recognised in the Group Income Statement.

Oil inventory is measured at fair value, being the spot price at the balance sheet date.

Decommissioning costs

Provision is made for the net present value of the estimated cost of decommissioning gas and oil production facilities at the end of the producing lives of fields and power stations at the end of their useful lives, based on price levels and technology at the balance sheet date.

When this provision relates to an asset with sufficient future economic benefits, a decommissioning asset is recognised and included as part of the associated PP&E and depreciated accordingly. The asset is subject to impairment review as detailed above. Changes in estimates and discount rates are dealt with prospectively and reflected as an adjustment to the provision and corresponding decommissioning asset included within PP&E. The unwinding of the discount on the provision is included in the Group Income Statement within financing costs.

Non-current assets and disposal groups held for sale and discontinued operations

Non-current assets and disposal groups classified as held for sale are measured at the lower of carrying amount and fair value less costs of disposal. No depreciation is charged in respect of non-current assets classified as held for sale.

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable, the asset or disposal group is available for immediate sale in its present condition and the Directors are committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

The profits or losses and cash flows that relate to a major component of the Group that has been sold or is classified as held for sale are presented separately from continuing operations as discontinued operations within the Group Income Statement and Group Cash Flow Statement.

Pensions and other post-employment benefits

The Group operates a number of defined benefit and defined contribution pension schemes. The cost of providing benefits under the defined benefit schemes is determined separately for each scheme using the projected unit credit actuarial valuation method. Actuarial gains and losses are recognised in the period in which they occur in other comprehensive income.

The cost of providing retirement pensions and other benefits is charged to the Group Income Statement over the periods benefiting from employees' service. Past service cost is recognised immediately. Costs of administering the schemes are charged to the Group Income Statement. Net interest, being the change in the net defined benefit liability or asset due to the passage of time, is recognised in the Group Income Statement within net finance cost.

The net defined benefit liability or asset recognised in the Group Balance Sheet represents the present value of the defined benefit obligation of the schemes and the fair value of the schemes' assets. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits are paid, and that have terms of maturity approximating to the terms of the related pension liability.

Payments to defined contribution retirement benefit schemes are recognised in the Group Income Statement as they fall due.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, that can be measured reliably, and it is probable that the Group will be required to settle that obligation. Provisions are discounted to present value where the effect is material.

Where discounting is used, the increase in the provision due to the passage of time is recognised in the Group Income Statement within interest expense. Onerous contract provisions are recognised where the unavoidable costs of meeting the obligations under a contract exceed the economic benefits expected to be received under it. Contracts to purchase or sell energy are reviewed on a portfolio basis given the fungible nature of energy, whereby it is assumed that the highest priced purchase contract supplies the highest priced sales contract and the lowest priced sales contract is supplied by the lowest priced purchase contract.

Taxation

Current tax, including UK corporation tax, UK petroleum revenue tax and foreign tax is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date. From time to time, the Group may have open tax issues with a number of revenue authorities. Where an outflow of funds is believed to be probable and a reliable estimate of the dispute can be made, management provides for its best estimate of the liability. These estimates take into account the specific circumstances of each dispute and relevant external advice as well as the rules and regulations of the relevant tax authority in the jurisdiction of the dispute. Often the Group is unable to predict whether an uncertain tax treatment will be accepted by the relevant authority. In such instances the effects of uncertainty are reflected in management's assessment of the most likely outcome of each issue, as reviewed and updated on a regular basis. Each item is considered separately and on a basis that provides the better prediction of the outcome, unless the Group determines that it is appropriate to group certain items for consideration. See note 9 for further details on uncertain tax provisions.

S2. Summary of significant accounting policies

Deferred tax is recognised in respect of all temporary differences identified at the balance sheet date, except to the extent that the deferred tax arises from the initial recognition of goodwill, or the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting profit nor taxable profit and loss. Temporary differences are differences between the carrying amount of the Group's assets and liabilities and their tax base.

Deferred tax liabilities may be offset against deferred tax assets within the same taxable entity or qualifying local tax group. Any remaining deferred tax asset is recognised only when, on the basis of all available evidence, it can be regarded as probable that there will be suitable taxable profits, within the same jurisdiction, in the foreseeable future, against which the deductible temporary difference can be utilised.

Deferred tax is provided on temporary differences arising on subsidiaries, joint ventures and associates, except where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the asset is realised or liability settled, based on tax rates and laws that have been enacted or substantively enacted by the balance sheet date. Measurement of deferred tax liabilities and assets reflects the tax consequences expected from the manner in which the asset or liability is recovered or settled.

Financial instruments

Financial assets and financial liabilities are recognised in the Group Balance Sheet when the Group becomes a party to the contractual provisions of the instrument. Financial assets are derecognised when the Group no longer has the rights to cash flows, the risks and rewards of ownership or control of the asset. Financial liabilities are derecognised when the obligation under the liability is discharged, cancelled or expires.

(a) Trade receivables

Trade receivables are initially recognised at fair value, which is usually the original invoice amount, and are subsequently held at amortised cost using the effective interest method less an allowance for impairment losses. Balances are written off when recoverability is assessed as being remote. If collection is due in one year or less, receivables are classified as current assets. If not, they are presented as non-current assets.

(b) Trade payables

Trade payables are initially recognised at fair value, which is usually the original invoice amount and are subsequently held at amortised cost using the effective interest method. If payment is due within one year or less, payables are classified as current liabilities. If not, they are presented as non-current liabilities.

(c) Share capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares are shown in equity as a deduction from the proceeds received. Own equity instruments that are reacquired (treasury or own shares) are deducted from equity. No gain or loss is recognised in the Group Income Statement on the purchase, sale, issue or cancellation of the Group's own equity instruments.

(d) Cash and cash equivalents

Cash and cash equivalents comprise cash in hand and current balances with banks and similar institutions, which are readily convertible to known amounts of cash and which are subject to insignificant risk of changes in value and have an original maturity of three months or less. Cash and cash equivalents are presented net of outstanding bank overdrafts where there is a legal right of set off and, for the Group's cash pooling arrangements, to the extent the Group expects to settle its subsidiaries' year-end account balances on a net basis.

For the purpose of the Group Cash Flow Statement, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts.

(e) Interest-bearing loans and other borrowings

All interest-bearing loans and other borrowings with banks and similar institutions are initially recognised at fair value net of directly attributable transaction costs. After initial recognition, interest-bearing loans and other borrowings are subsequently measured at amortised cost using the effective interest method, except when they are hedged items in an effective fair value hedge relationship where the carrying value is also adjusted to reflect the fair value movements associated with the hedged risks. Such fair value movements are recognised in the Group Income Statement. Amortised cost is calculated by taking into account any issue costs, discount or premium.

(f) Financial instruments at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income are equity instruments that the Group has elected to recognise the changes in fair value of in other comprehensive income. They are recognised initially at fair value in the Group Balance Sheet and are re-measured subsequently at fair value with gains and losses arising from changes in fair value recognised directly in equity and presented in other comprehensive income. Accrued interest or dividends arising on these financial assets are recognised in the Group Income Statement.

If the Group assesses the need to recognise a loss allowance on a financial asset carried at fair value through other comprehensive income, the loss allowance is recognised in other comprehensive income; however, the recognition of a loss allowance does not impact the carrying value of the asset on the Group's balance sheet.

Cumulative gains and losses on equity instruments at fair value through other comprehensive income are not recycled to the Group Income Statement.

Supplementary information continued

S2. Summary of significant accounting policies

(g) Financial assets at fair value through profit or loss

The Group holds investments in gilts which it designates at fair value through profit or loss in order to eliminate asymmetry arising from the measurement of an index-linked derivative. Other debt instruments and money market funds are required to be measured at fair value through profit or loss under IFRS 9, as the assets are not held solely for the purpose of collecting contractual cash flows related to principal and interest. Both mandatory and designated instruments are measured at fair value on initial recognition and are re-measured to fair value in each subsequent reporting period. Gains and losses arising from changes in fair value are recognised in the Group Income Statement within investment income or financing costs.

(h) Derivative financial instruments

The Group routinely enters into sale and purchase transactions for physical delivery of gas, power and oil. A portion of these transactions take the form of contracts that were entered into and continue to be held for the purpose of receipt or delivery of the physical commodity in accordance with the Group's expected sale, purchase or usage requirements ('own use'), and are not within the scope of IFRS 9. The assessment of whether a contract is deemed to be 'own use' is conducted on a Group basis without reference to underlying book structures, business units or legal entities.

Certain purchase and sales contracts for the physical delivery of gas, power and oil are within the scope of IFRS 9 due to the fact that they net settle or contain written options. Such contracts are accounted for as derivatives under IFRS 9 and are recognised in the Group Balance Sheet at fair value. Gains and losses arising from changes in fair value on derivatives that do not qualify for hedge accounting are taken directly to the Group Income Statement for the year.

The Group uses a range of derivatives for both trading and to hedge exposures to financial risks, such as interest rates, foreign exchange and energy price risks, arising in the normal course of business. The use of derivative financial instruments is governed by the Group's policies which are approved by the Board of Directors. Further detail on the Group's risk management policies is included within the Strategic Report – Principal Risks and Uncertainties on pages 34 to 43 and in note S3.

The accounting treatment of derivatives is dependent on whether they are entered into for trading or hedging purposes. A derivative instrument is considered to be used for hedging purposes when it alters the risk profile of an underlying exposure of the Group in line with the Group's risk management policies and is in accordance with established guidelines. Certain derivative instruments used for hedging purposes are designated in hedge accounting relationships as described by IAS 39 (the Group has not applied the hedge accounting requirements of IFRS 9). In order to qualify for hedge accounting, the effectiveness of the hedge must be reliably measurable and documentation describing the formal hedging relationship must be prepared at the point of designation. The hedge must be highly effective in achieving its objective. The Group also holds derivatives that are used for hedging purposes which are not designated in hedge accounting relationships and are held for trading.

All derivatives are recognised at fair value on the date on which the derivative is entered into and are re-measured to fair value at each reporting date. Derivatives are carried as assets when the fair value is positive and as liabilities when the fair value is negative. Derivative assets and derivative liabilities are offset and presented on a net basis only when there is a currently enforceable legal right of set-off, and the intention to net settle the derivative contracts is present.

The Group enters into certain energy derivative contracts covering periods for which observable market data does not exist. The fair value of such derivatives is estimated by reference in part to published price quotations from active markets, to the extent that such observable market data exists, and in part by using valuation techniques, the inputs to which include data that is not based on or derived from observable markets. Where the fair value at initial recognition for such contracts differs from the transaction price, a fair value gain or fair value loss will arise. This is referred to as a day-one gain or day-one loss. Such gains and losses are deferred (not recognised) and amortised to the Group Income Statement based on volumes purchased or delivered over the contractual period until such time as observable market data becomes available. When observable market data becomes available, any remaining deferred day-one gains or losses are recognised within the Group Income Statement. Recognition of the gains or losses resulting from changes in fair value depends on the purpose for issuing or holding the derivative. For derivatives that do not qualify for hedge accounting, any gains or losses arising from changes in fair value are taken directly to the Group Income Statement and are included within gross profit or investment income and financing costs. Gains and losses arising on derivatives entered into for speculative energy trading purposes are presented on a net basis within revenue.

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contracts and the host contracts are not carried at fair value, with gains or losses reported in the Group Income Statement. The closely related nature of embedded derivatives is reassessed when there is a change in the terms of the contract that significantly modifies the future cash flows under the contract. Where a contract contains one or more embedded derivatives, and providing that the embedded derivative significantly modifies the cash flows under the contract, the option to fair value the entire contract may be taken and the contract will be recognised at fair value with changes in fair value recognised in the Group Income Statement.

S2. Summary of significant accounting policies

(i) Hedge accounting

The Group continues to apply the hedge accounting requirements of IAS 39 and has not adopted IFRS 9 hedge accounting.

For the purposes of hedge accounting, hedges are classified as either fair value hedges or cash flow hedges. Note S5 details the Group's accounting policies in relation to derivatives qualifying for hedge accounting under IAS 39.

(j) Impairment of financial assets

In accordance with IFRS 9, the Group has applied the expected credit loss model to financial assets measured at amortised cost and fair value through other comprehensive income.

For trade receivables, contract assets and finance lease receivables, the simplified approach is taken and the lifetime expected credit loss provided for.

For all other in-scope financial assets at the balance sheet date either the lifetime expected credit loss or a 12-month expected credit loss is provided for, depending on the Group's assessment of whether the credit risk associated with the specific asset has increased significantly since initial recognition. As the Group's financial assets are predominantly short term (less than 12 months), the impairment loss recognised is not materially different using either approach. Further details of the assumptions and inputs used to calculate expected credit losses are shown in note 17.

Nuclear activity

The Group's investment in Lake Acquisitions Limited ('Nuclear') is accounted for as an associate. The following accounting policies are specific to this nuclear activity.

(a) Fuel costs – nuclear front end

Front-end fuel costs consist of the costs of procurement of uranium, conversion and enrichment services, and fuel element fabrication. All costs are capitalised into inventory and charged to the Group Income Statement in proportion to the amount of fuel burnt.

(b) Fuel costs – nuclear back end

Advanced gas-cooled reactors (AGR)

Spent fuel extracted from the reactors is sent for reprocessing and/or long-term storage and eventual disposal of resulting waste products. Back-end fuel costs comprise of a loading-related cost per tonne of uranium and a rebate/surcharge to this cost which is dependent on the out-turn market electricity price and the amount of electricity generated from AGR stations in the year. These costs are capitalised into inventory and charged to the Group Income Statement in proportion to the amount of fuel burnt.

Pressurised water reactor (PWR)

Back-end fuel costs are based on wet storage in station ponds followed by dry storage and subsequent direct disposal of fuel. Back-end fuel costs are capitalised into inventory on loading and are charged to the Group Income Statement in proportion to the amount of fuel burnt.

(c) Nuclear property, plant and equipment – depreciation

The majority of the cost of the nuclear fleet is depreciated from the date of the Group acquiring its share of the fleet on a straight-line basis, with remaining depreciable periods currently of up to 16 years.

Other expenditure including amounts spent on major inspections and overhauls of production plant is depreciated over the period until the next outage which for AGR power stations is two to three years and for the PWR power station is 18 months.

(d) Nuclear Liabilities Fund (NLF) funding arrangements

Under the arrangements in place with the Secretary of State, the NLF will fund, subject to certain exceptions, qualifying uncontracted nuclear liabilities and qualifying decommissioning costs.

In part consideration for the assumption of these liabilities by the Secretary of State and the NLF, the former British Energy Group agreed to pay fixed decommissioning contributions each year and £150,000 (indexed to RPI) for every tonne of uranium in PWR fuel loaded into the Sizewell B reactor after the date of these arrangements.

(e) NLF and nuclear liabilities receivables

The UK Government indemnity is provided to indemnify any future shortfall on NLF funding of qualifying uncontracted nuclear liabilities (including PWR back-end fuel services) and qualifying nuclear decommissioning costs such that the receivable equals the present value of the associated qualifying nuclear liabilities (apart from a small timing difference due to timing of receipts from NLF).

(f) Nuclear liabilities

Nuclear liabilities represent provision for liabilities in respect of the costs of waste management of spent fuel and nuclear decommissioning.

(g) Unburnt fuels at shutdown

Due to the nature of the nuclear fuel process there will be quantities of unburnt fuel in the reactors at station closure. The costs relating to this unburnt fuel (final core) are fully provided for at the balance sheet date. The provision is based on a projected value per tonne of fuel remaining at closure, discounted back to the balance sheet date and recorded as a long-term liability.

Supplementary information continued

S3. Financial risk management

The Group's normal operating, investing and financing activities expose it to a variety of financial risks: market risk (including commodity price risk, currency risk and interest rate risk), credit risk and liquidity risk. The Group's overall financial risk management processes are designed to identify, manage and mitigate these risks.

Further detail on the Group's overall risk management processes is included within the Strategic Report – Principal Risks and Uncertainties on pages 34 to 43.

Commodity price risk management is carried out in accordance with individual business unit policies and directives including appropriate escalation routes.

Treasury risk management, including management of currency risk, interest rate risk and liquidity risk is carried out by a central Group Treasury function in accordance with the Group's financing and treasury policy, as approved by the Board.

The wholesale credit risks associated with commodity trading and treasury positions are managed in accordance with the Group's credit risk policy. Downstream customer credit risk management is carried out in accordance with individual business unit credit policies.

Market risk management

Market risk is the risk of loss that results from changes in market prices (commodity prices, foreign exchange rates and interest rates). The level of market risk to which the Group is exposed at a point in time varies depending on market conditions, expectations of future price or market rate movements and the composition of the Group's physical asset and contract portfolios.

(a) Commodity price risk management

The Group is exposed to commodity price risk in its energy procurement and supply activities, production, generation and trading operations and uses specific limits to manage the exposure to commodity prices associated with the Group's activities to an acceptable level. The Group uses Profit at Risk (PaR) limits to control exposures to market prices. These are complemented by other limits including Value at Risk (VaR), volumetric or stop-loss limits to control risk around trading activities.

(i) Energy price exposed business activities

The Group's price exposed business activities consist of equity gas and liquids production, equity power generation, bilateral procurement and sales contracts, market-traded purchase and sales contracts and derivative positions primarily transacted with the intent of securing gas and power for the Group's supply customers, from a variety of sources at an optimal cost. The Group actively manages commodity price risk by optimising its asset and contract portfolios and making use of volume flexibility.

The Group's commodity price risk exposure in its business activities is driven by the cost of procuring gas and electricity to serve its supply customers and selling gas, oil and electricity from its upstream production and generation, which varies with wholesale commodity prices. The primary risk is that market prices for commodities will fluctuate between the time that sales prices are fixed or tariffs are set and the time at which the corresponding procurement cost is fixed, thereby potentially reducing expected margins or making sales unprofitable.

The Group's supply activities are also exposed to volumetric risk in the form of an uncertain consumption profile arising from a range of factors, including the weather, energy consumption changes, customer attrition and the economic climate. There is also risk associated with ensuring that there is sufficient commodity available to secure supply to customers. The Group's production and generation activities are also exposed to volumetric risk in the form of uncertain production profiles.

In order to manage the exposure to market prices associated with the Group's business operations the Group uses a specific set of limits (including VaR and PaR) established by the Board, and sub-delegated downwards through the delegation lines to the commercial leaders.

PaR measures the estimated potential loss in a position or portfolio of positions associated with the movement of a commodity price for a given confidence level, over the remaining term of the position or contract. VaR measures the estimated potential loss for a given confidence level over a predetermined holding period. The standard confidence level used is 95%. In addition, regular stress and scenario tests are performed to evaluate the impact on the portfolio of possible substantial movements in commodity prices.

The Group measures and manages the commodity price risk associated with the Group's entire energy price exposed business portfolio. Only certain of the Group's energy contracts constitute financial instruments under IFRS 9 (see note S6).

As a result, while the Group manages the commodity price risk associated with both financial and non-financial energy procurement, sales and purchase contracts, it is the notional value of energy contracts being carried at fair value that represents the exposure of the Group's energy price exposed business activities to commodity price risk according to IFRS 7: 'Financial instruments: disclosures'. This is because energy contracts that are financial instruments under IFRS 9 are accounted for on a fair value basis and changes in fair value immediately impact profit. Conversely, energy contracts that are not financial instruments under IFRS 9 are accounted for as executory contracts and changes in fair value do not immediately impact profit and, as such, are not exposed to commodity price risk as defined by IFRS 7. So, whilst the PaR or VaR associated with energy procurement and supply contracts that are outside the scope of IFRS 9 are monitored for internal risk management purposes, only those energy contracts within the scope of IFRS 9 are within the scope of the IFRS 7 disclosure requirements.

(ii) Proprietary energy trading

The Group's proprietary energy trading activities consist of physical and financial commodity purchases and sales contracts taken on with the intent of benefiting from changes in market prices or differences between buying and selling prices. The Group conducts its trading activities in the over-the-counter market and through exchanges in the UK, North America and continental Europe. The Group is exposed to commodity price risk as a result of its proprietary energy trading activities because the value of its trading assets and liabilities will fluctuate with changes in market prices for commodities.

S3. Financial risk management

The Group sets volumetric and VaR limits to manage the commodity price risk exposure associated with the Group's proprietary energy trading activities. VaR measures the estimated potential loss at a 95% confidence level over a one-day holding period. The carrying value of energy contracts used in proprietary energy trading activities at 31 December 2019 is disclosed in note 19.

As with any modelled risk measure, there are certain limitations that arise from the assumptions used in the VaR calculation. VaR assumes that historical price behaviours will continue in the future and that the Group's trading positions can be unwound or hedged within the predetermined holding period. Furthermore, the use of a 95% confidence level, by definition, does not take into account changes in value that might occur beyond this confidence level.

(b) Currency risk management

The Group is exposed to currency risk on foreign currency denominated forecast transactions, firm commitments, monetary assets and liabilities (transactional exposure) and on its net investments in foreign operations (translational exposure). IFRS 7 only requires disclosure of currency risk arising on financial instruments denominated in a currency other than the functional currency of the commercial operation transacting. As a result, for the purposes of IFRS 7, currency risk excludes items that are not financial instruments, such as the Group's net investments in international operations as well as foreign currency denominated forecast transactions and firm commitments.

(i) Transactional currency risk

The Group is exposed to transactional currency risk on transactions denominated in currencies other than the underlying functional currency of the commercial operation transacting. The primary functional currencies remain pounds sterling in the UK, Canadian dollars in Canada, US dollars in the US, Norwegian krone in Norway, Danish krone in Denmark and euros in the Netherlands and the Republic of Ireland. The risk is that the functional currency value of cash flows will vary as a result of movements in exchange rates. Transactional exposure arises from the Group's energy procurement, production and generation activities, where many transactions are denominated in foreign currencies. In addition, in order to optimise the cost of funding, the Group has, in certain cases, issued foreign currency denominated debt or entered into foreign currency loans, primarily in US dollars, euros and Japanese yen.

It is the Group's policy to hedge material transactional exposures using derivatives (either applying formal hedge accounting or economic hedge relationships) to fix the functional currency value of non-functional currency cash flows, except where there is an economic hedge inherent in the transaction. At 31 December 2019, there were no material unhedged non-functional currency monetary assets or liabilities, firm commitments or probable forecast transactions (2018: £nil), other than transactions which have an inherent economic hedge and foreign currency borrowings used to hedge translational exposures.

(ii) Translational currency risk

The Group is exposed to translational currency risk as a result of its net investments in North America and Europe. The risk is that the pound sterling value of the net assets of foreign operations will decrease with changes in foreign exchange rates. The Group's policy is to protect the pounds sterling book value of its net investments in foreign operations where appropriate, subject to certain parameters, by holding foreign currency debt, entering into foreign currency derivatives, or a mixture of both.

The Group manages translational currency risk taking into consideration the cash impact of any hedging activity as well as the risk to the net asset numbers in the Group's Financial Statements. The translation hedging programme including the potential cash impact is managed by the Group Treasury function and monitored by the Chief Financial Officer.

(c) Interest rate risk management

In the normal course of business the Group borrows to finance its operations. The Group is exposed to interest rate risk because the fair value of fixed-rate borrowings and the cash flows associated with floating rate borrowings will fluctuate with changes in interest rates. The Group's policy is to manage the interest rate risk on long-term borrowings by ensuring the exposure to floating interest rates remains within a 30% to 70% range, including the impact of interest rate derivatives.

The return generated on the Group's cash balance is also exposed to movements in short-term interest rates. The Group manages cash balances to protect against adverse changes in rates whilst retaining liquidity.

(d) Sensitivity analysis

IFRS 7 requires disclosure of a sensitivity analysis that is intended to illustrate the sensitivity of the Group's financial position and performance to changes in market variables (commodity prices, foreign exchange rates and interest rates) as a result of changes in the fair value or cash flows associated with the Group's financial instruments. The sensitivity analysis provided discloses the effect on profit or loss and equity at 31 December 2019, assuming that a reasonably possible change in the relevant risk variable had occurred at 31 December 2019, and has been applied to the risk exposures in existence at that date to show the effects of reasonably possible changes in price on profit or loss and equity. Reasonably possible changes in market variables used in the sensitivity analysis are based on implied volatilities, where available, or historical data for energy prices and foreign exchange rates. Reasonably possible changes in interest rates are based on management judgement and historical experience.

The sensitivity analysis has been prepared based on 31 December 2019 balances and on the basis that the balances, the ratio of fixed to floating rates of debt and derivatives, the proportion of energy contracts that are financial instruments, the proportion of financial instruments in foreign currencies and the hedge designations in place at 31 December 2019 are all constant. Excluded from this analysis are all non-financial assets and liabilities and energy contracts that are not financial instruments under IFRS 9. The sensitivity to foreign exchange rates relates only to monetary assets and liabilities denominated in a currency other than the functional currency of the commercial operation transacting, and excludes the translation of the net assets of foreign operations to pounds sterling.

Supplementary information continued

S3. Financial risk management

The sensitivity analysis provided is hypothetical only and should be used with caution as the impacts provided are not necessarily indicative of the actual impacts that would be experienced. This is because the Group's actual exposure to market rates is changing constantly as the Group's portfolio of commodity, debt and foreign currency contracts changes. Changes in fair values or cash flows based on a variation in a market variable cannot be extrapolated because the relationship between the change in market variable and the change in fair value or cash flows may not be linear. In addition, the effect of a change in a particular market variable on fair values or cash flows is calculated without considering interrelationships between the various market rates or mitigating actions that would be taken by the Group. The sensitivity analysis provided excludes the impact of proprietary energy trading assets and liabilities because the VaR associated with the Group's proprietary energy trading activities is less than £5 million.

(i) Transactional currency risk

The Group has performed an analysis of the sensitivity of the Group's financial position and performance to changes in foreign exchange rates. The Group deems 10% movements to US dollar, Canadian dollar and euro currency rates relative to pounds sterling to be reasonably possible. The impact of such movements on profit and equity, both before and after taxation, is immaterial.

(ii) Interest rate risk

The Group has performed an analysis of the sensitivity of the Group's financial position and performance to changes in interest rates. The Group deems a one percentage point move in UK, US and euro interest rates to be reasonably possible. The impact of such movements on profit and equity, both after taxation, is immaterial.

(iii) Commodity price risk

The impacts of reasonably possible changes in commodity prices on profit and equity, both after taxation, based on the assumptions set out above are as follows:

	2019		2018	
	Base price (i)	Reasonably possible change in variable (ii) %	Base price (i)	Reasonably possible change in variable (ii) %
Energy prices				
UK gas (p/therm)	40	+/-15	54	+/-14
UK power (£/MWh)	45	+/-13	54	+/-12
UK emissions (€/tonne)	25	+/-7	26	+/-22
UK oil (US\$/bbl)	60	+/-9	56	+/-20
North American gas (US cents/therm)	24	+/-4	27	+/-4
North American power (US\$/MWh)	27	+/-6	34	+/-6
Incremental profit/(loss)			2019	2018
			Impact on profit (ii) £m	Impact on profit (ii) £m
UK energy prices (combined) – increase/(decrease)			39/(43)	18/(9)
North American energy prices (combined) – increase/(decrease)			287/(287)	280/(280)

(i) The base price represents the average forward market price over the duration of the active market curve used in the sensitivity analysis provided.

(ii) The reasonably possible change in variable and the impact on profit are calculated using both the active and inactive market curves for all UK energy prices.

The impact on other comprehensive income of such price changes is immaterial.

Credit risk management

Credit risk is the risk of loss associated with a counterparty's inability or failure to discharge its obligations under a contract.

The Group continually reviews its rating thresholds for relevant counterparty credit limits and updates these as necessary, based on a consistent set of principles. It continues to operate within its limits. In respect of trading activities for both the US and Europe there is an effort to maintain a balance between exchange-based trading and bilateral transactions. This allows for a reasonable balance between counterparty credit risk and potential liquidity requirements. In addition, the Group actively manages the trade-off between credit and liquidity risks by optimising the use of contracts with collateral obligations and physically settled contracts without collateral obligations.

S3. Financial risk management

The Group is exposed to credit risk in its treasury, trading, energy procurement and downstream activities. The maximum exposure to credit risk for financial instruments at fair value is equal to their carrying value and is shown by counterparty credit rating in the table below. Further details of other collateral and credit security not offset against these amounts is shown in note S6.

	2019				2018			
	Financial assets at amortised cost		Financial assets at fair value		Financial assets at amortised cost		Financial assets at fair value	
	Receivables including treasury, trading and energy procurement counterparties £m	Cash and cash equivalents £m	Cash and cash equivalents £m	Derivative financial instruments with positive fair values £m	Receivables including treasury, trading and energy procurement counterparties £m	Cash and cash equivalents £m	Cash and cash equivalents £m	Derivative financial instruments with positive fair values £m
31 December								
AAA to AA	148	–	621	31	82	–	781	13
AA– to A–	268	699	–	487	580	454	–	655
BBB+ to BBB–	580	8	–	763	601	15	–	738
BB+ to BB–	123	–	–	331	375	–	–	154
B+ or lower	10	–	–	32	15	–	–	61
Unrated ⁽ⁱ⁾	3,981	14	–	169	4,151	18	–	57
	5,110	721	621	1,813	5,804	487	781	1,678

(i) The unrated counterparty receivables primarily comprise amounts due from downstream customers, subsidiaries of rated entities, exchanges or clearing houses.

Details of how credit risk is managed across the asset categories are provided below:

(a) Treasury, trading and energy procurement activities

Wholesale counterparty credit exposures are monitored by individual counterparty and by category of credit rating, and are subject to approved limits. The Group uses master netting agreements to reduce credit risk and net settles payments with counterparties where net settlement provisions exist (see note S6 for details of amounts offset). In addition, the Group employs a variety of other methods to mitigate credit risk: margining, various forms of bank and parent company guarantees and letters of credit. See note 24 for details of cash posted or received under margin or collateral agreements.

100% of the Group's credit risk associated with its treasury, trading and energy procurement activities is with counterparties in related energy industries or with financial institutions. The impairment considerations of IFRS 9 are applicable to financial assets arising from treasury, trading and energy procurement activities that are carried at amortised cost and equity instruments that are carried at fair value through other comprehensive income (FVOCI). Equity instruments measured at FVOCI are not material for further disclosure.

Included in the table above within receivables including treasury, trading and energy procurement counterparties is £1,246 million of treasury, trading and energy procurement assets. The Group's risk assessment procedures and counterparty selection process ensure that the credit risk on this type of financial asset is always low at initial recognition, and is expected to continue to be assessed as low throughout the asset life. Therefore, the assumption that there has been no significant increase in credit risk since initial recognition applies, and accordingly the expected credit loss modelled is the 12-month expected credit loss, and is not material for further disclosure.

Included within the table above is information about the exposure to credit risk arising from only certain of the Group's energy procurement contracts – those in the scope of IFRS 9. Whilst the Group manages the credit risk associated with both financial and non-financial energy procurement contracts, it is the carrying value of financial assets within the scope of IFRS 9 (note S6) that represents the maximum exposure to credit risk in accordance with IFRS 7.

(b) Trade receivables and contract assets

The simplified approach of measuring lifetime expected credit losses has been applied to trade receivables and contract asset balances, which are the focus of this disclosure. Therefore, consideration of the significance of any change in credit risk since initial recognition for the purpose of applying this model is not required for any material component of the receivables balance.

In the case of business customers, credit risk is managed by checking a company's creditworthiness and financial strength both before commencing trade and during the business relationship. For residential customers, creditworthiness is ascertained normally before commencing trade to determine the payment mechanism required to reduce credit risk to an acceptable level. Certain customers will only be accepted on a prepayment basis or with a security deposit. In some cases, an ageing of receivables is monitored and used to manage the exposure to credit risk associated with both business and residential customers. In other cases, credit risk is monitored and managed by grouping customers according to method of payment or profile.

A sensitivity analysis on the further credit deterioration of receivables greater than 90 days past their due date is provided in note 17.

Liquidity risk management and going concern

Liquidity risk is the risk that the Group is unable to meet its financial obligations as they fall due. The Group experiences significant movements in its liquidity position due primarily to the seasonal nature of its business and margin cash arrangements associated with certain wholesale commodity contracts. To mitigate this risk the Group maintains significant committed facilities and holds cash on deposit. See note 24 for further information.

Supplementary information continued

S3. Financial risk management**Maturity profiles**

Maturities of derivative financial instruments, provisions, borrowings and leases are provided in the following tables (all amounts are remaining contractual undiscounted cash flows):

	<1 year £m	1 to 2 years £m	2 to 3 years £m	3 to 4 years £m	4 to 5 years £m	>5 years £m
Due for payment 2019						
Energy and interest derivatives in a loss position that will be settled on a net basis	(353)	(59)	(30)	(8)	(5)	(14)
Gross energy procurement contracts and other derivative buy trades carried at fair value ⁽ⁱ⁾	(4,506)	(2,651)	(1,763)	(1,812)	(2,033)	(1,602)
Foreign exchange derivatives that will be settled on a gross basis:						
Outflow	(4,378)	(1,721)	(345)	(34)	(2)	(59)
Inflow	4,367	1,818	341	32	–	96
Financial liabilities within provisions	(152)	(28)	(29)	(10)	(7)	(23)
Borrowings (bank loans, bonds, overdrafts and interest)	(808)	(834)	(469)	(391)	(154)	(4,473)
Leases: ⁽ⁱⁱ⁾						
Minimum lease payments	(171)	(132)	(65)	(37)	(30)	(95)
Capital elements of leases	(163)	(127)	(61)	(35)	(28)	(89)
Due for payment 2018						
Energy and interest derivatives in a loss position that will be settled on a net basis	(193)	(90)	(10)	(4)	(1)	4
Gross energy procurement contracts and other derivative buy trades carried at fair value ⁽ⁱ⁾	(4,323)	(3,280)	(2,363)	(1,756)	(2,018)	(3,629)
Foreign exchange derivatives that will be settled on a gross basis:						
Outflow	(4,630)	(1,001)	(910)	(120)	(2)	(61)
Inflow	4,638	995	1,041	113	–	102
Financial liabilities within provisions	(109)	(68)	(34)	(23)	(6)	(6)
Borrowings (bank loans, bonds, overdrafts and interest)	(435)	(267)	(875)	(472)	(401)	(4,669)
Finance leases: ⁽ⁱⁱ⁾						
Minimum lease payments	(68)	(76)	(59)	(19)	(14)	(2)
Capital elements of leases	(59)	(68)	(57)	(19)	(13)	(2)

(i) Proprietary energy trades are excluded from this maturity analysis as the Group does not take physical delivery of volumes traded under these contracts. The associated cash flows are expected to be equal to the contract fair value at the balance sheet date. See note 19 for further details.

(ii) The difference between the total minimum lease payments and the total capital elements of leases is due to future finance charges.

S4. Other equity

This section summarises the Group's other equity reserve movements.

	Cash flow hedging reserve £m	Foreign currency translation reserve £m	Actuarial gains and losses reserve £m	Financial asset at FVOCI reserve £m	Treasury and own shares reserve £m	Share-based payments reserve £m	Merger, capital redemption and other reserves £m	Total £m
1 January 2018	2	(172)	(1,286)	31	(142)	100	517	(950)
Adjustment on adoption of IFRS 9	–	–	–	(28)	–	–	–	(28)
Actuarial gain	–	–	792	–	–	–	–	792
Employee share schemes:								
Increase in own shares	–	–	–	–	(11)	–	–	(11)
Exercise of awards	–	–	–	–	46	(51)	–	(5)
Value of services provided	–	–	–	–	–	43	–	43
Impact of cash flow hedging	11	–	–	–	–	–	–	11
Taxation on above items	(2)	–	(135)	–	–	–	–	(137)
Share of other comprehensive loss of joint ventures and associates, net of taxation	–	–	(1)	–	–	–	–	(1)
Exchange adjustments	–	104	1	–	–	–	–	105
Other movements	–	–	–	(1)	–	–	8	7
31 December 2018	11	(68)	(629)	2	(107)	92	525	(174)
Actuarial loss	–	–	(465)	–	–	–	–	(465)
Employee share schemes:								
Exercise of awards	–	–	–	–	70	(60)	–	10
Value of services provided	–	–	–	–	–	41	–	41
Impact of cash flow hedging	(6)	–	–	–	–	–	–	(6)
Taxation on above items	2	–	78	–	–	–	–	80
Share of other comprehensive income of joint ventures and associates, net of taxation	–	–	29	–	–	–	–	29
Exchange differences on translation of foreign operations	–	(110)	–	–	–	–	–	(110)
Exchange differences reclassified to Group Income	–	–	–	–	–	–	–	–
Statement on disposal	–	(18)	–	–	–	–	–	(18)
Other movements	–	–	–	2	–	–	2	4
31 December 2019	7	(196)	(987)	4	(37)	73	527	(609)

Merger, capital redemption and other reserves

During February 1997, BG plc (formerly British Gas plc) demerged certain businesses (grouped together under GB Gas Holdings Limited (GBGH)) to form Centrica plc. Upon demerger, the share capital of GBGH was transferred to Centrica plc and was recorded at the nominal value of shares issued to BG plc shareholders. In accordance with the Companies Act 1985, no premium was recorded on the shares issued. On consolidation, the difference between the nominal value of the Company's shares issued and the amount of share capital and share premium of GBGH at the date of demerger was credited to a merger reserve.

On 8 December 2017, the Group's existing exploration and production business was combined with that of Bayerngas Norge AS to form the Spirit Energy business. The Group acquired 69% of the Spirit Energy business and Bayerngas Norge's former shareholders acquired 31%. The non-controlling interest established on acquisition has been based on its share of the carrying value of the combined business, with the other reserve representing the difference between the fair value and this carrying value.

In accordance with the Companies Act 1985, the Company has transferred to the capital redemption reserve an amount equal to the nominal value of shares repurchased and subsequently cancelled. Up to 31 December 2019 the cumulative nominal value of shares repurchased and subsequently cancelled was £28 million (2018: £26 million).

Own shares reserve

The own shares reserve reflects the cost of shares in the Company held in the Centrica employee share ownership trusts to meet the future requirements of the Group's share-based payment plans.

Treasury shares reserve

Treasury shares are acquired equity instruments of the Company.

Supplementary information continued

S5. Hedge accounting

The Group applies hedge accounting to address interest rate and foreign currency risk on borrowings.

For the purposes of hedge accounting, hedges are classified either as fair value hedges, cash flow hedges or, in previous periods, hedges of net investments in foreign operations.

The fair values of derivatives and primary financial instruments in hedge accounting relationships at 31 December were as follows:

31 December	Hedge	2019			2018		
		Assets £m	Liabilities £m	Change in fair value £m	Assets £m	Liabilities £m	Change in fair value £m
Interest rate risk	Fair value	105	(2)	55	59	(10)	3
Foreign exchange risk	Cash flow hedge	131	(2)	(44)	185	(1)	22

2019	Hedge	Timing of nominal amount	Average rate	Nominal value	Hedged item	Change in fair value of hedged item in year £m	Cumulative amount of fair value hedge adjustments on hedged item £m	Accumulated foreign exchange gain/(losses) in CFHR (i) £m
Interest rate risk	Fair value	2022 – 2033	Fixed to floating at LIBOR/US IBOR + 1% - 5%	£50 million - £550 million, \$250 million	Bonds ⁽ⁱⁱ⁾	(57)	(85)	N/A
Foreign exchange risk	Cash flow hedge	2021 – 2032	GBP to Euro at 1.356	€50 million, €750 million	Euro bonds	42	N/A	25
	Cash flow hedge	2036 – 2038	GBP to Yen at 151.49	¥20 billion	Yen bank loans	1	N/A	(18)

2018	Hedge	Timing of nominal amount	Average rate	Nominal value	Hedged item	Change in fair value of hedged item in year £m	Cumulative amount of fair value hedge adjustments on hedged item £m	Accumulated foreign exchange gain/(losses) in CFHR (i) £m
Interest rate risk	Fair value	2022 – 2033	Fixed to floating at LIBOR/US IBOR + 1% - 5%	£50 million - £550 million, \$250 million	Bonds ⁽ⁱⁱ⁾	2	(28)	N/A
Foreign exchange risk	Cash flow hedge	2021 – 2032	GBP to Euro at 1.356	€50 million, €750 million	Euro bonds	(12)	N/A	30
	Cash flow hedge	2036 – 2038	GBP to Yen at 151.49	¥20 billion	Yen bank loans	(11)	N/A	(17)

(i) In the years presented all amounts related to continuing cash flow hedge relationships.

(ii) The carrying amount of bonds designated as hedged items in hedging relationships is disclosed in note 24.

The Group's accounting policies in relation to derivatives qualifying for hedge accounting under IAS 39 are described below.

Fair value hedges

A derivative is designated as a hedging instrument and its relationship to a recognised asset or liability is classified as a fair value hedge when it hedges the exposure to changes in the fair value of that recognised asset or liability. The Group's fair value hedges consist of interest rate swaps used to protect against changes in the fair value of fixed-rate, long-term debt due to movements in market interest rates. Any gain or loss from re-measuring the hedging instrument to fair value is recognised immediately in the Group Income Statement. Any gain or loss on the hedged item attributable to the hedged risk is adjusted against the carrying amount of the hedged item and recognised in the Group Income Statement within net finance cost. The Group discontinues fair value hedge accounting if the hedging instrument expires or is sold, terminated or exercised, the hedge no longer qualifies for hedge accounting or the Group revokes the designation. Any adjustment to the carrying amount of a hedged financial instrument for which the effective interest method is used is amortised to the Group Income Statement. Amortisation may begin as soon as an adjustment exists and shall begin no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

Impact of interest rate benchmark reform

The Group has elected to early adopt amendments to IFRS 9, IAS 39 and IFRS 7: 'Interest rate benchmark reform' during the year. The amendments permit continuation of hedge accounting even if, in the future, the benchmark interest rate applicable to the hedge may not be separately identifiable.

The Group has monitored developments and considered the impact of reform, concluding that the primary impact relates to fair value hedging relationships in which fixed interest rates on bonds are swapped for floating interest rates linked to GBP and USD LIBOR, as detailed in the above table.

S5. Hedge accounting

The Group will continue to apply the amendments until the uncertainty arising from the interest rate benchmark reforms with respect to the timing and amount of the underlying cash flows to which the Group is exposed ends. The Group has assumed that the uncertainty will not end until the Group's contracts that reference IBORs are amended and appropriate fall-back language is introduced into relevant contracts. Discussions with counterparties are in the early stages and will continue during 2020, along with the Group's activities to ensure systems and processes are ready and able to accommodate the changes.

Cash flow hedges

A derivative is classified as a cash flow hedge when it hedges exposure to variability in cash flows that is attributable to a particular risk either associated with a recognised asset, liability or a highly probable forecast transaction. The Group's cash flow hedges consist primarily of:

- forward foreign exchange contracts used to protect against the variability of functional currency denominated cash flows associated with non-functional currency denominated highly probable forecast transactions; and
- cross-currency interest rate swaps and forward foreign exchange contracts used to protect against the variability in cash flows associated with borrowings denominated in non-functional currencies.

The portion of the gain or loss on the hedging instrument which is effective is recognised directly in equity while any ineffectiveness is recognised in the Group Income Statement. The gains or losses that are initially recognised in the cash flow hedging reserve through other comprehensive income are transferred to the Group Income Statement in the period in which the highly probable forecast transaction affects income. Where the hedged item is the cost of a non-financial asset or liability, the amounts taken to equity are transferred to the initial carrying amount of the non-financial asset or liability on its recognition. Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, no longer qualifies for hedge accounting or the Group revokes the designation. At that point in time, any cumulative gain or loss on the hedging instrument recognised in equity remains in equity until the highly probable forecast transaction occurs. If the transaction is no longer expected to occur, the cumulative gain or loss recognised in equity is recognised in the Group Income Statement.

Note S4 details movements in the cash flow hedging reserve. The ineffective portion of gains and losses on cash flow hedging is immaterial and is recognised immediately in the Group Income Statement.

Supplementary information continued

S6. Fair value of financial instruments

The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Group has documented internal policies for determining fair value, including methodologies used to establish valuation adjustments required for credit risk.

(a) Fair value hierarchy

Financial assets and financial liabilities measured and held at fair value are classified into one of three categories, known as hierarchy levels, which are defined according to the inputs used to measure fair value as follows:

- Level 1: fair value is determined using observable inputs that reflect unadjusted quoted market prices for identical assets and liabilities;
- Level 2: fair value is determined using significant inputs that may be directly observable inputs or unobservable inputs that are corroborated by market data; and
- Level 3: fair value is determined using significant unobservable inputs that are not corroborated by market data and may be used with internally developed methodologies that result in management's best estimate of fair value.

31 December	2019				2018			
	Level 1 £m	Level 2 £m	Level 3 £m	Total £m	Level 1 £m	Level 2 £m	Level 3 £m	Total £m
Financial assets								
Derivative financial instruments:								
Energy derivatives	1	1,241	228	1,470	6	1,248	150	1,404
Interest rate derivatives	–	108	–	108	–	59	–	59
Foreign exchange derivatives	–	235	–	235	–	215	–	215
Treasury gilts designated FVTPL	124	–	–	124	126	–	–	126
Debt instruments	77	–	–	77	68	–	–	68
Equity instruments	26	–	28	54	20	–	25	45
Cash and cash equivalents	–	621	–	621	–	781	–	781
Total financial assets at fair value	228	2,205	256	2,689	220	2,303	175	2,698
Financial liabilities								
Derivative financial instruments:								
Energy derivatives	(146)	(1,778)	(90)	(2,014)	(42)	(1,390)	(59)	(1,491)
Interest rate derivatives	–	(25)	–	(25)	–	(36)	–	(36)
Foreign exchange derivatives	–	(106)	–	(106)	–	(39)	–	(39)
Total financial liabilities at fair value	(146)	(1,909)	(90)	(2,145)	(42)	(1,465)	(59)	(1,566)

S6. Fair value of financial instruments

The reconciliation of the Level 3 fair value measurements during the year is as follows:

	2019		2018	
	Financial assets £m	Financial liabilities £m	Financial assets £m	Financial liabilities £m
Level 3 financial instruments				
1 January	175	(59)	59	(33)
Total realised and unrealised gains/(losses):				
Recognised in Group Income Statement	17	(10)	79	(11)
Purchases, sales, issuances and settlements (net)	28	(26)	24	(4)
Transfers between Level 2 and Level 3 ⁽ⁱ⁾	38	5	12	(8)
Foreign exchange movements	(2)	–	1	(3)
31 December	256	(90)	175	(59)
Total (losses)/gains for the year for Level 3 financial instruments held at the end of the reporting year	(14)	(2)	71	(32)

(i) Transfers between levels are deemed to occur at the beginning of the reporting period.

(b) Valuation techniques used to derive Level 2 and Level 3 fair values and Group valuation process

Level 2 interest rate derivatives and foreign exchange derivatives comprise interest rate swaps and forward foreign exchange contracts. Interest rate swaps are fair valued using forward interest rates extracted from observable yield curves. Forward foreign exchange contracts are fair valued using forward exchange rates that are quoted in an active market, with the resulting market value discounted back to present value using observable yield curves.

Level 2 energy derivatives are fair valued by comparing and discounting the difference between the expected contractual cash flows for the relevant commodities and the quoted prices for those commodities in an active market. The average discount rate applied to value this type of contract during the year was 1% (Europe) and 3% (North America) per annum (31 December 2018 average discount rate of 1% (Europe) and 3% (North America) per annum).

For Level 3 energy derivatives, the main input used by the Group pertains to deriving expected future commodity prices in markets that are not active as far into the future as some of our contractual terms. This applies to certain contracts within Europe and North America. Fair values are then calculated by comparing and discounting the difference between the expected contractual cash flows and these derived future prices using an average discount rate of 2% (Europe) and 3% (North America) per annum (31 December 2018 average discount rate of 2% (Europe) and 3% (North America) per annum).

Active period of markets	Gas	Power	Coal	Emissions	Oil
UK (years)	3	3	3	3	3
North America (years)	5	Up to 5	N/A	Up to 5	3

Because the Level 3 energy derivative valuations involve the prediction of future commodity market prices, sometimes a long way into the future, reasonably possible alternative assumptions for gas, power, coal, emissions or oil prices may result in a higher or lower fair value for Level 3 financial instruments. Given the relative size of the volumetric exposures and these fair values, it is unlikely that the impact of these reasonably possible changes would be significant when judged in relation to the Group's profit and loss or total asset value.

It should be noted that the fair values disclosed in the tables above only concern those contracts entered into which are within the scope of IFRS 9. The Group has numerous other commodity contracts which are outside of the scope of IFRS 9 and are not fair valued. The Group's actual exposure to market rates is constantly changing as the Group's portfolio of energy contracts changes.

The Group's valuation process includes specific teams of individuals that perform valuations of the Group's derivatives for financial reporting purposes, including Level 3 valuations. The Group has an independent team that derives future commodity price curves based on available external data and these prices feed into the energy derivative valuations, subject to adjustments to ensure they are compliant with IFRS 13: 'Fair value measurement'. The price curves are subject to review and approval by the Group's Executive Committee and valuations of all derivatives, together with other contracts that are not within the scope of IFRS 9, are also reviewed regularly as part of the overall risk management process.

Where the fair value at initial recognition for contracts which extend beyond the active period differs from the transaction price, a day-one gain or loss will arise. Such gains and losses are deferred and amortised to the Group Income Statement based on volumes purchased or delivered over the contractual period until such time as observable market data becomes available (see note S2 for further detail). The amount that has yet to be recognised in the Group Income Statement relating to the differences between the transaction prices and the amounts that would have arisen had valuation techniques used for subsequent measurement been applied at initial recognition, less subsequent releases, is immaterial.

Supplementary information continued

S6. Fair value of financial instruments**(c) Fair value of financial assets and liabilities held at amortised cost**

The carrying value of the Group's financial assets and liabilities measured at amortised cost are approximately equal to their fair value except as listed below:

31 December	Notes	2019			2018		
		Carrying value £m	Fair value £m	Fair value hierarchy	Carrying value £m	Fair value £m	Fair value hierarchy
Bank loans	24(d)	(144)	(176)	Level 2	(149)	(165)	Level 2
Bonds	Level 1	(3,963)	(4,595)	Level 1	(4,057)	(4,432)	Level 1
	Level 2	(102)	(138)	Level 2	(105)	(128)	Level 2
Obligations under leases	24(d)	(503)	(510)	Level 2	(218)	(226)	Level 2

Financial liabilities

The fair values of bonds classified as Level 1 within the fair value hierarchy are calculated using quoted market prices. The fair values of Level 2 bonds and bank loans have been determined by discounting cash flows with reference to relevant market rates of interest. The fair values of overdrafts and short-term loans are assumed to equal their book values due to the short-term nature of these amounts. The fair values of obligations under leases have been determined by discounting contractual cash flows with reference to the Group's cost of borrowing.

Other financial instruments

Due to their nature and/or short-term maturity, the fair values of trade and other receivables, cash and cash equivalents, trade and other payables and provisions are estimated to approximate their carrying values.

(d) Financial assets and liabilities subject to offsetting, master netting arrangements and similar arrangements

31 December 2019	Gross amounts of recognised financial instruments £m	Gross amounts of recognised financial instruments offset in the Group Balance Sheet £m	Net amounts presented in the Group Balance Sheet £m	Related amounts not offset in the Group Balance Sheet (i)		
				Financial instruments £m	Collateral £m	Net amount £m
Derivative financial assets	9,072	(7,259)	1,813	(505)	(35)	1,273
Derivative financial liabilities	(9,404)	7,259	(2,145)	505	181	(1,459)
			(332)			(186)
Balances arising from commodity contracts:						
Accrued and unbilled downstream and energy income	5,625	(3,280)	2,345	(186)	-	2,159
Accruals for commodity costs	(5,146)	3,280	(1,866)	186	-	(1,680)
Cash and financing arrangements:						
Cash and cash equivalents	1,353	(11)	1,342	(548)	-	794
Bank loans and overdrafts	(703)	11	(692)	548	-	(144)
Securities	255	-	255	-	(26)	229

31 December 2018	Gross amounts of recognised financial instruments £m	Gross amounts of recognised financial instruments offset in the Group Balance Sheet £m	Net amounts presented in the Group Balance Sheet £m	Related amounts not offset in the Group Balance Sheet (i)		
				Financial instruments £m	Collateral £m	Net amount £m
Derivative financial assets	7,630	(5,952)	1,678	(292)	(157)	1,229
Derivative financial liabilities	(7,518)	5,952	(1,566)	292	472	(802)
			112			427
Balances arising from commodity contracts:						
Accrued and unbilled downstream and energy income	6,994	(4,129)	2,865	(264)	-	2,601
Accruals for commodity costs	(6,604)	4,129	(2,475)	264	-	(2,211)
Cash and financing arrangements:						
Cash and cash equivalents	1,289	(21)	1,268	(140)	-	1,128
Bank loans and overdrafts	(310)	21	(289)	140	-	(149)
Securities	307	-	307	-	(26)	281

(i) The Group has arrangements in place with various counterparties in respect of commodity trades which provide for a single net settlement of all financial instruments covered by the arrangement in the event of default or termination, or other circumstances arising whereby either party is unable to meet its obligations. The above table shows the potential impact of these arrangements being enforced by offsetting the relevant amounts within each Group Balance Sheet class of asset or liability, but does not show the impact of offsetting across Group Balance Sheet classes where the offsetting Group Balance Sheet class is not included within the above table.

S7. Fixed-fee service and insurance contracts

This section includes fixed-fee service (FFS) and insurance contract disclosures for services related to UK Home and North America Home.

FFS contracts in North America are entered into with home and business services customers. Insurance contracts in North America are entered into with home services customers.

FFS contracts in the UK are entered into with home services customers by British Gas Services Limited (BGSL) and with business customers by British Gas Services (Commercial) Limited. Insurance contracts in the UK are entered into with home services customers by British Gas Insurance Limited (BGIL), authorised by the PRA and regulated by the FCA and the PRA.

Product offerings include central heating, boiler and controls, plumbing and drains and electrical appliance insurance cover.

FFS contracts continue until cancelled by either party; insurance contracts normally provide cover for 12 months with the option of renewal.

The contracts which protect policyholders against the risk of breakdowns result in the transfer of risk to the contract provider. Benefits provided to customers vary in accordance with terms and conditions of the contracts entered into. However, they generally include maintenance, repair and/or replacement of the items affected.

The levels of risk exposure and service provision to customers under the contract terms are dependent on the occurrence of uncertain future events, in particular the nature and frequency of faults, and the cost of repair or replacement of the items affected. Accordingly, the timing and amount of future cash outflows associated with the contracts is uncertain. As the Group's insurance contract portfolio is comprised of a large number of contracts with small individual values, a high volume of claims with a relatively low unit cost results. The characteristics of the business mean that material concentrations or aggregations of risk are relatively remote. The key terms and conditions that affect future cash flows are as follows:

- provision of labour and parts for repairs, dependent on the agreement and associated level of service;
- a specified number of safety and maintenance inspections are carried out as set out in the agreement (usually once a year);
- no limit to the number of call-outs to carry out repair work; and
- limits on certain maintenance and repair costs.

The most significant insurance risk is an extreme weather event for an extended period, which has the propensity to increase claim frequencies. The Group regularly assesses insurance risk sensitivities, the most significant relating to increases in breakdown frequency and increases in the average cost of repair. A reasonably possible increase in either would not have a material impact on the results of the Group.

Revenue is recognised over the life of contracts (usually twelve months) having regard to the incidence of risk, in particular the seasonal propensity of claims which span the life of the contract as a result of emergency maintenance being available throughout the contract term. Costs incurred to settle claims represent principally the engineer workforce employed by the Group within home services and the cost of parts utilised in repair or maintenance. These costs are accounted for over a 12-month period with adjustments made to reflect the seasonality of workload over a given year.

Weather conditions and the seasonality of repairs both affect the profile of the workload and associated costs incurred across the year.

The risk exposure of these uncertain events is actively managed by undertaking the following risk mitigation activities:

- an initial service visit is provided to customers taking up most central heating contracts and in some instances pre-existing faults may lead to the contract being cancelled and no further cover being provided;
- an annual maintenance inspection is performed as part of most central heating contracts to help identify and prevent issues developing into significant maintenance or breakdown claims; and
- contract limits are applied to certain types of maintenance and repair work considered to be higher risk in terms of frequency and cost.

The costs of FFS claims and insurance claims incurred during the year were £20 million (2018: £18 million) and £341 million (2018: £398 million) respectively and are included in the table below in 'Expenses relating to FFS and insurance contracts'. All claims are settled immediately and in full. Due to the short average lead time between claims occurrence and settlement, no material provisions were outstanding at the balance sheet date (2018: £nil).

	2019 £m	2018 £m
Total revenue	1,118	1,142
Expenses relating to FFS and insurance contracts	(949)	(1,019)
Deferred income	(86)	(83)
Accrued income	33	32

The Group also considers whether estimated future cash flows under the contracts will be sufficient to meet expected future costs. Any deficiency is charged immediately to the Group Income Statement. Claims frequency is sensitive to the reliability of appliances as well as the impact of weather conditions. The contracts are not exposed to any interest rate risk or significant credit risk and do not contain any embedded derivatives.

Supplementary information continued

S8. Related party transactions

The Group's principal related party is its investment in Lake Acquisitions Limited, which owns the existing EDF UK nuclear fleet. The disclosures below, including comparatives, only refer to related parties that were related in the current reporting period.

During the year, the Group entered into the following arm's length transactions with related parties who are not members of the Group, and had the following associated balances:

	2019		2018	
	Purchase of goods and services £m	Amounts owed to £m	Purchase of goods and services £m	Amounts owed to £m
Associates:				
Nuclear	(454)	(51)	(476)	(42)
Joint Ventures	(16)	(1)	(17)	(2)
	(470)	(52)	(493)	(44)

During the year, there were no material changes to commitments in relation to joint ventures and associates.

At the balance sheet date, the Group committed facilities to the Lake Acquisition Group totalling £120 million, although nothing has been drawn at 31 December 2019.

Key management personnel comprise members of the Board and Executive Committee, a total of 17 individuals at 31 December 2019 (2018: 18).

Remuneration of key management personnel

Year ended 31 December	2019 £m	2018 £m
Short-term benefits	7.9	10.1
Post-employment benefits	1.0	1.2
Share-based payments	4.1	1.6
	13.0	12.9

Remuneration of the Directors of Centrica plc

Year ended 31 December	2019 £m	2018 (restated) (i) £m
Total emoluments (ii)	4.0	6.0
Amounts receivable under long-term incentive schemes	–	0.7
Contributions into pension schemes	0.5	0.8

(i) Comparatives have been restated. Further detail is provided in the Remuneration Report on pages 82 to 93.

(ii) These emoluments were paid for services performed on behalf of the Group. No emoluments related specifically to services performed for the Company.

Directors' interests in shares are given in the Remuneration Report on pages 82 to 93

S9. Auditors' remuneration

Year ended 31 December	2019 £m	2018 £m
Fees payable to the Company's auditors for the audit of the Company's individual and consolidated:		
Financial Statements (i)	6.0	5.6
Audit of the Company's subsidiaries	1.7	1.7
Total fees related to the audit of the parent and subsidiary entities	7.7	7.3
Fees payable to the Company's auditors and its associates for other services:		
Audit-related assurance services (ii)	0.8	0.8
All other services	–	0.4
	8.5	8.5
Fees in respect of pension scheme audits (iii)	0.1	0.1

(i) Including £0.3 million (2018: £0.3 million) for the audit of the Ofgem Consolidated Segmental Statement.

(ii) Predominantly relates to the review of the condensed interim Financial Statements included in the interim results.

(iii) The pension scheme audit continues to be performed by PricewaterhouseCoopers LLP.

S10. Related undertakings

The Group has a large number of related undertakings principally in the UK, US, Norway, Canada, Denmark, the Netherlands and the Republic of Ireland. These are listed below.

(a) Subsidiary undertakings

Investments held directly by Centrica plc with 100% voting rights

31 December 2019	Principal activity	Country of incorporation/ registered address key (i)	Class of shares held
Centrica Beta Holdings Limited	Holding company	United Kingdom / A	Ordinary shares
Centrica Holdings Limited	Holding company	United Kingdom / A	Ordinary shares
Centrica Trading Limited	Dormant	United Kingdom / A	Ordinary shares
Rhodes Holdings HK Limited ⁽ⁱ⁾	Holding company	Hong Kong / AQ	Ordinary shares

(i) Established in 2019.

Investments held indirectly by Centrica plc with 100% voting rights

31 December 2019	Principal activity	Country of incorporation/ registered address key (i)	Class of shares held
5016892 Ontario Ltd. ⁽ⁱ⁾⁽ⁱⁱ⁾	Gas and/or oil exploration and production and/ or trading	Canada / B	Ordinary shares
Accord Energy (Trading) Limited	Dormant	United Kingdom / A	Ordinary shares
Accord Energy Limited	Dormant	United Kingdom / A	Ordinary shares
Airtron Inc. ⁽ⁱⁱⁱ⁾	Home and/or commercial services	United States / C	Ordinary shares
Alertme.com GmbH	Non-trading	Germany / D	Ordinary shares
Alertme.com Inc.	Energy management products and services	United States / E	Ordinary shares
Astrum Solar Inc.	Home and/or commercial services	United States / F	Ordinary shares
Atform Limited	Dormant	United Kingdom / A	Ordinary shares
AWHR America's Water Heater Rentals LLC	Home and/or commercial services	United States / C	Membership interest
Bord Gáis Energy Limited	Energy supply and power generation	Republic of Ireland / G	Ordinary shares
Bounce Energy Inc.	Energy supply	United States / C	Ordinary shares
Brae Canada Ltd. ⁽ⁱⁱ⁾	Gas and/or oil exploration and production	Canada / B	Ordinary and preference shares
British Gas Energy Procurement Limited	Energy supply	United Kingdom / A	Ordinary shares
British Gas Finance Limited	Vehicle leasing	United Kingdom / A	Ordinary shares
British Gas Insurance Limited	Insurance provision	United Kingdom / A	Ordinary shares
British Gas Limited	Dormant	United Kingdom / A	Ordinary shares
British Gas New Heating Limited	Electrical and gas installations	United Kingdom / A	Ordinary shares
British Gas Services (Commercial) Limited	Servicing and installation of heating systems	United Kingdom / A	Ordinary shares
British Gas Services Limited	Home services	United Kingdom / A	Ordinary shares
British Gas Social Housing Limited	Servicing and installation of heating systems	United Kingdom / A	Ordinary shares
British Gas Solar Limited	Dormant	United Kingdom / A	Ordinary shares
British Gas Trading Limited	Energy supply	United Kingdom / A	Ordinary shares
British Gas X Limited ^(iv)	Energy supply	United Kingdom / A	Ordinary shares
Business Gas Limited	Dormant	United Kingdom / A	Ordinary shares
Caythorpe Gas Storage Limited	Gas storage	United Kingdom / H	Ordinary shares
CBS US Solar Fund 1, LLC	Distributed energy and power	United States / C	Membership interest
Centrica (IOM) Limited	Dormant	Isle of Man / I	Ordinary shares
Centrica (Lincs) Wind Farm Limited	Holding company	United Kingdom / A	Ordinary shares
Centrica Alpha Finance Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica America Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Bary Limited	Power generation	United Kingdom / A	Ordinary shares
Centrica Brigg Limited	Power generation	United Kingdom / A	Ordinary shares
Centrica Business Solutions (Generation) Limited	Power generation	United Kingdom / A	Ordinary shares
Centrica Business Solutions Asset Management LLC ^(v)	Energy management products and services	United States / C	Ordinary shares
Centrica Business Solutions Belgium NV ^(vi)	Demand response aggregation	Belgium / J	Ordinary shares
Centrica Business Solutions BV	Energy management products and services	Netherlands / K	Ordinary shares

Supplementary information continued

S10. Related undertakings

31 December 2019	Principal activity	Country of incorporation/ registered address key (f)	Class of shares held
Centrica Business Solutions Canada Inc	Energy management products and services	Canada / B	Ordinary shares
Centrica Business Solutions Delivery LLC ^(a)	Energy management products and services	United States / C	Ordinary shares
Centrica Business Solutions Deutschland GmbH ^(a)	Demand response aggregation	Germany / L	Ordinary shares
Centrica Business Solutions France SASU ^(a)	Demand response aggregation	France / M	Ordinary shares
Centrica Business Solutions International Limited	Holding company	United Kingdom / A	Ordinary shares
Centrica Business Solutions Ireland Limited ^(a)	Holding company	Ireland / N	Ordinary shares
Centrica Business Solutions Italia Srl	Energy management products and services	Italy / O	Ordinary shares
Centrica Business Solutions Management Limited ^(a)	Holding company	United Kingdom / A	
Centrica Business Solutions México S.A. de C.V.	Energy management products and services	Mexico / P	Ordinary shares
Centrica Business Solutions Romania Srl ^(a)	Energy management products and services	Romania / Q	Ordinary shares
Centrica Business Solutions UK Limited	Energy management products and services	United Kingdom / A	Ordinary shares
Centrica Business Solutions UK Optimisation Limited ^(a)	Demand response aggregation	United Kingdom / A	Ordinary shares
Centrica Business Solutions US Inc	Energy management products and services	United States / C	Ordinary shares
Centrica Business Solutions Zrt	Energy management products and services	Hungary / R	Ordinary shares
Centrica Combined Common Investment Fund Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Delta Limited	Dormant	Isle of Man / S	Ordinary shares
Centrica Directors Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Distributed Generation Limited	Power generation	United Kingdom / A	Ordinary shares
Centrica Energy (Trading) Limited	Wholesale energy trading	United Kingdom / A	Ordinary shares
Centrica Energy Limited	Wholesale energy trading	United Kingdom / A	Ordinary shares
Centrica Energy Marketing Limited	Wholesale energy trading	United Kingdom / A	Ordinary shares
Centrica Energy Operations Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Energy Renewable Investments Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Energy Trading A/S ^(a)	Energy Services and wholesale energy trading	Denmark / T	Ordinary shares
Centrica Energy Trading GmbH ^(a)	Energy Services and wholesale energy trading	Germany / U	Ordinary shares
Centrica Energy Trading Pte. Ltd. ^(a)	Energy Services and wholesale energy trading	Singapore / V	Ordinary shares
Centrica Engineers Pension Trustees Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Finance (Canada) Limited	Holding company	United Kingdom / A	Ordinary shares
Centrica Finance (Scotland) Limited	Holding company	United Kingdom / W	Ordinary shares
Centrica Finance (US) Limited	Holding company	United Kingdom / A	Ordinary shares
Centrica Finance Investments Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Finance Norway Limited	Group financing	Jersey / X	Ordinary shares
Centrica Gamma Holdings Limited	Holding company	United Kingdom / A	Ordinary shares
Centrica Hive Canada Inc.	Energy management products and services	Canada / B	Ordinary shares
Centrica Hive Limited	Energy management products and services	United Kingdom / A	Ordinary shares
Centrica Hive SAS	Energy management products and services	France / Y	Ordinary shares
Centrica Hive Srl	Energy management products and services	Italy / Z	Ordinary shares
Centrica Hive US Inc.	Energy management products and services	United States / C	Ordinary shares
Centrica HoldCo GP LLC	Holding company	United States / C	Membership interest
Centrica Ignite GP Limited	Investment company	United Kingdom / A	Ordinary shares
Centrica Ignite LP Limited	Investment company	United Kingdom / A	Ordinary shares
Centrica India Offshore Private Limited	Business services	India / AA	Ordinary shares
Centrica Infrastructure Limited	Dormant	United Kingdom / W	Ordinary shares
Centrica Innovations UK Limited	Investment company	United Kingdom / A	Ordinary shares
Centrica Innovations US Inc.	Investment company	United States / C	Ordinary shares
Centrica Insurance Company Limited	Insurance provision	Isle of Man / I	Ordinary and preference shares
Centrica Jersey Limited	Dormant	Jersey / AB	Ordinary shares
Centrica KL Limited	Power generation	United Kingdom / A	Ordinary shares
Centrica KPS Limited	Power generation	United Kingdom / A	Ordinary shares
Centrica Lake Limited	Holding company	United Kingdom / A	Ordinary shares

S10. Related undertakings

31 December 2019	Principal activity	Country of incorporation/ registered address key (f)	Class of shares held
Centrica Leasing (KL) Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica LNG Company Limited	LNG trading	United Kingdom / A	Ordinary shares
Centrica LNG UK Limited	LNG trading	United Kingdom / A	Ordinary shares
Centrica Nederland BV	Holding company	Netherlands /AC	Ordinary shares
Centrica NewCo 123 Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Nigeria Limited	Holding company	United Kingdom / A	Ordinary shares
Centrica No.12 Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Nominees No.1 Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Offshore UK Limited	Gas and/or oil exploration and production	United Kingdom / H	Ordinary shares
Centrica Onshore Processing UK Limited	Dormant	United Kingdom / H	Ordinary shares
Centrica Overseas Holdings Limited	Holding company	United Kingdom / A	Ordinary shares
Centrica PB Limited	Power generation	United Kingdom / A	Ordinary shares
Centrica Pension Plan Trustees Limited	Dormant	United Kingdom / A	Limited by guarantee
Centrica Pension Trustees Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Production Limited	Dormant	United Kingdom / W	Ordinary shares
Centrica Renewable Energy Limited	Holding company	United Kingdom / A	Ordinary shares
Centrica Resources (Nigeria) Limited	Non-trading	Nigeria /AD	Ordinary shares
Centrica Resources (UK) Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Resources Petroleum UK Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Secretaries Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Services Limited	Business services	United Kingdom / A	Ordinary shares
Centrica Storage Holdings Limited	Holding company	United Kingdom / H	Ordinary shares
Centrica Storage Limited	Gas production and processing	United Kingdom / H	Ordinary shares
Centrica Trinidad and Tobago Limited	Business services	Trinidad and Tobago /AE	Ordinary shares
Centrica Trust (No.1) Limited	Dormant	United Kingdom / A	Ordinary shares
Centrica Upstream Investment Limited	Dormant	United Kingdom / W	Ordinary shares
Centrica US Holdings Inc.	Holding company	United States / C	Ordinary shares
CH4 Energy Limited	Dormant	United Kingdom / A	Ordinary shares
CID1 Limited	Dormant	United Kingdom / A	Ordinary shares
CIU1 Limited	Dormant	United Kingdom / A	Ordinary shares
CSA Offshore Services (Proprietary) Limited	Business services	South Africa /AF	Ordinary shares
DEML Investments Limited	Holding company	Canada /AG	Ordinary shares
DER Development No.10 Ltd.	Holding company	Canada / B	Ordinary shares
Direct Energy (B.C.) Limited	Energy supply and/or services	Canada /AH	Ordinary shares
Direct Energy Business LLC	Energy supply and/or services	United States / C	Membership interest
Direct Energy Business Marketing LLC	Energy supply and/or services	United States / C	Membership interest
Direct Energy GP LLC	Holding company	United States / C	Membership interest
Direct Energy Holdings (Alberta) Inc.	Home and/or commercial services	Canada / B	Ordinary shares
Direct Energy HVAC Services Ltd.	Home and/or commercial services	Canada / B	Ordinary shares
Direct Energy Leasing LLC	Home and/or commercial services	United States / C	Membership interest
Direct Energy Marketing Inc.	Wholesale energy trading	United States / C	Ordinary and preference shares
Direct Energy Marketing Limited	Energy supply and/or services	Canada /AG	Ordinary shares
Direct Energy Operations LLC	Energy supply and/or services	United States / C	Membership interest
Direct Energy Services LLC	Energy supply and/or services	United States / C	Membership interest
Distributed Energy Asset Solutions Limited	Dormant	United Kingdom / A	Ordinary shares
Distributed Energy Customer Solutions Limited	Energy Management products and services	United Kingdom / A	Ordinary shares
Drips Limited	Dormant	United Kingdom / A	Ordinary shares
Dyno Developments Limited	Dormant	United Kingdom / A	Ordinary shares
Dyno-Plumbing Limited	Dormant	United Kingdom / A	Ordinary shares
Dyno-Rod Limited	Operation of a franchise network	United Kingdom / A	Ordinary shares

Supplementary information continued

S10. Related undertakings

31 December 2019	Principal activity	Country of incorporation/ registered address key (f)	Class of shares held
Dyno-Security Services Limited	Dormant	United Kingdom / A	Ordinary shares
Dyno-Services Limited	Dormant	United Kingdom / A	Ordinary shares
ECL Contracts Limited	Dormant	United Kingdom / A	Ordinary shares
ECL Investments Limited	Dormant	United Kingdom / A	Ordinary shares
Electricity Direct (UK) Limited	Dormant	United Kingdom / A	Ordinary shares
ENER-G Cogen International Limited	Holding company	United Kingdom / A	Ordinary shares
ENER-G Nagykanizsa Kft	Energy management products and services	Hungary / R	Ordinary shares
ENER-G Power2 Limited	Holding company	United Kingdom / A	Ordinary shares
ENER-G Rudox LLC	Energy management products and services	United States / C	Membership interest
Energy For Tomorrow	Not-for-profit energy services	United Kingdom / A	Limited by guarantee
FES Energy Solutions Limited ^(vi)	Energy supply and/or services	Ireland / G	Ordinary shares
First Choice Power LLC	Energy supply and/or services	United States / AI	Membership interest
Gateway Energy Services Corporation	Energy supply	United States / AJ	Ordinary shares
GB Gas Holdings Limited	Holding company	United Kingdom / A	Ordinary shares
Generation Green Solar Limited	Dormant community benefit society	United Kingdom / A	Ordinary shares
GF One Limited ^(vi)	In liquidation	United Kingdom / AK	Ordinary shares
GF Two Limited ^(vi)	In liquidation	United Kingdom / AK	Ordinary shares
Goldbrand Development Limited	Dormant	United Kingdom / A	Ordinary shares
Hillserve Limited	Dormant	United Kingdom / A	Ordinary shares
Home Assistance UK Limited	Non-trading	United Kingdom / A	Ordinary shares
Home Warranty Holdings Corp.	Insurance provision	United States / C	Ordinary shares
Home Warranty of America Inc. ^(vi)	Home and/or commercial services	United States / AL	Ordinary shares
Home Warranty of America Inc. ^(vi)	Home and/or commercial services	United States / AM	Ordinary shares
Io-Tahoe LLC	Data management	United States / C	Membership interest
Io-Tahoe UK Limited	Data management	United Kingdom / A	Ordinary shares
Io Tahoe Ukraine LLC	Data management	Ukraine / AN	Ordinary shares
Masters Inc.	Home and/or commercial services	United States / F	Ordinary shares
Neas Energy Limited	Energy services and wholesale energy trading	United Kingdom / A	Ordinary shares
Neas Invest A/S	Dormant	Denmark / T	Ordinary shares
Newco One Limited	Dormant	United Kingdom / A	Ordinary shares
North Sea Infrastructure Partners Limited	Dormant	United Kingdom / W	Ordinary shares
NSIP (Holdings) Limited	Dormant	United Kingdom / W	Ordinary shares
P.H. Jones Facilities Management Ltd	Servicing and maintenance of heating systems	United Kingdom / A	Ordinary shares
P.H Jones Group Limited	Holding company	United Kingdom / A	Ordinary shares
Panoramic Power Ltd.	Energy management products and services	Israel / AO	Ordinary shares
Pioneer Shipping Limited	LNG vessel chartering	United Kingdom / A	Ordinary Shares
Repair and Care Limited	Dormant	United Kingdom / A	Ordinary shares
REstore North America LLC	Demand response aggregation	United States / AP	Membership interest
RSG Holding Corp.	Holding company	United States / C	Ordinary shares
SmartWatt Energy Inc. ^(vi)	Energy supply and/or services	United States / C	Ordinary shares
Solar Technologies Group Limited	Dormant	United Kingdom / A	Ordinary shares
Solar Technologies Limited	Dormant	United Kingdom / A	Ordinary shares
Soren Limited	Dormant	United Kingdom / A	Ordinary shares
South Energy Investments LLC ^(vi)	Investment company	United States / AR	Membership interest
Vista Solar, Inc	Distributed energy and power	United States / AS	Ordinary shares

S10. Related undertakings

Investments held indirectly by Centrica plc with 69% voting rights

31 December 2019	Principal activity	Country of incorporation/ registered address key (i)	Class of shares held
Bayerngas Norge AS	Holding company	Norway / AT	Ordinary shares
Bayerngas Produksjon Norge AS	Finance company	Norway / AT	Ordinary shares
Bowland Resources (No.2) Limited	Gas and/or oil exploration and production	United Kingdom / AU	Ordinary shares
Bowland Resources Limited	Gas and/or oil exploration and production	United Kingdom / AU	Ordinary shares
Elswick Energy Limited	Gas and/or oil exploration and production	United Kingdom / AU	Ordinary shares
NSGP (Ensign) Limited	Gas and/or oil exploration and production	Jersey / AV	Ordinary shares
Spirit Energy Danmark ApS	Gas and/or oil exploration and production	Denmark / AW	Ordinary shares
Spirit Energy Hedging Holding Limited	Dormant	United Kingdom / AU	Ordinary shares
Spirit Energy Hedging Limited	Dormant	United Kingdom / AU	Ordinary shares
Spirit Energy Limited	Holding company	United Kingdom / AU	Ordinary and deferred shares
Spirit Energy Nederland BV	Gas and/or oil exploration and production	Netherlands / AX	Ordinary shares
Spirit Energy Norge AS	Gas and/or oil exploration and production	Norway / AY	Ordinary shares
Spirit Energy North Sea Limited	Gas and/or oil exploration and production	United Kingdom / AU	Ordinary shares
Spirit Energy North Sea Oil Limited	Gas and/or oil exploration and production	United Kingdom / AZ	Ordinary shares
Spirit Energy Petroleum Danmark AS ^(viii)	Gas and/or oil exploration and production	Norway / AT	Ordinary shares
Spirit Energy Production UK Limited	Gas and/or oil exploration and production	United Kingdom / AU	Ordinary shares
Spirit Energy Resources Limited	Gas and/or oil exploration and production	United Kingdom / AU	Ordinary shares
Spirit Energy Southern North Sea Limited	Gas and/or oil exploration and production	United Kingdom / AU	Ordinary shares
Spirit Energy Treasury Limited	Finance company	United Kingdom / AU	Ordinary shares
Spirit Energy WOS Limited	Gas and/or oil exploration and production	United Kingdom / AU	Ordinary shares
Spirit Europe Limited	Holding company	United Kingdom / AU	Ordinary shares
Spirit Infrastructure BV	Construction, ownership and exploitation of infrastructure	Netherlands / AX	Ordinary shares
Spirit North Sea Gas Limited	Gas and/or oil exploration and production	United Kingdom / AZ	Ordinary shares
Spirit Norway Limited	Gas and/or oil exploration and production	United Kingdom / AU	Ordinary shares
Spirit Production (Services) Limited	Business services	United Kingdom / AZ	Ordinary shares
Spirit Resources (Armada) Limited	Gas and/or oil exploration and production	United Kingdom / AU	Ordinary shares

(i) For list of registered addresses, refer to note S10(d).

(ii) The following name changes were made during the year: 1773648 Alberta Ltd. to 5016892 Ontario Ltd., REstore NV to Centrica Business Solutions Belgium NV, REstore Deutschland GmbH to Centrica Business Solutions Deutschland GmbH, REstore France SAS to Centrica Business Solutions France SASU, ENER-G Technologii Energetice Srl to Centrica Business Solutions Romania Srl, REstore Flexpond UK Limited to Centrica Business Solutions UK Optimisation Limited, Neas Energy A/S to Centrica Energy Trading A/S, Neas Energy GmbH to Centrica Energy Trading GmbH, Neas Energy Singapore Pte. Ltd to Centrica Energy Trading Pte. Ltd.

(iii) On 1 January 2020 5016892 Ontario Ltd. and Brae Canada Ltd. were merged into Direct Energy Marketing Limited.

(iv) During 2019 T.A. Kaiser Heating & Air, Inc. was merged into its parent Airtron Inc.

(v) Acquired or established in 2019.

(vi) GF One Limited and GF Two Limited are 75% indirectly owned by Centrica plc.

(vii) Home Warranty of America Inc. is registered as separate entities in the states of California and Illinois.

(viii) Spirit Energy Petroleum Danmark AS principally operates in Denmark.

Supplementary information continued

S10. Related undertakings**(b) Subsidiary undertakings – partnerships held indirectly by Centrica plc with 100% voting rights**

31 December 2019	Principal activity	Country of incorporation/ registered address key (i)	Class of shares held
CF 2016 LLP	Group financing	United Kingdom / A	Membership interest
CFCEPS LLP	Group financing	United Kingdom / A	Membership interest
CFCPP LLP	Group financing	United Kingdom / A	Membership interest
CPL Retail Energy LP	Energy supply	United States / C	Membership interest
Direct Energy LP	Energy supply	United States / AI	Membership interest
Direct Energy Partnership	Energy supply	Canada / B	Membership interest
Direct Energy Resources Partnership	Holding entity	Canada / B	Membership interest
Finance Scotland 2016 Limited Partnership	Group financing	United Kingdom / W	Membership interest
Finance Scotland CEPS Limited Partnership	Group financing	United Kingdom / W	Membership interest
Finance Scotland CPP Limited Partnership	Group financing	United Kingdom / W	Membership interest
Ignite Social Enterprise LP	Social enterprise investment fund	United Kingdom / A	Membership interest
WTU Retail Energy LP	Energy supply	United States / C	Membership interest

(i) For list of registered addresses, refer to note S10(d).

The following partnerships are fully consolidated into the Group Financial Statements and the Group has taken advantage of the exemption (as confirmed by regulation 7 of the Partnerships (Accounts) Regulations 2008) not to prepare or file separate accounts for these entities:

- Finance Scotland 2016 Limited Partnership;
- Finance Scotland CEPS Limited Partnership;
- Finance Scotland CPP Limited Partnership;
- Finance Scotland CPS Limited Partnership; and
- Ignite Social Enterprise LP.

(c) Joint arrangements and associates

31 December 2019	Principal activity	Country of incorporation/ registered address key (i)	Class of shares held	Indirect interest and voting rights (%)
Joint ventures (ii)				
Allegheny Solar 1 LLC	Energy supply and/or services	United States / BA	Membership interest	40.0%
Barrow Shipping Limited	Energy supply and/or services	United Kingdom / BB	Ordinary shares	50.0%
Celtic Array Limited	Development of an offshore windfarm	United Kingdom / A	Ordinary shares	50.0%
Eurowind Polska VI Sp z o.o.	Operation of an onshore windfarm	Poland / BC	Ordinary shares	50.0%
Greener Ideas Limited	Development of flexible power generation sites	Republic of Ireland / G	Ordinary shares	50.0%
Rhiannon Wind Farm Limited	Dormant	United Kingdom / A	Ordinary shares	50.0%
Three Rivers Solar 1 LLC	Energy supply and/or services	United States / BC	Membership interest	40.0%
Three Rivers Solar 2 LLC	Energy supply and/or services	United States / BC	Membership interest	40.0%
Three Rivers Solar 3 LLC	Energy supply and/or services	United States / BC	Membership interest	40.0%
Vindpark Kεblowo ApS	Operation of an onshore windfarm	Denmark / BD	Ordinary shares	50.0%
Associates (iii)				
Better Home Care Services Limited (ii)	Other information technology service activities	United Kingdom / BE	Ordinary shares	43.7%
C2 Centrica MT LLC (ii)	Energy supply and/or services	United States / BF	Membership interest	50.0%
Lake Acquisitions Limited	Holding company	United Kingdom / BG	Ordinary shares	20.0%
Veolia CHP Ireland Limited	Energy supply and power generation	Republic of Ireland / BH	Ordinary shares	20.0%

(i) For list of registered addresses, refer to note S10(d).

(ii) Further information on the principal joint ventures and associate investments held by the Group is disclosed in notes 6 and 14.

(iii) Acquired or established in 2019.

All Group companies principally operate within their country of incorporation unless noted otherwise.

S10. Related undertakings

(d) List of registered addresses

Registered address key	Address
A	Millstream, Maidenhead Road, Windsor, SL4 5GD, United Kingdom
B	350 7 th Avenue SW, Suite 3400, Calgary AB T2P3N9, Canada ⁽ⁱ⁾
C	3411 Silverside Road, Suite 104, Tatnall Building, Wilmington, DE 19810, United States
D	Thomas-Wimmer-Ring 1-3, 80539, Munich, Germany
E	1521 Concord Pike #303, Wilmington, DE 19803, United States
F	2 Wisconsin Circle #700, Chevy Chase, MD 20815, United States
G	1 Warrington Place, Dublin 2, Republic of Ireland ⁽ⁱⁱ⁾
H	Woodland House, Woodland Park, Hessle, HU13 0FA, United Kingdom
I	Third Floor, St George's Court, Upper Church Street, Douglas, IM1 1EE, Isle of Man
J	Posthofbrug 12, 2600 Antwerp, Belgium
K	Wiegerbruinlaan 2A, 1422 CB Uithoorn, Netherlands
L	Neuer Wall 10, 20354 Hamburg, Germany ⁽ⁱⁱⁱ⁾
M	Place de la Défense 12, Maison de la Défense, 92974 Paris, France
N	1 The Seapoint Building, Clontarf, Dublin 3, Republic of Ireland
O	Milan (MI), Via Emilio Comalia 26, Italy
P	Presidente Masaryk no. 61, Piso 7, Mexico, D.f. CP 11570, Mexico ^(iv)
Q	Strada Martir Colonel Ioan Uta nr.28 camera 1, Municipiul Timisoara judet Timis, Romania ^(v)
R	H-1106 Budapest Jászberényi út 24-36, Hungary
S	33-37 Athol Street, Douglas, IM1 1LB, Isle of Man
T	Skelagervej 1, DK 9000 Aalborg, Denmark
U	Gustav-Mahler-Platz 1, 20354 Hamburg, Germany ^(vi)
V	220 Orchard Road, #05-01 Midpoint Orchard, Singapore 238852, Republic of Singapore
W	1 Waterfront Avenue, Edinburgh, Scotland EH5 1SG ^(vii)
X	47 Esplanade, St Helier, JE1 0BD, Jersey
Y	3 Boulevard de Sebastopol, 75001, Paris, France
Z	Via Paleocapa Pietro 4, 20121, Milano, Italy
AA	G-74, LGF, Kalkaji, New Delhi, South Delhi, Delhi, 110019, India
AB	26 New Street, St Helier, JE2 3RA, Jersey
AC	Wiegerbruin laan 2a, 1422 CB Uithoorn, Netherlands ^(viii)
AD	Sterling Towers, 20 Marina, Lagos, Nigeria
AE	48-50 Sackville Street, Port of Spain, Trinidad and Tobago
AF	No.12A Sooty Street, Cnr Reddersburg & Virginia Street, Amberfield Glen, Rooihuiskraal, North Centurion Gauteng, 0175, South Africa
AG	333 Bay Street, Suite 400, Toronto ON, M5H 2R2, Canada
AH	500 Burrard Street, Suite 2900, Vancouver BC V6C A3, Canada ^(ix)
AI	2425 W. Loop South, #200, TX 77027, United States
AJ	15 North Mill Street, Nyack, NY 10960, United States
AK	1 More London Place, London, SE1 2AF, United Kingdom
AL	1430 Truxtun Avenue, 5th floor, Bakersfield, CA 93301, United States
AM	350 S. Northwest Highway #300, Park Ridge, IL 60068, United States
AN	20 A Heroiev Stalingrada Avenue, Kyiv 04210, Ukraine
AO	15 Atir Yeda Street, Kfar Saba, 44643, Israel
AP	WTS LLC, 67 East Park Place, Morristown, New Jersey 07960, United States
AQ	Level 54, Hopewell Centre, 183 Queens Road East, Hong Kong
AR	6 Landmark Square, 4 th Floor, Stamford CT 06901, United States
AS	4640 Admiralty Way, 5th floor, Marine del Rey, California 90292, United States
AT	Lilleakerveien 8, 0283 Oslo, Norway
AU	First Floor, 20 Kingston Road, Staines-upon-Thames, TW18 4LG, United Kingdom
AV	Sanne, IFC5, St Helier, JE1 1ST, Jersey ^(x)
AW	Rådhuspladsen 16, 1550 København V, Denmark
AX	Transpolis Building, Polarisavenue 39, 2132 JH Hoofddorp, Netherlands
AY	Veritasvien 25, 4007 Stavanger, Norway
AZ	IQ Building, 15 Justice Mill Lane, Aberdeen, AB11 6EQ, United Kingdom
BA	1209 Orange Street, Wilmington, New Castle County, DE 19801, United States
BB	C/O Wilkin Chapman LLP, The Maltings, 11-15 Brayford Wharf East, Lincoln, LN5 7AY, United Kingdom

Supplementary information continued

S10. Related undertakings

Registered address key	Address
BC	Ul. Wysogotowska 23, 62-081 Przemierowo, Wielkopolskie, Poland
BD	Mariagervej 58B, DK 9500 Hobro, Denmark
BE	24 Park Road South, Havant, Hampshire, PO19 1HB
BF	850 New Burton Road, Suite 201, Dover, DE 19904
BG	90 Whitfield Street, London, W1T 4EZ, United Kingdom
BH	Innovation House, DCU Innovation Campus, 11 Old Finglas Road, Glasnevin, Dublin 11, Republic of Ireland

- (i) 5016892 Ontario Ltd., Brae Canada Ltd., Centrica Business Solutions Canada Inc, DER Development No.10 Ltd., Direct Energy Holdings (Alberta) Inc., Direct Energy HVAC Services Ltd., Direct Energy Partnership and Direct Energy Resources Partnership changed their registered address during the year from 2323 32nd Avenue N.E., Suite 260, Calgary, AB T2E 6Z3, Canada to the address listed above.
- (ii) Greener Ideas Limited changed their registered address during the year from Webworks, Eglinton Street, Cork, Republic of Ireland to the address listed above.
- (iii) Centrica Business Solutions Deutschland GmbH changed their registered address during the year from Graf-Adolf-Platz 12, 40213 Düsseldorf, Germany to the address listed above.
- (iv) Centrica Business Solutions México S.A. de C.V. changed their registered address during the year from Av. Presidente Masaryk No 61 Int 503 Col Chapultepec Morales, Miguel Hidalgo Ciudad de México, Mexico 11570 to the address listed above.
- (v) Centrica Business Solutions Romania Srl changed their registered address during the year from 15-23 Bucuresti Nord Street, Windsor Building, Ground Floor, Office No.1 Voluntari, Ilfov County, Romania to the address listed above.
- (vi) Centrica Energy Trading GmbH changed their registered address during the year from Schillerstr.7, 40721 Hilden (bei Düsseldorf), Germany to the address listed above.
- (vii) Centrica Production Limited, Centrica Upstream Investment Limited, Finance Scotland 2016 Limited Partnership, Finance Scotland CEPS Limited Partnership and Finance Scotland CPP Limited Partnership changed their registered address during the year from IQ Building, 15 Justice Mill Lane, Aberdeen, AB11 6EQ, United Kingdom to the address listed above.
- (viii) Centrica Nederland BV changed their registered address during the year from Transpolis Building, Polarisavenue 39, 2132 JH Hoofddorp, Netherlands to the address listed above.
- (ix) Direct Energy (B.C.) Limited changed their registered address during the year from 1185 West Georgia Street, Suite 1700, Vancouver BC, V6E 4E6, Canada to the address listed above.
- (x) NSGP (Ensign) Limited changed their registered address during the year from 13 Castle Street, St Helier, JE4 5UT, Jersey to the address listed above.

(e) Summarised financial information
Material associates and joint arrangements

Management has determined that the investment in Lake Acquisitions Limited is sufficiently material to warrant further disclosure on an individual basis. Accordingly, the Group presents summarised financial information, along with reconciliations to the amounts included in the consolidated Group Financial Statements, for this investee.

Lake Acquisitions Limited
Summarised statement of total comprehensive income

Year ended 31 December	2019				2018			
	Associate information reported to Group £m	Unadjusted 20% share £m	Fair value and other adjustments £m	Group share £m	Associate information reported to Group £m	Unadjusted 20% share £m	Fair value and other adjustments £m	Group share £m
Revenue	2,463	493	–	493	2,446	489	–	489
Operating profit before interest and tax	268	54	(58)	(4)	233	46	(66)	(20)
Profit for the year	166	33	(46)	(13)	153	31	(49)	(18)
Other comprehensive income	145	29	–	29	(6)	(1)	–	(1)
Total comprehensive income	311	62	(46)	16	147	30	(49)	(19)

Summarised balance sheet

31 December	2019				2018			
	Associate information reported to Group £m	Unadjusted 20% share £m	Fair value and other adjustments (i) £m	Group share £m	Associate information reported to Group £m	Unadjusted 20% share £m	Fair value and other adjustments (i) £m	Group share £m
Non-current assets	18,558	3,712	702	4,414	15,209	3,042	758	3,800
Current assets	3,426	685	(1)	684	3,237	648	(1)	647
Current liabilities	(674)	(135)	–	(135)	(670)	(134)	–	(134)
Non-current liabilities	(13,057)	(2,611)	(105)	(2,716)	(9,833)	(1,967)	(115)	(2,082)
Net assets	8,253	1,651	596	2,247	7,943	1,589	642	2,231

(i) Before cumulative impairments of £958 million (2018: £586 million) of the Group's associate investment.

During the year, dividends of £nil (2018: £20 million) were paid by the associate to the Group.

Joint operations – fields/assets

31 December 2019	Location	Percentage holding
Cygnus	UK North Sea	61%

S11. Non-controlling interests

The Group has one subsidiary undertaking with a non-controlling interest: Spirit Energy Limited, through which the Group carries out the majority of its exploration and production activities.

31 December	2019					2018				
	Non-controlling interests %	Loss for the year £m	Total comprehensive loss £m	Total equity £m	Distributions to non-controlling interests £m	Non-controlling interests %	Profit for the year £m	Total comprehensive income £m	Total equity £m	Distributions to non-controlling interests £m
Spirit Energy Limited	31%	(80)	(96)	583	124	31%	59	60	803	–

Summarised financial information

The summarised financial information disclosed is shown on a 100% basis. It represents the consolidated position of Spirit Energy Limited and its subsidiaries that would be shown in its consolidated financial statements prepared in accordance with IFRS under Group accounting policies before intercompany eliminations.

Summarised statement of total comprehensive income

Year ended 31 December	2019 £m	2018 £m
Revenue	1,579	1,854
(Loss)/profit for the year	(258)	191
Other comprehensive (loss)/income	(52)	3
Total comprehensive (loss)/income	(310)	194

Summarised balance sheet

31 December	2019 £m	2018 £m
Non-current assets	4,200	4,775
Current assets	932	1,243
Assets of disposal groups classified as held for sale	11	–
Current liabilities	(606)	(949)
Liabilities of disposal groups classified as held for sale	(6)	–
Non-current liabilities	(2,651)	(2,479)
Net assets	1,880	2,590

Summarised cash flow

Year ended 31 December	2019 £m	2018 £m
Net (decrease)/increase in cash and cash equivalents	(57)	37

Company Statement of Changes in Equity

	Share capital £m	Share premium £m	Capital redemption reserve £m	Retained earnings £m	Other equity (note II) £m	Total equity £m
1 January 2018	348	2,121	26	2,745	(92)	5,148
Adjustment on adoption of IFRS 9	–	–	–	(14)	(28)	(42)
Profit for the year	–	–	–	634	–	634
Other comprehensive income	–	–	–	–	117	117
Employee share schemes	–	–	–	3	27	30
Scrip dividend	6	119	–	–	–	125
Dividends paid to equity holders	–	–	–	(673)	–	(673)
31 December 2018	354	2,240	26	2,695	24	5,339
Profit for the year	–	–	–	567	–	567
Other comprehensive loss	–	–	–	–	(59)	(59)
Employee share schemes and other share transactions	–	–	2	(10)	51	43
Scrip dividend	6	90	–	–	–	96
Dividends paid to equity holders	–	–	–	(561)	–	(561)
31 December 2019	360	2,330	28	2,691	16	5,425

As permitted by section 408(3) of the Companies Act 2006 no Income Statement or Statement of Comprehensive Income is presented.

The Directors propose a final dividend of 3.50 pence per share (totalling £204 million) for the year ended 31 December 2019. Details of the dividends are given in note 11 to the consolidated Group Financial Statements.

Details of the Company's share capital are provided in the Group Statement of Changes in Equity and note 25 to the consolidated Group Financial Statements.

The notes on pages 198 to 207 form part of these Financial Statements, along with note 25 to the consolidated Group Financial Statements.

Company Balance Sheet

31 December	Notes	2019 £m	2018 £m
Non-current assets			
Property, plant and equipment	IV	15	24
Investments	V	2,262	2,258
Trade and other receivables	VI	71	44
Derivative financial instruments	VII	241	208
Retirement benefit assets	XII	108	154
Securities		103	216
		2,800	2,904
Current assets			
Trade and other receivables	VI	13,770	13,422
Derivative financial instruments	VII	109	76
Current tax assets		11	11
Cash and cash equivalents		434	713
Securities		124	–
		14,448	14,222
Total assets		17,248	17,126
Current liabilities			
Derivative financial instruments	VII	(104)	(34)
Trade and other payables	IX	(6,651)	(7,049)
Provisions for other liabilities and charges		(1)	(2)
Bank overdrafts, loans and other borrowings	XI	(631)	(203)
		(7,387)	(7,288)
Non-current liabilities			
Deferred tax liabilities	X	(11)	(20)
Derivative financial instruments	VII	(36)	(44)
Trade and other payables	IX	(168)	(134)
Provisions for other liabilities and charges		(1)	–
Retirement benefit liabilities	XII	(62)	(63)
Bank loans and other borrowings	XI	(4,158)	(4,238)
		(4,436)	(4,499)
Total liabilities		(11,823)	(11,787)
Net assets			
Share capital		360	354
Share premium		2,330	2,240
Capital redemption reserve		28	26
Retained earnings ⁽ⁱ⁾		2,691	2,695
Other equity	II	16	24
Total shareholders' equity		5,425	5,339

(i) Retained earnings includes a net profit after taxation of £567 million (2018: £634 million).

The Financial Statements on pages 196 to 207, of which the notes on pages 198 to 207 form part, along with note 25 to the consolidated Group Financial Statements, were approved and authorised for issue by the Board of Directors on 12 February 2020 and were signed on its behalf by:

Iain Conn
Group Chief Executive

Chris O'Shea
Group Chief Financial Officer

Notes to the Company Financial Statements

I. General information and principal accounting policies of the Company

General information

The Company is a public company limited by shares, incorporated and domiciled in the UK, and registered in England and Wales. The registered office is Millstream, Maidenhead Road, Windsor, Berkshire, SL4 5GD.

The Company Financial Statements are presented in pounds sterling with all values rounded to the nearest million pounds. Pounds sterling is the functional currency of the Company.

Basis of preparation

The Company Financial Statements have been prepared in accordance with Financial Reporting Standard 101: 'Reduced disclosure framework' (FRS 101). In preparing these Financial Statements, the Company applies the recognition, measurement and disclosure requirements of International Financial Reporting Standards as adopted by the EU (Adopted IFRSs) but makes amendments where necessary in order to comply with Companies Act 2006 and sets out below where advantage of the FRS 101 disclosure exemptions has been taken.

From 1 January 2019, the following standard, amendments and interpretations are effective in the Company's Financial Statements:

- IFRS 16, 'Leases';
- Amendments to IAS 19, 'Plan Amendment, Curtailment or Settlement'.

The adoption of IFRS 16 had a minimal impact on the Company's Financial Statements. The amendments to IAS 19 are detailed in note 1 of the Group Financial Statements.

Other amendments effective during the year did not have any impact on the Company's Financial Statements.

In these Financial Statements, the Company has applied the exemptions available under FRS 101 in respect of the following disclosures:

- the requirements of IAS 7: 'Statement of cash flows';
- the statement of compliance with Adopted IFRSs;
- the effects of new but not yet effective IFRSs;
- prior year reconciliations for property, plant and equipment and intangible assets;
- the prior year reconciliation in the number of shares outstanding at the beginning and at the end of the year for share capital;
- disclosures in respect of related party transactions with wholly owned subsidiaries in a group;
- disclosures in respect of the compensation of key management personnel; and
- disclosures in respect of capital management.

As the consolidated Financial Statements of Centrica plc, which are available from the registered office, include the equivalent disclosures, the Company has also taken the exemptions under FRS 101 available in respect of the following disclosures:

- IFRS 2: 'Share-based payment' in respect of Group-settled share-based payments; and
- certain disclosures required by IFRS 13: 'Fair value measurement' and the disclosures required by IFRS 7: 'Financial instruments: disclosures' have not been provided apart from those which are relevant for the financial instruments which are held at fair value.

Measurement convention

The Company Financial Statements have been prepared on the historical cost basis except for: investments in subsidiaries that have been recognised at deemed cost on transition to FRS 101; derivative financial instruments, financial instruments designated at fair value through profit or loss on initial recognition or required to be measured at fair value through profit or loss or other comprehensive income on initial recognition, and the assets of the defined benefit pension schemes that have been measured at fair value; the liabilities of the defined benefit pension schemes that have been measured using the projected unit credit valuation method; and the carrying values of recognised assets and liabilities qualifying as hedged items in fair value hedges that have been adjusted from cost by the changes in the fair values attributable to the risks that are being hedged.

Going concern

The accounts have been prepared on a going concern basis, as described in the Directors' Report and note 24(b) of the consolidated Group Financial Statements.

Critical accounting judgements and key sources of estimation uncertainty

The Company does not have any critical accounting judgements. It is subject to estimation uncertainty related to its share of the Group's pension scheme surplus/deficit, as detailed further in note 22 of the consolidated Group Financial Statements. The valuation of the Company's investments is also a key source of estimation uncertainty. The Company's net assets were higher than its market capitalisation on 31 December 2019, and this was an indicator of impairment. However, the estimate of the recoverable amounts of these investments were in excess of their carrying values and as a result, no impairment has been reflected.

I. General information and principal accounting policies of the Company

Principal accounting policies

The accounting policies set out below have, unless otherwise stated, been applied consistently to all periods presented in these Company Financial Statements.

Employee share schemes

The Group has a number of employee share schemes under which it makes equity-settled share-based payments as detailed in the Remuneration Report on pages 82 to 93 and in note S2 to the consolidated Group Financial Statements. Equity-settled share-based payments are measured at fair value at the date of grant (excluding the effect of non-market-based vesting conditions). The fair value determined at the grant date is expensed on a straight-line basis together with a corresponding increase in equity over the vesting period, based on the Group's estimate of the number of awards that will vest and adjusted for the effect of non-market-based vesting conditions. The issue of share incentives by the Company to employees of its subsidiaries represents additional capital contributions. When these costs are recharged to the subsidiary undertaking, the investment balance is reduced accordingly.

Fair value is measured using methods detailed in note S2 to the consolidated Group Financial Statements.

Foreign currencies

The Company's functional and presentational currency is pounds sterling. Transactions in foreign currencies are translated at the rate of exchange ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated into pounds sterling at closing rates of exchange. Exchange differences on monetary assets and liabilities are taken to the Income Statement.

Property, plant and equipment

PP&E is included in the Balance Sheet at cost, less accumulated depreciation and any provisions for impairment. The initial cost of an asset comprises purchase price and construction cost and any costs directly attributable to bringing the asset into operation. The purchase price or construction cost is the aggregate amount paid and the fair value of any other consideration given to acquire the asset.

Depreciation is charged so as to write off the cost of assets over their estimated useful lives, on a straight-line basis, over a period of 3 to 10 years.

Investments

Fixed asset investments in subsidiaries' shares are held at deemed cost on transition to FRS 101 and at cost in accordance with IAS 27: 'Separate financial statements', less any provision for impairment as necessary for any subsequent investments.

Impairment

The Company's accounting policies in respect of impairment of property, plant and equipment, intangible assets and financial assets are consistent with those of the Group.

The carrying values of investments in subsidiary undertakings are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

The recoverable amount of an investment in a subsidiary undertaking is the greater of its value in use and its fair value less costs of disposal. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. The Company's impairment policies in relation to financial assets are consistent with those of the Group, with additional consideration given to amounts owed by Group undertakings. Except for certain loans due in greater than one year, all outstanding receivable balances are repayable on demand and arise from funding provided by the Company to its subsidiaries. The Company deems it unlikely that net receivers of funding would be able to repay loan balances in full at the end of the reporting period if the debt was called upon and in such circumstances the counterparty would either negotiate extended credit terms with the Company or obtain external financing to repay the balance. As such, the expected credit loss is either considered immaterial based on discounting the loan over the extended payment term, or has been calculated by applying a default loss rate based on the actual or proxy credit rating of the counterparty. No change in credit risk is deemed to have occurred since initial recognition for amounts not repayable and therefore a 12-month expected credit loss has been calculated based on the assessed probability of default.

The Company has applied the impairment requirements of IFRS 9 to financial guarantees issued to its subsidiary undertakings. Expected credit losses on such arrangements have been calculated according to the nature of the guarantee and the Company's perceived exposure at the balance sheet date.

I. General information and principal accounting policies of the Company

Leases

At inception of a contract, the Company assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Company assesses whether:

- the contract involves the use of an identified asset;
- the Company has the right to obtain substantially all the economic benefits from use of the asset throughout the period of use; and
- the Company has the right to direct the use of the asset.

As a lessee

The Company recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received. The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of right-of-use assets are determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain re-measurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounting using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate.

Lease payments included in the measurement of the lease liability comprise: fixed payments (including in-substance fixed payments), variable lease payments that depend on an index or a rate (initially measured using the index or rate as at the commencement date), amounts expected to be payable under a residual value guarantee, and the exercise price under a purchase option that the Company is reasonably certain to exercise, lease payments in an optional renewal period if the Company is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Company is reasonably certain not to terminate early. Variable lease payments that do not depend on an index or rate are recognised in profit or loss in the period in which the event or condition that triggers those payments occurs. The lease liability is subsequently measured at amortised cost using the effective interest method. It is re-measured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, lease-term extension or termination option. When the lease liability is re-measured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

In the prior year, the determination of whether an arrangement is, or contains, a lease was based on the substance of the arrangement and required an assessment of whether the fulfilment of the arrangement was dependent on the use of a specific asset or assets and whether the arrangement conveyed a right to use the asset or assets. Leases were classified as finance leases whenever the terms of the lease transferred substantially all of the risks and rewards of ownership to the lessee. All other leases were classified as operating leases.

Pensions and other post-employment benefits

The Company's employees participate in a number of the Group's defined benefit pension schemes. The total Group cost of providing benefits under defined benefit schemes is determined separately for each of the Group's schemes under the projected unit credit actuarial valuation method. Actuarial gains and losses are recognised in full in the period in which they occur. The key assumptions used for the actuarial valuation are based on the Group's best estimate of the variables that will determine the ultimate cost of providing post-employment benefits, on which further detail is provided in notes 3(b) and 22 to the consolidated Group Financial Statements.

The Company's share of the total Group surplus or deficit at the end of the reporting period for each scheme is calculated in proportion to the Company's share of ordinary employer contributions to that scheme during the year; ordinary employer contributions are determined by the pensionable pay of the Company's employees within the scheme and the cash contribution rates set by the scheme trustees. Note that as a participant in these multi-employer schemes, the Company could be liable for other entities' obligations (for example under section 75 of the Pensions Act). See note 22 of the consolidated Group Financial Statements for details of the overall scheme obligations. Current service cost is calculated with reference to the pensionable pay of the Company's employees. The Company's share of the total Group interest on scheme liabilities, expected return on scheme assets and actuarial gains or losses is calculated in proportion to ordinary employer contributions in the prior accounting period. Changes in the surplus or deficit arising as a result of the changes in the Company's share of total ordinary employer contributions are also treated as actuarial gains or losses.

I. General information and principal accounting policies of the Company

Taxation

Current tax, including UK corporation tax, is provided at amounts expected to be paid (or recovered) using the tax rates and laws that have been enacted or substantively enacted by the balance sheet date.

Deferred tax is recognised in respect of all temporary differences identified at the balance sheet date, except for differences arising on:

- the initial recognition of an asset or liability in a transaction which is not a business combination and which at the time of the transaction affects neither accounting profit nor taxable profit; and
- investments in subsidiaries where the Company is able to control the timing of the reversal of the difference and it is probable that the difference will not reverse in the foreseeable future.

Temporary differences are differences between the carrying amount of the Company's assets and liabilities and their tax base.

Deferred tax assets and liabilities are offset when the Company has a legally enforceable right to offset current tax assets and liabilities and the deferred tax assets and liabilities relate to taxes levied by the same tax authority.

Deferred tax assets that are not eligible for offset against deferred tax liabilities are recognised only when, on the basis of all available evidence, it can be regarded as probable that there will be suitable taxable profits in the foreseeable future, against which the deductible temporary difference can be utilised.

Deferred tax is measured at the average tax rates that are expected to apply in the periods in which the asset is realised or the liability is settled, based on tax rates and laws that have been enacted or substantively enacted by the balance sheet date. Measurement of deferred tax liabilities and assets reflects the tax consequences expected from the manner in which the asset or liability is recovered or settled.

The tax expense for the year comprises current and deferred tax. Tax is recognised in the Income Statement, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

Financial instruments

The Company's accounting policies for financial instruments are consistent with those of the Group as disclosed in note S2 to the consolidated Group Financial Statements. The Company's financial risk management policies are consistent with those of the Group and are described in the Strategic Report – Principal Risks and Uncertainties on pages 34 to 43 and in note S3 to the Group Financial Statements.

Presentation of derivative financial instruments

In line with the Group's accounting policy for derivative financial instruments, the Company has classified those derivatives held for the purpose of treasury management as current or non-current, based on expected settlement dates.

II. Other equity

	Cash flow hedging reserve £m	Actuarial gains and losses reserve £m	Financial asset at FVOCI reserve (previously AFS) £m	Treasury and own shares reserve £m	Share-based payments reserve £m	Total £m
1 January 2018	(1)	(82)	33	(142)	100	(92)
Adjustment on adoption of IFRS 9	–	–	(28)	–	–	(28)
Losses on revaluation of equity investments measured at fair value through other comprehensive income	–	–	(2)	–	–	(2)
Actuarial gain	–	133	–	–	–	133
Employee share schemes:						
Increase in own shares	–	–	–	(11)	–	(11)
Exercise of awards	–	–	–	46	(51)	(5)
Value of services provided	–	–	–	–	43	43
Cash flow hedges:						
Net gains	22	–	–	–	–	22
Transferred to income and expense	(10)	–	–	–	–	(10)
Taxation on above items	(2)	(25)	1	–	–	(26)
31 December 2018	9	26	4	(107)	92	24
Gains on revaluation of equity investments measured at fair value through other comprehensive income	–	–	4	–	–	4
Actuarial loss	–	(72)	–	–	–	(72)
Employee share schemes:						
Exercise of awards	–	–	–	70	(60)	10
Value of services provided	–	–	–	–	41	41
Cash flow hedges:						
Net losses	(6)	–	–	–	–	(6)
Transferred to income and expense	2	–	–	–	–	2
Taxation on above items	–	13	–	–	–	13
31 December 2019	5	(33)	8	(37)	73	16

III. Directors and employees

Employee costs

Year ended 31 December	2019 £m	2018 £m
Wages and salaries	(21)	(20)
Other	(18)	(16)
	(39)	(36)

Average number of employees during the year

Year ended 31 December	2019 Number	2018 Number
Administration	82	66
Power	74	79
	156	145

IV. Property, plant and equipment

	2019 £m
Cost	
1 January	29
Re-measurement of right-of-use asset	(2)
Disposals	(1)
31 December	26
Accumulated depreciation	
1 January	(5)
Charge for year	(6)
31 December	(11)
NBV at 31 December	15

Included within the above balance is £15 million of assets held as right-of-use assets (2018: £23 million of assets held under finance leases).

V. Investments in subsidiaries

	2019 (i) £m	2018 (i) £m
Cost		
1 January	2,258	2,286
Employee share scheme net capital movement (i)	4	(28)
31 December	2,262	2,258

(i) Employee share scheme movement is the net change in shares to be awarded under employee share schemes to employees of Group undertakings. Direct investments are held in Centrica Holdings Limited, Centrica Trading Limited and Centrica Beta Holdings Limited, all of which are incorporated in England, and Rhodes Holdings HK Limited, which is incorporated in Hong Kong. Related undertakings are listed in note S10 to the consolidated Group Financial Statements.

The Directors believe that the carrying value of the investments is supported by their realisable value.

VI. Trade and other receivables

31 December	2019		2018	
	Current (i) £m	Non-current (ii) £m	Current (i) £m	Non-current (ii) £m
Amounts owed by Group undertakings	13,763	65	13,414	39
Prepayments	7	6	8	5
	13,770	71	13,422	44

(i) The amounts receivable by the Company include £12,383 million (2018: £12,398 million) that bears interest at a quarterly rate determined by Group treasury and linked to the Group cost of funds. The quarterly rates ranged between 3.0% and 6.3% per annum during 2019 (2018: 2.8% and 5.7%). The other amounts receivable from Group undertakings are interest free. All amounts receivable from Group undertakings are unsecured and repayable on demand. Amounts receivable by the Company are stated net of provisions of £418 million (2018: £128 million).

(ii) The amounts receivable by the Company due after more than one year include £20 million (2018: £20 million) that bears interest at a quarterly rate determined by Group treasury and linked to the Group cost of funds. The quarterly rates ranged between 4.4% and 4.9% per annum during 2019 (2018: 3.7% and 4.1%). The other amounts receivable from Group undertakings are interest-free. All amounts receivable from Group undertakings are unsecured and repayable in two to three years.

VII. Derivative financial instruments

31 December	2019			2018		
	Current £m	Non-current £m	Total £m	Current £m	Non-current £m	Total £m
Derivative financial assets	109	241	350	76	208	284
Derivative financial liabilities	(104)	(36)	(140)	(34)	(44)	(78)

VIII. Financial instruments

(a) Determination of fair values

The Company's policy for the classification and valuation of financial instruments carried at fair value into one of the three hierarchy levels determined in accordance with IFRS 13 are consistent with those of the Group, as detailed in note S6 to the Group Financial Statements.

(b) Financial instruments carried at fair value

31 December	Level 1 £m	Level 2 £m	2019 Total £m	Level 1 £m	Level 2 £m	2018 Total £m
Financial assets						
Derivative financial assets held for trading:						
Foreign exchange derivatives	–	113	113	–	42	42
Derivative financial assets in hedge accounting relationships:						
Interest rate derivatives	–	108	108	–	59	59
Foreign exchange derivatives	–	129	129	–	183	183
Treasury gilts designated FVTPL	124	–	124	126	–	126
Debt instruments	77	–	77	68	–	68
Equity instruments designated FVOCI	26	–	26	22	–	22
Cash and cash equivalents	–	432	432	–	699	699
Total financial assets at fair value	227	782	1,009	216	983	1,199
Financial liabilities						
Derivative financial liabilities held for trading:						
Interest rate derivatives	–	(23)	(23)	–	(26)	(26)
Foreign exchange derivatives	–	(115)	(115)	–	(42)	(42)
Derivative financial liabilities in hedge accounting relationships:						
Interest rate derivatives	–	(2)	(2)	–	(10)	(10)
Total financial liabilities at fair value	–	(140)	(140)	–	(78)	(78)

IX. Trade and other payables

31 December	2019		2018	
	Current (i) £m	Non-current (ii) £m	Current (i) £m	Non-current (ii) £m
Amounts owed to Group undertakings	(6,616)	(158)	(7,004)	(114)
Accruals and other creditors	(35)	(10)	(45)	(20)
	(6,651)	(168)	(7,049)	(134)

- (i) The amounts payable by the Company include £5,120 million (2018: £7,004 million) that bears interest at a quarterly rate determined by Group treasury and linked to the Group cost of funds. The quarterly rates ranged between 3.0% and 6.3% per annum during 2019 (2018: 2.8% and 5.7%). Other amounts payable by the Company are interest free.
- (ii) The amounts payable by the Company due after more than one year include £120 million (2018: £100 million) that bears interest at the prevailing LIBOR rate less 0.05%. These amounts payable are due in over five years. Other amounts payable by the Company are interest free.

X. Deferred tax

	Retirement benefit obligation £m	Other £m	Total £m
1 January 2018	7	(7)	–
Credit/(charge) to income	8	(2)	6
Charge to equity	(25)	(1)	(26)
31 December 2018	(10)	(10)	(20)
(Charge)/credit to income	(6)	3	(3)
Credit to equity	12	–	12
31 December 2019	(4)	(7)	(11)

Other deferred tax liabilities primarily relate to other temporary differences. All deferred tax crystallises in over one year.

XI. Bank overdrafts, loans and other borrowings

31 December	2019		2018	
	Current £m	Non-current £m	Current £m	Non-current £m
Bank loans and overdrafts	(483)	(144)	(22)	(149)
Bonds	(60)	(4,005)	(90)	(4,072)
Interest accruals	(82)	–	(85)	–
Lease obligations (2018: finance lease obligations)	(6)	(9)	(6)	(17)
	(631)	(4,158)	(203)	(4,238)

Disclosures in respect of the Group's financial liabilities are provided in note 24 to the Group Financial Statements.

XII. Pensions

(a) Summary of main schemes

The Company's employees participate in the following Group defined benefit pension schemes: Centrica Pension Plan (CPP), Centrica Pension Scheme (CPS) and Centrica Unfunded Pension Scheme. Its employees also participate in the defined contribution section of the Centrica Pension Scheme. Information on these schemes is provided in note 22 to the Group Financial Statements.

Together with the Centrica Engineers Pensions Scheme (CEPS), CPP and CPS form the significant majority of the Group's and Company's defined benefit obligation and are referred to below and in the Group Financial Statements as the 'Registered Pension Schemes'.

(b) Accounting assumptions, risks and sensitivity analysis

The accounting assumptions, risks and sensitivity analysis for the Registered Pension Schemes are provided in note 22 to the consolidated Group Financial Statements.

(c) Movements in the year

	2019		2018	
	Pension liabilities £m	Pension assets £m	Pension liabilities £m	Pension assets £m
1 January	(1,370)	1,461	(1,082)	1,052
Items included in the Company Income Statement:				
Current service cost	(11)	–	(14)	–
Past service credit/(cost)	29	–	(18)	–
Interest on scheme liabilities	(39)	–	(28)	–
Expected return on scheme assets	–	43	–	28
Items included in the Company Statement of Comprehensive Income:				
Actuarial (loss)/gain	(75)	3	(255)	388
Other movements:				
Employer contributions	–	32	–	25
Benefits paid from schemes	47	(47)	32	(32)
Transfers	(27)	–	(5)	–
31 December	(1,446)	1,492	(1,370)	1,461

Presented in the Company Balance Sheet as:

	2019 £m	2018 £m
31 December		
Retirement benefit pension assets	108	154
Retirement benefit pension liabilities	(62)	(63)
	46	91

Of the pension schemes liabilities, £62 million (2018: £63 million) relates to the Centrica Unfunded Pension Scheme.

(d) Analysis of the actuarial losses recognised in reserves (note II)

Year ended 31 December	2019 £m	2018 £m
Actuarial gain (actual return less expected return on pension scheme assets)	3	388
Experience gain/(loss) arising on the scheme liabilities	42	(3)
Changes in assumptions underlying the present value of the schemes' liabilities	(117)	(252)
Actuarial (loss)/gain recognised in reserves before adjustment for taxation	(72)	133
Cumulative actuarial gains/(losses) recognised in reserves at 1 January, before adjustment for taxation	32	(101)
Cumulative actuarial (losses)/gains recognised in reserves at 31 December, before adjustment for taxation	(40)	32

XII. Pensions

(e) Defined benefit pension scheme contributions

Note 22 to the Group Financial Statements provides details of the triennial review carried out at 31 March 2018 in respect of the UK Registered Pension Schemes and the future pension scheme contributions, including asset-backed arrangements, agreed as part of this review. Under IAS 19, the Company's contribution and trustee interest in the Scottish Limited Partnerships are recognised as scheme assets.

The Company estimates that it will pay £9 million of employer contributions during 2020 at an average rate of 19% of pensionable pay together with contributions via the salary sacrifice arrangement of £3 million.

(f) Pension scheme assets

31 December	2019			2018		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	188	346	534	1,991	351	2,342
Corporate bonds	2,646	–	2,646	1,118	–	1,118
High-yield debt	1,015	1,288	2,303	595	1,360	1,955
Liability matching assets	1,430	1,075	2,505	1,581	994	2,575
Property	–	316	316	–	395	395
Cash pending investment	695	–	695	102	–	102
Asset-backed contribution assets	–	738	738	–	802	802
Group pension scheme assets⁽ⁱ⁾	5,974	3,763	9,737	5,387	3,902	9,289
			2019 £m			2018 £m
Company share of the above			1,492			1,461

(i) Total pension scheme assets for the UK pension schemes.

XIII. Commitments

At 31 December 2019, the Company had commitments of £101 million (2018: £135 million) relating to contracts for outsourced services. The Company's commitment in respect of its agreement with Cheniere is detailed in note 23 to the consolidated Group Financial Statements.

In 2019 Centrica LNG Company Limited and the Company executed an agreement to transfer the LNG Sale and Purchase Agreement with Sabine Pass Liquefaction from the Company to Centrica LNG Company Limited. No commitment in respect of this agreement remains in the Company.

XIV. Related parties

During the year the Company accepted cash deposits on behalf of the Spirit Energy group of companies giving rise to a Trade and other payables balance of £312 million (2018: £532 million).

Gas and Liquids Reserves (Unaudited)

The Group's estimates of reserves of gas and liquids are reviewed as part of the full year reporting process and updated accordingly.

A number of factors affect the volumes of gas and liquids reserves, including the available reservoir data, commodity prices and future costs. Due to the inherent uncertainties and the limited nature of reservoir data, estimates of reserves are subject to change as additional information becomes available.

The Group discloses 2P gas and liquids reserves, representing the central estimate of future hydrocarbon recovery. Reserves for Centrica operated fields are estimated by in-house technical teams composed of geoscientists and reservoir engineers. Reserves for non-operated fields are estimated by the operator, but are subject to internal review and challenge.

As part of the internal control process related to reserves estimation, an assessment of the reserves, including the application of the reserves definitions, is undertaken by an independent technical auditor. An annual reserves assessment has been carried out by Gaffney, Cline & Associates for the Group's global reserves. Reserves are estimated in accordance with a formal policy and procedure standard.

The Group has estimated 2P gas and liquids reserves in Europe.

The principal fields in Spirit Energy are Kvitebjørn, Statfjord, Ivar Aasen, Cygnus, Maria, South and North Morecambe, Rhyl and Chiswick. The principal non-Spirit Energy field is Rough. The European reserves estimates are consistent with the guidelines and definitions of the Society of Petroleum Engineers, the Society of Petroleum Evaluation Engineers and the World Petroleum Council's Petroleum Resources Management System using accepted principles.

Estimated net 2P reserves of gas (billion cubic feet)	Spirit Energy (i)	Rough	Total
1 January 2019	698	103	801
Revisions of previous estimates (ii)	128	–	128
Disposals of reserves in place (iii)	(14)	–	(14)
Production (iv)	(129)	(40)	(169)
31 December 2019	683	63	746

Estimated net 2P reserves of liquids (million barrels)	Spirit Energy (i)	Rough	Total
1 January 2019	69	–	69
Revisions of previous estimates (ii)	23	–	23
Production (iv)	(10)	–	(10)
31 December 2019	82	–	82

Estimated net 2P reserves (million barrels of oil equivalent)	Spirit Energy (i)	Rough	Total
31 December 2019 (v)	196	10	206

(i) The movements represent Centrica's 69% interest in Spirit Energy.

(ii) Revision of previous estimates include those associated with North and South Morecambe, North Sea fields and Norwegian fields.

(iii) Reflects the disposal of interests in the Valemon and Sindre assets.

(iv) Represents total sales volumes of gas and oil produced from the Group's reserves.

(v) Includes the total of estimated gas and liquids reserves at 31 December 2019 in million barrels of oil equivalent.

Liquids reserves include oil, condensate and natural gas liquids.

Five Year Summary (Unaudited)

Year ended 31 December	2015 (restated) (i) (ii) (iii) £m	2016 (restated) (i) (ii) (iii) £m	2017 (restated) (i) (ii) (iii) £m	2018 (restated) (i) (ii) (iii) £m	2019 (ii) £m
Group revenue included in business performance (i)	27,971	27,102	28,035	27,831	26,825
Operating profit before exceptional items and certain re-measurements:					
Centrica Consumer (ii) (iv)	938	899	885	750	505
Centrica Business (ii) (iv)	159	369	99	75	217
Upstream (ii) (iv)	301	199	256	567	179
	1,398	1,467	1,240	1,392	901
Exceptional items and certain re-measurements after taxation	(1,717)	777	(407)	(416)	(1,531)
(Loss)/profit attributable to owners of the parent	(747)	1,672	328	183	(1,023)
	Pence	Pence	Pence	Pence	Pence
Earnings per ordinary share	(14.9)	31.4	5.9	3.3	(17.8)
Adjusted earnings per ordinary share	17.2	16.8	12.5	11.2	7.3
Dividend per share declared in respect of the year	12.0	12.0	12.0	12.0	5.0

Assets and liabilities

31 December	2015 (ii) £m	2016 (ii) £m	2017 (ii) £m	2018 (ii) £m	2019 £m
Goodwill and other intangible assets	3,824	4,383	4,326	4,456	4,033
Other non-current assets (i)	7,790	8,218	7,190	7,435	5,826
Net current (liabilities)/assets (i)	(521)	1,220	1,705	284	(696)
Non-current liabilities	(9,718)	(11,173)	(9,789)	(8,227)	(7,474)
Net (liabilities)/assets of disposal groups held for sale	(33)	196	–	–	106
Net assets	1,342	2,844	3,432	3,948	1,795
Net debt (note 24)	(4,747)	(3,473)	(2,596)	(2,656)	(3,181)

Cash flows

Year ended 31 December	2015 £m	2016 £m	2017 £m	2018 £m	2019 £m
Cash flow from operating activities before exceptional payments	2,278	2,669	2,016	2,182	1,548
Payments relating to exceptional charges in operating costs	(81)	(273)	(176)	(248)	(298)
Net cash flow from investing activities	(611)	(803)	32	(1,007)	(503)
Cash flow before cash flow from financing activities	1,586	1,593	1,872	927	747

- (i) 2018 Group revenue included in business performance has been restated to include the net result of certain commodity purchases and sales trades that are deemed to be speculative in nature. Further details are given in note 1. Earlier periods have not been restated and therefore are not presented on a comparable basis.
- (ii) Results for the years ended 2019, 2018 and 2017 are presented in accordance with IFRS 15: 'Revenue from contracts with customers'. Results for earlier periods have not been restated and therefore are not presented on a comparable basis.
- (iii) Results have been restated to reflect the new operating structure of the Group. See note 1 for further details.
- (iv) Adjusted operating profit has been restated to include the impact of business performance interest and taxation of joint ventures and associates.

Ofgem Consolidated Segmental Statement

Independent Auditor's Report to the Directors of Centrica plc and its Licensees

In our opinion the accompanying statement (the 'Ofgem Consolidated Segmental Statement' or 'CSS') of Centrica plc and its Licensees for the year ended 31 December 2019 is prepared, in all material respects, in accordance with:

- the requirements of Ofgem's Standard Condition 19A of the Electricity and Gas Supply Licences and Standard Condition 16B of the Electricity Generation Licences established by the regulator Ofgem; and
- the basis of preparation on pages 217 to 219.

We have audited the Ofgem Consolidated Segmental Statement of Centrica plc and its Licensees (as listed in footnote (i)) (the Group) for the year ended 31 December 2019 in accordance with the terms of our engagement letter dated 22 July 2019. The Ofgem Consolidated Segmental Statement has been prepared by the Directors of Centrica plc and its Licensees based on the requirements of Ofgem's Standard Condition 19A and the Electricity and Gas Supply Licences and Standard Condition 16B of the Electricity Generation Licences (together, the 'Licences') and the basis of preparation on pages 217 to 219.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the CSS section of our report.

We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the CSS in the United Kingdom, including the Financial Reporting Council's (the 'FRC's') Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of matter – basis of accounting

We draw attention to pages 217 to 219 of the CSS which describes the basis of accounting. The CSS is prepared to assist the Company in complying with the requirements of Ofgem's Standard Condition 19A of the Electricity and Gas Supply Licences and Standard Condition 16B of the Electricity Generation Licences established by the regulator Ofgem. The basis of preparation is not the same as segmental reporting under IFRS and/or statutory reporting. As a result, the CSS may not be suitable for another purpose. Our opinion is not modified in respect of this matter.

Conclusions relating to going concern

We are required by ISAs (UK) to report in respect of the following matters where:

- the Directors' use of the going concern basis of accounting in preparation of the CSS is not appropriate; or
- the Directors have not disclosed in the CSS any identified material uncertainties that may cast significant doubt about the Group's ability to continue to adopt the going concern basis of accounting for a period of at least twelve months from the date when the CSS is authorised for issue.

We have nothing to report in respect of these matters.

Other information

The Directors are responsible for the other information. The other information comprises the information included in the annual report, other than the CSS and our auditor's report thereon. Our opinion on the CSS does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the CSS, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the CSS or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the CSS or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in respect of these matters.

Responsibilities of the Directors

The Directors are responsible for the preparation of the CSS in accordance with the Licences and the basis of preparation on pages 217 to 219 and for such internal control as the Directors determine is necessary to enable the preparation of the CSS that are free from material misstatement, whether due to fraud or error.

In preparing the CSS, the Directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities for the audit of the CSS

Our objectives are to obtain reasonable assurance about whether the CSS as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this CSS.

A further description of our responsibilities for the audit of the CSS is located on the Financial Reporting Council's website at: frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

Independent Auditor's Report to the Directors of Centrica plc and its Licensees

Use of this report

This report is made solely to the Company's Directors, as a body, in accordance with our engagement letter dated 22 July 2019 and solely for the purpose of assisting the Directors in reporting on the CSS to the Regulator Ofgem. We permit this report to be displayed on the Centrica plc website www.centrica.com and within the December 2019 Annual Report & Accounts (see footnote (ii)) to enable the Directors to show they have addressed their governance responsibilities by obtaining an independent assurance report in connection with the CSS. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Directors as a body and Centrica plc, for our work or this report, or for the opinions we have formed. The materiality level we used in planning and performing our audit was £20 million.

The engagement partner on the audit resulting in this independent auditor's report is Dean Cook.

Deloitte LLP

12 February 2020

London

(i) British Gas Trading Limited, Neas Energy Limited, Centrica Barry Limited, Centrica KPS Limited, Centrica PB Limited and Centrica KL Limited.

(ii) The maintenance and integrity of Centrica plc's website is the responsibility of the Directors of Centrica plc; the work carried out by the auditors does not involve consideration of these matters and accordingly, the auditors accept no responsibility for any changes that may have occurred to the CSS since it was initially presented on the website.

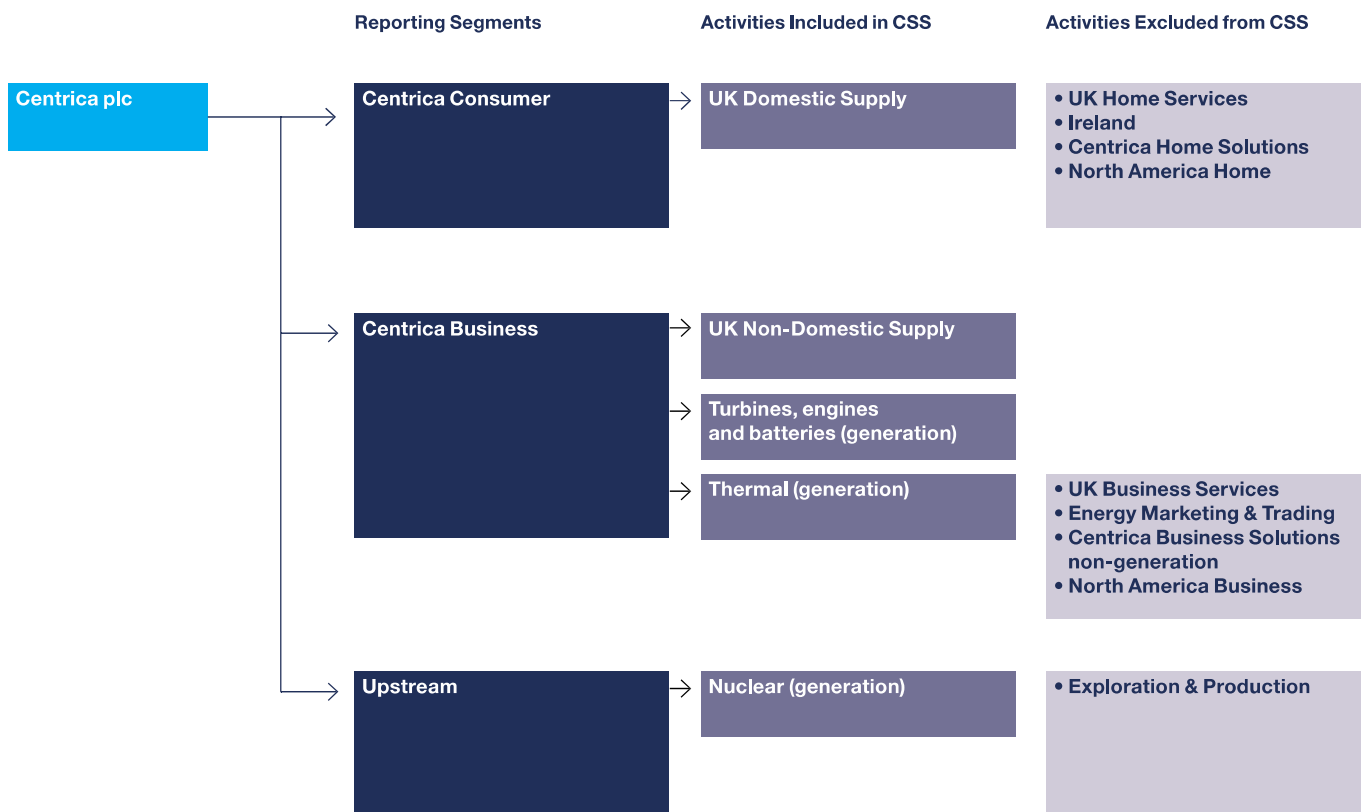
Introduction

The Ofgem Consolidated Segmental Statement (CSS) and required regulatory information on pages 212 to 221 are provided in order to comply with Standard Condition 16B of the Electricity Generation Licences and Standard Condition 19A of the Electricity and Gas Supply Licences.

The CSS and supporting information is prepared by the Directors in accordance with the Segmental Statements Guidelines issued by Ofgem. The CSS has been derived from and reconciled to the Centrica plc Annual Report and Accounts for the year ended 31 December 2019, which have been prepared in accordance with International Financial Reporting Standards (IFRS) adopted by the European Union (EU) and therefore comply with Article 4 of the EU IAS Regulation and those parts of the Companies Act 2006 applicable to companies reporting under IFRS.

Centrica plc operational reporting structure

Below is a summary of the Centrica plc Group's (Group) operational reporting structure. The CSS financial data has been extracted from the Centrica plc Annual Report and Accounts 2019 operating segments rather than with reference to specific legal entities. Certain activities included in the Group's operating segments have been excluded from the Generation and Supply segments of the CSS on the basis they are non-licensed activities (for example Business Services and trading activity unrelated to Generation or Supply) as illustrated below. The Centrica plc Annual Report and Accounts 2019 provides operating segment results in note 4. A full reconciliation between the relevant operating segment results and those disclosed for 'Domestic Supply', 'Non-Domestic Supply' and 'Generation' in this CSS is provided at the end of the report.



Centrica plc operational reporting structure

Centrica plc is the ultimate parent company of all 100% owned licensees. The individual supply and generation licences are held in legal entities whose licensed activities are reported as part of the Centrica plc Annual Report and Accounts 2019 within the operating segments shown above. The individual supply and generation licences held in subsidiaries, joint ventures or associates of Centrica plc during 2019 are detailed below:

Licensee	Licence	Ownership
British Gas Trading Limited	Supply	100%
Neas Energy Limited ⁽ⁱ⁾	Supply	100%
Centrica Brigg Limited	Exempt	100%
Centrica Barry Limited	Generation	100%
Centrica KPS Limited	Generation	100%
Centrica Distributed Generation Limited	Exempt	100%
Centrica PB Limited	Generation	100%
Centrica KL Limited	Generation	100%
EDF Energy Nuclear Generation Limited ⁽ⁱⁱ⁾	Generation	20% Associate

(i) Neas Energy holds a supply licence but currently does not supply any UK customers.

(ii) The Group holds a 20% investment in Lake Acquisitions Limited which indirectly owns 100% of EDF Energy Nuclear Generation Limited.

Ofgem consolidated segmental statement

Year ended 31 December 2019

	Unit	Electricity Generation		Aggregate Generation Business	Electricity Supply		Gas Supply		Aggregate Supply Business
		Nuclear	Thermal		Domestic	Non-Domestic	Domestic	Non-Domestic	
Total revenue	£m	534.8	262.5	797.3	3,166.3	1,574.1	3,642.0	467.2	8,849.6
Sales of electricity & gas	£m	496.5	232.1	728.6	3,088.2	1,574.1	3,569.0	467.2	8,698.5
Other revenue	£m	38.3	30.4	68.7	78.1	–	73.0	–	151.1
Total operating costs	£m	(358.3)	(244.3)	(602.6)	(3,157.7)	(1,547.5)	(3,415.6)	(424.3)	(8,545.1)
Direct fuel costs	£m	(90.7)	(144.9)	(235.6)	(1,093.3)	(601.3)	(1,678.6)	(248.1)	(3,621.3)
Direct costs	£m	(214.4)	(91.4)	(305.8)	(1,516.0)	(804.0)	(1,045.6)	(112.7)	(3,478.3)
Network costs	£m	(45.1)	(0.2)	(45.3)	(731.0)	(354.7)	(938.6)	(92.4)	(2,116.7)
Environmental and social obligation costs	£m	–	(58.5)	(58.5)	(722.4)	(423.0)	(41.9)	–	(1,187.3)
Other direct costs	£m	(169.3)	(32.7)	(202.0)	(62.6)	(26.3)	(65.1)	(20.3)	(174.3)
Indirect costs	£m	(53.2)	(8.0)	(61.2)	(548.4)	(142.2)	(691.4)	(63.5)	(1,445.5)
WACOF/E/G	£/MWh, P/th	(8.9)	(48.4)	N/A	(65.9)	(55.7)	(60.3)	(51.2)	N/A
EBITDA	£m	176.5	18.2	194.7	8.6	26.6	226.4	42.9	304.5
DA	£m	(149.4)	(50.0)	(199.4)	(44.2)	(10.8)	(54.3)	(4.4)	(113.7)
EBIT	£m	27.1	(31.8)	(4.7)	(35.6)	15.8	172.1	38.5	190.8
Volume	TWh, MThms	10.2	4.2	N/A	16.6	10.8	2,783.2	484.3	N/A
Average customer numbers/sites	'000s	N/A	N/A	N/A	5,359.0	463.3	6,586.0	189.0	N/A

Supply EBIT	margin	(1.1)%	1.0%	4.7%	8.2%	2.2%
Supply PAT	£m	(28.7)	12.7	139.1	31.2	154.3
Supply PAT	margin	(0.9)%	0.8%	3.8%	6.7%	1.7%

2018 Summarised CSS

Year ended 31 December 2018

	Unit	Electricity Generation		Aggregate Generation Business	Electricity Supply		Gas Supply		Aggregate Supply Business
		Nuclear	Thermal		Domestic	Non-Domestic	Domestic	Non-Domestic	
Total revenue	£m	540.8	236.7	777.5	3,054.9	1,393.4	3,860.3	431.2	8,739.8
EBIT	£m	45.7	(28.3)	17.4	48.4	10.7	417.8	28.8	505.7

Supply EBIT	margin	1.6%	0.8%	10.8%	6.7%	5.8%
Supply PAT	£m	39.4	8.6	337.6	23.9	409.5
Supply PAT	margin	1.3%	0.6%	8.7%	5.5%	4.7%

Glossary of terms

- 'WACOF/E/G' is weighted average cost of fuel (nuclear), electricity (supply) and gas (thermal and supply) calculated by dividing direct fuel costs by volumes. For the Thermal sub-segment, the cost of carbon emissions is added to direct fuel costs before dividing by the generated volume.
- 'EBITDA' is earnings before interest, tax, depreciation and amortisation, and is calculated by subtracting total operating costs from revenue.
- 'DA' is depreciation and amortisation.
- 'EBIT' is earnings before interest and tax, and is calculated by subtracting total operating costs, depreciation and amortisation from total revenue.
- 'Supply EBIT margin' is a profit margin expressed as a percentage and calculated by dividing EBIT by total revenue and multiplying by 100 for the Supply segment.
- 'Supply PAT' is profit after tax but before interest and is calculated by subtracting Group adjusted tax from EBIT for the Supply segment.
- 'Supply PAT margin' is a profit margin expressed as a percentage and calculated by dividing Supply PAT by total revenue and multiplying by 100 for the Supply segment.
- 'Volume' for Supply is supplier volumes at the meter point (i.e. net of losses); Generation volume is the volume of power that can actually be sold in the wholesale market (i.e. generation volumes after losses up to the point where power is received under the Balancing and Settlement Code but before subsequent losses).
- 'Average customer numbers/sites' are calculated by adding average monthly customer numbers/sites (as defined in the basis of preparation) and dividing by 12.
- 'Scheduling decisions' means the decision to run individual generation units.
- 'Responsible for interactions with the Balancing Market' means interactions with the Balancing Mechanism in electricity.
- 'Interacts with wider market participants to buy/sell energy' means the business unit is responsible for interacting with wider market participants to buy/sell energy, not the entity responsible for the buy/sell decision itself, which falls under 'Responsible for implementing hedging policy/makes decisions to buy/sell energy'.
- 'Matches own generation with own supply' means where there is some internal matching of generation and supply before either generation or supply interact with the wider market.
- 'Forecasts total system demand' means forecasting total system electricity demand or total system gas demand.
- 'Forecasts customer demand' means forecasting the total demand of own supply customers.
- 'Bears shape risk after initial hedge until market allows full hedge' means the business unit which bears financial risk associated with hedges made before the market allows fully shaped hedging.
- 'Bears short-term risk for variance between demand and forecast' means the business unit which bears financial risk associated with too little or too much supply for own customer demand.

Business functions table

Year ended 31 December 2019 – analysis of business functions ⁽ⁱ⁾

The table below illustrates where the business functions reside.

	Generation	Supply	Another part of business
Operates and maintains generation assets	✓	–	–
Responsible for scheduling decisions	✓	–	–
Responsible for interactions with the Balancing Market	✓	✓	–
Responsible for determining hedging policy	✓ (output)	✓ (demand)	–
Responsible for implementing hedging policy/makes decision to buy and sell energy	✓ (output)	✓ (demand)	–
Interacts with wider market participants to buy/sell energy	✓ (bilateral)	✓ (market and bilateral)	✓ (market and bilateral) ⁽ⁱⁱ⁾
Holds unhedged positions (either short or long)	✓	✓	✓ ⁽ⁱⁱ⁾
Procures fuel for generation	✓	–	–
Procures allowances for generation	✓	–	–
Holds volume risk on positions sold (either internal or external)	✓	✓	–
Matches own generation with own supply	–	–	✓ ⁽ⁱⁱ⁾ ⁽ⁱⁱⁱ⁾
Forecasts total system demand	–	✓	–
Forecasts wholesale price	✓ ^(iv)	✓ ^(iv)	✓ ^(iv)
Forecasts customer demand	–	✓	–
Determines retail pricing and marketing strategies	–	✓	–
Bears shape risk after initial hedge until market allows full hedge	✓	✓	–
Bears short-term risk for variance between demand and forecast	–	✓	–

⁽ⁱ⁾ The table reflects the business functions that impact our UK segments.

⁽ⁱⁱ⁾ The Group's Supply and Generation businesses are separately managed. Both businesses independently enter into commodity purchases and sales with the market via Centrica Energy Limited (CEL), our market-facing legal entity. CEL forms part of our non-licensed element of Energy Marketing & Trading function, part of Centrica Business, and also conducts trading for the purpose of making profits in its own right. The Supply segment is also able to enter into market trades directly as part of its within day balancing activities (as well as external bilateral contracts).

⁽ⁱⁱⁱ⁾ 'Matches own generation with own supply' is undertaken in 'Another part of the business' (by CEL at market referenced prices), outside of the Generation and Supply segments.

^(iv) A separate team forecasts the wholesale price for the benefit and use of the entire Group. This team does not formally reside in any particular segment but their costs are recharged across the Group.

Key:

- ✓ Function resides and profit/loss recorded in segment.
- Neither function nor profit/loss reside in segment.

Basis of preparation

The following notes provide a summary of the basis of preparation of the 2019 submission.

The Ofgem CSS segments our Supply and Generation activities and provides a measure of profitability, weighted average cost of fuel, and volumes, in order to increase energy market transparency for consumers and other stakeholders.

These statements have been prepared by the Directors of Centrica plc and its Licensees in accordance with Standard Condition 16B of the Electricity Generation Licences and Standard Condition 19A of the Electricity and Gas Supply Licences and the basis of preparation. Throughout the basis of preparation the first paragraph number relates to the generation licence and the second to the supply licence conditions respectively.

The financial data provided has been taken from the relevant licensee's and affiliate's financial information for the year ended 31 December 2019, included in the Centrica plc Annual Report and Accounts 2019 which have been prepared under IFRS as adopted by the EU (in accordance with paragraph 3/19A.3).

The CSS has been prepared on a going concern basis, as described in the Directors' Report and note 24 in the Centrica plc Annual Report and Accounts 2019.

For the Generation segment, we have included the financial results from all activities that relate to our generation licences. For clarity the following judgements have been made:

- the Group has a long-term tolling contract in respect of the Spalding power station, but does not specifically hold the generation licence. This arrangement provides the Group with the right to nominate 100% of the plant capacity in return for a mix of capacity payments and operating payments. We do not own the power station and the Group does not control the physical dispatch of the asset. This contractual arrangement has been accounted for as a lease (under IFRS) and therefore the financial result and volume has been included in the Thermal sub-segment, within the Generation segment;
- Brigg and Roosecote power stations had their licences revoked on 2 July 2015 (at their request) because they no longer required an electricity generation licence and are now exempt. Whilst we do not specifically hold a generation licence for these power stations, the financial results from these businesses have been included in the Thermal sub-segment and hence within the Generation segment;
- the Group has a 20% equity interest in Lake Acquisitions Limited, which owns eight nuclear power stations (through its indirect investment in EDF Energy Nuclear Generation Limited). Although we do not specifically hold a generation licence for any of the nuclear stations, our gross share of the financial result from this business (including any contractual arrangements) has been included in the Nuclear sub-segment and hence within the Generation segment; and
- where power is purchased from third parties (for example from wind farms, power stations or other bilateral arrangements) and we do not have an equity interest in, or a leasing arrangement (from an IFRS perspective) over the assets that generate this power, the result related to these activities is excluded from the Generation segment. In all cases, the Generation segment reports direct fuel costs and generation volumes on a consistent basis (if the purchase cost is a direct fuel cost, then the electricity generated is reported in volume).

Domestic Supply represents the revenue and associated costs in supplying gas and electricity to residential customers in the UK. Non-Domestic Supply represents the revenue and associated costs in supplying gas and electricity to business customers in the UK.

As a voluntary disclosure, to aid comparability, a summarised 2018 CSS with margins has been included within the report.

Revenues

Revenues, costs and profits of the Licensees have been defined below and prepared in compliance with the Group's accounting policies as detailed in notes 2, 3 and S2 of the Centrica plc Annual Report and Accounts 2019, except for joint ventures and associates which are presented gross (in accordance with paragraph 4(a)/19A.4(a)).

- Revenue from sales of electricity and gas for the Supply segment is recognised on the basis of gas and electricity supplied during the year to both domestic and non-domestic customers.
- Revenue from sales of electricity and gas includes an assessment of energy supplied to customers between the date of the last meter reading and the year end (unread). For the respective Supply segments this means electricity and gas sales. Revenue for domestic supply is after deducting dual fuel discounts where applicable, with the discount split evenly between electricity and gas. Government mandated social tariffs and discounts, such as the Warm Home Discount, and other social discounts, have also been deducted from Domestic Supply revenues directly, charged specifically to each fuel.
- Revenue from sales of electricity for the Generation segment is recognised on the basis of power supplied during the year. Power purchases and sales entered into to optimise the performance of each of the power Generation segments are presented net within revenue.

Basis of preparation

- The financial risks and rewards of owning and using the Group's power stations reside entirely in the reported Generation segment.
- Other respective segmental revenues not related to the sale of gas or power have been separately disclosed. Other revenues include:
 - £78.1 million (2018: £89.0 million) in Domestic Electricity Supply and £73.0 million (2018: £80.4 million) in Domestic Gas Supply primarily relating to New Housing Connections and smart meter installations;
 - £30.4 million (2018: £19.5 million) in Thermal principally relating to Supplementary Balancing Reserve (SBR), Short Term Operating Reserve (STOR), Triad revenue and Capacity Market income; and
 - £38.3 million (2018: £13.3 million) revenue in Nuclear not directly related to energy sales, such as capacity market income and provision of miscellaneous services.

Direct fuel costs

Direct fuel costs for both Generation and Supply include electricity, gas, nuclear fuel and imbalance costs.

- Energy supply to Domestic and Non-Domestic energy customers is procured at a market referenced price, through a combination of bilateral, over-the-counter (OTC) and exchange-based trades/contracts (see table below). Where energy is procured from within the Group it is also at a market referenced price on an OTC basis. The market referenced prices used are those prevailing at the time of procurement, which may differ from the price prevailing at the time of supply.
- Domestic and Non-Domestic fixed price products are hedged based upon anticipated demand at the start of the contract period. The majority of the gas and power for Non-Domestic energy and Domestic energy tariff products is purchased in advance (see table below).
- The exact Domestic and Non-Domestic purchasing patterns vary in response to the outlook for commodity markets and commercial factors.
- The Generation segment purchases gas and sells all of its energy at market referenced prices. Gas for turbines/engines is procured at market referenced prices through a combination of OTC and exchange-based trades/contracts. The cost to the power stations will reflect market referenced prices at the time of procurement, and so may differ from the price prevailing at the time of physical supply.

How we procure electricity, gas and carbon:

Long form bilateral contracts ('bilateral')	Individually negotiated contracts with non-standardised terms and conditions which may relate to size, duration or flexibility. Pricing is predominantly indexed to published market referenced prices, adjusted for transfer of risks, cost of carry and administration.
OTC	Broker supported market of standardised products, predominantly performed via screen-based trading. These transactions are between two parties, leaving both parties exposed to the other's default with no necessary intermediation of any exchange. An internal OTC price may be provided where market liquidity prevents external trading, with prices that are reflective of market conditions at the time of execution.
Exchange	Regulated electronic platform (notably ICE, APX, and N2EX) where standardised products are traded on exchange through the intermediary of the clearing house which becomes the counterparty to the trade. Membership of a clearing house is required which entails posting of cash or collateral as margin.

WACOF/WACOE/WACOG

- For Generation this represents a proxy for the weighted average input cost of gas, carbon and nuclear fuel, shown as £/MWh, used by the Generation business. Gas for turbines/engines is procured at market referenced prices through a combination of OTC and exchange-based trades/contracts. The cost to the power stations will reflect market referenced prices at the time of procurement, and so may differ from the price prevailing at the time of physical supply.
- For Supply this covers the wholesale energy cost, the energy element of reconciliation by difference (RBD) costs and balancing and shaping costs incurred by the Supply licensees. Again, gas and electricity is procured at market referenced prices through a combination of bilateral, OTC and exchange-based trades/contracts. The cost for the Supply business will reflect market referenced prices at the time of procurement, and so may differ from the price prevailing at the time of physical supply. Where gas is procured using (predominantly indexed) bilateral contracts, the fuel cost is then allocated between Domestic and Non-Domestic Supply using annually updated fixed percentages based on the historical split of tariff book volumes. Gas and Electricity balancing costs are allocated between Domestic and Non-Domestic Supply based on their respective volumes multiplied by an appropriate industry referenced price (for example APX or SAP).
- For electricity Supply the weighted average cost of electricity is shown as £/MWh. For gas Supply, the weighted average cost of gas is shown as p/th.

Direct costs

Direct costs for Supply and Generation are broken down into network costs, environmental and social obligation costs and other direct costs.

- Network costs for Supply and Generation include transportation costs, BSUOS and the transport element of RBD costs. Supply transportation costs include transportation and LNG costs, including £35.7 million incurred by Gas Domestic Supply in 2019, which enables the segment to secure supply by giving the ability to bring gas into the UK from overseas (2018: £38.3 million).
- Environmental and social obligation costs for Domestic Supply include ROCs, FIT, ECO and UK Capacity Market costs. Non-Domestic Supply includes the cost of LECs, ROCs, FIT and UK Capacity Market costs. Within the Domestic and Non-Domestic segments, the costs of LECs, FIT, ROCs and UK Capacity Market costs are included within Electricity, and ECO is allocated between Electricity and Gas based on the relevant legislation. Environmental and social obligation costs for the Generation segment relate to EU ETS carbon emission costs and carbon tax.
- Other direct costs for Generation include employee and maintenance costs.

Basis of preparation

- Other direct costs for Supply include brokers' costs and sales commissions when the costs have given rise directly to revenue, that is, producing a sale. They also include Elexon and Xoserve market participation and wider Smart metering programme costs.

Indirect costs

Indirect costs for Supply and Generation include operating costs such as sales and marketing, bad debt costs, costs to serve, IT, HR, finance, property, staffing and billing and metering costs (including smart meter costs).

- Indirect costs for the Generation, Domestic and Non-Domestic Supply segments (including corporate and business unit recharges) are allocated based on relevant drivers, which include turnover, headcount, operating profit, net book value of fixed assets and proportionate use/benefit. For Supply, indirect costs (including corporate recharges but excluding bad debt costs) are primarily allocated between Electricity and Gas on the basis of customer numbers (Domestic) and sites (Non-Domestic). Bad debt costs are allocated between Electricity and Gas on the basis of actual bad debt cost by individual contract in the billing system (Domestic) and on the basis of revenues (Non-Domestic).

Other

- For Supply, depreciation and amortisation is allocated between Electricity and Gas on the basis of customer numbers (Domestic) and sites (Non-Domestic).
- For the purposes of Supply PAT, tax is allocated between Gas and Electricity within both Domestic and Non-Domestic Supply based on their relative proportions of EBIT.
- For the Domestic Supply segment, customer numbers are stated based on the number of district meter point reference numbers (MPRNs) and meter point administration numbers (MPANs) in our billing system (for gas and electricity respectively), where it shows an active point of delivery and a meter installation. As a result, our customer numbers do not include those meter points where a meter may recently have been installed but the associated industry registration process has yet to complete, as the meter information will not be present in our billing system.
- For the Non-Domestic Supply segment, sites are based on the number of distinct MPRNs and MPANs in our billing system for gas and electricity respectively.

Transfer pricing for electricity, gas and generation licensees in accordance with paragraph 4(d)/19A.4(d)

There are no specific energy supply agreements between the Generation and Supply segments.

The Group continues to ensure transfer pricing methodologies are appropriate and up to date. In order to meet this requirement, the Group ensured all transfer pricing and cost allocation methodologies were internally reviewed, updated and collated in a central repository.

Treatment of joint ventures and associates

The share of results of joint ventures and associates for the year ended 31 December 2019 principally arises from the Group's interests in the entities listed on page 213.

Under paragraph 5 of the Conditions, the information provided in the CSS includes our gross share of revenues, costs, profits and volumes of joint ventures and associates. In preparing the CSS, joint ventures and associates (which hold a UK generation licence or exemption) are accounted for as follows:

- our proportionate share of revenues of joint ventures and associates has been included within revenue;
- our proportionate share of the profit before tax of joint ventures and associates has been included within EBIT and EBITDA; and
- our proportionate share of the generation volumes of joint ventures and associates has been included within the generation volumes.

For each of the above items, our share of the income and expenses of the joint ventures or associates has been combined line-by-line within the relevant item of the CSS.

Exceptional items and certain re-measurements

Restructuring costs, impairment charges and onerous provisions that have been identified as exceptional items, and mark-to-market adjustments in the Centrica plc Annual Report and Accounts 2019, are excluded from the CSS. For further details of excluded exceptional items and certain re-measurements see note 7 in the Centrica plc Annual Report and Accounts 2019.

A reconciliation of the Segmental Statement revenue, EBIT and depreciation to the 2019 audited Centrica plc Annual Report and Accounts has been included in accordance with paragraphs 4(b) & (c)/19A.4(b) & (c) and 6/19A.6.

Reconciliation to Centrica plc Annual Report and Accounts

The reconciliation refers to the segmental analysis of the 2019 Centrica plc Annual Report and Accounts in note 4.

	Notes	Generation segment	Supply segment			
			Domestic		Non-Domestic	
			Electricity	Gas	Electricity	Gas
		2019	2019	2019	2019	
Revenue (£m)	Centrica plc Annual Report and Accounts Segmental Analysis^(a)					
		Upstream	Consumer	Business		
		2,290.4	11,956.0	13,759.4		
	1	(1,793.9)	(5,147.7)	(11,455.6)		
		496.5	6,808.3	2,303.8		
	2	262.5	–	(262.5)		
		759.0	6,808.3	2,041.3		
	3	–	3,166.3	3,642.0	1,574.1	467.2
	4	492.6	–	–	–	–
	5	(454.3)	–	–	–	–
	Ofgem Consolidated Segmental Statement	797.3	3,166.3	3,642.0	1,574.1	467.2

EBIT (£m)	Centrica plc Annual Report and Accounts Segmental Analysis^(a)						
		179.0	505.0	217.1			
	1	(160.5)	(368.5)	(194.6)			
		18.5	136.5	22.5			
	2	(31.8)	–	31.8			
		(13.3)	136.5	54.3			
	3	–	(35.6)	172.1	15.8	38.5	
	4	8.6	–	–	–	–	
		Ofgem Consolidated Segmental Statement	(4.7)	(35.6)	172.1	15.8	38.5

Reconciliation to Centrica plc Annual Report and Accounts

	Notes	Supply segment				
		Generation segment	Domestic		Non-Domestic	
			Electricity	Gas	Electricity	Gas
		2019	2019	2019	2019	2019
Centrica plc Annual Report and Accounts Segmental Analysis⁽ⁱ⁾						
Depreciation and amortisation (£m)		Upstream	Consumer	Business		
		(753.0)	(218.0)	(145.4)		
	1	(753.0)	119.5	80.2		
		–	(98.5)	(65.2)		
	2	(50.0)	–	50.0		
		(50.0)	(98.5)	(15.2)		
	3	–	(44.2)	(54.3)	(10.8)	(4.4)
	4	(149.4)	–	–	–	–
		(199.4)	(44.2)	(54.3)	(10.8)	(4.4)
Ofgem Consolidated Segmental Statement						

(i) The tables reconcile the Generation segment to Upstream, the Domestic Supply segment to Centrica Consumer and the Non-Domestic Supply segment to Centrica Business from note 4 to the 2019 Centrica plc Annual Report and Accounts. Also included in note 4 is a reconciliation to the IFRS compliant statutory result reported by the Centrica plc Group.

Notes:

- UK Home includes Home Services and UK Business includes Business Services which are non-licensed activities and have been deducted to reconcile these CSS numbers.
- Centrica Business includes generation activity from the Group's thermal power assets.
- The share of Domestic and Non-Domestic Revenues, Operating Profit (EBIT) and Depreciation (including amortisation) as provided in note 4 of the Centrica plc Annual Report and Accounts 2019, has been split between Gas and Electricity.
- £492.6 million of revenues relating to the Group's share of joint ventures and associates in Generation are included in the CSS for Nuclear revenues. £(2.5) million of EBIT in the Generation segment relates to losses from associates for Nuclear. Additionally, costs relating to the Group's share of joint ventures and associates: £90.7 million direct fuel costs, £214.4 million direct costs, £40.6 million indirect costs and £149.4 million depreciation and amortisation are included. Note also that financing costs and tax of £8.6 million are initially included in the Upstream segmental EBIT associated with nuclear. The results of joint ventures and associates are shown separately in the Centrica plc Annual Report and Accounts 2019 in notes 6 and 14.
- £454.3 million of intra-segment revenues between the joint ventures and associates and the Generation segment (included in the £492.6 million of joint venture and associate revenues) are excluded from the CSS.

Shareholder Information

General enquiries

Centrica's share register is administered and maintained by Equiniti, our Registrar, whom you can contact directly if you have any questions about your shareholding which are not answered here or on our website. You can contact Equiniti using the following details:

Address: Equiniti, Aspect House, Spencer Road, Lancing, West Sussex BN99 6DA United Kingdom

Telephone: 0371 384 2985*

Outside the UK: +44 (0)121 415 7061

Textphone: 0371 384 2255*

Outside the UK: +44 (0)121 415 7028

Contact: help.shareview.co.uk

Website: equiniti.com

* Calls to an 03 number cost no more than a national rate call to an 01 or 02 number. Lines open 8.30 am to 5.30 pm, Monday to Friday (UK time), excluding public holidays in England and Wales.

When contacting Equiniti or registering via shareview.co.uk, you should have your shareholder reference number to hand. This can be found on your share certificate, dividend confirmation or any other correspondence you have received from Equiniti.

If you hold less than 2,500 shares you will be able to change your registered address or set up a dividend mandate instruction over the phone; however, for security reasons, if you hold more than 2,500 shares, you will need to put this in writing to Equiniti.

Together with Equiniti, we have introduced an electronic queries service to enable our Shareholders to manage their investment at a convenient time. Details of this service can be found at shareview.co.uk

American Depositary Receipt (ADR)

We have an ADR programme, trading under the symbol CPYYY. Centrica's ratio is one ADR being equivalent to four ordinary shares. Further information is available on our website or please contact:

Address: BNY Mellon Shareowner Services, PO Box 505000, Louisville, KY 40233-5000, USA

Email: shrrelations@cpshareownerservices.com

Website: mybnymdr.com

Telephone: +1 888 269 2377 (toll-free in the US)

Outside the US: +1 201 680 6825

Manage your shares online

We actively encourage our shareholders to receive communications via email and view documents electronically via our website, centrica.com. Receiving communications and Company documents electronically saves your Company money and reduces our environmental impact. If you sign up for electronic communications, you will receive an email to notify you that new shareholder documents are available to view online, including the Annual Report and Accounts and the Annual Review, on the day they are published. You will also receive alerts to let you know that you can cast your AGM vote online. You can manage your shareholding online by registering at shareview.co.uk, a free online platform provided by Equiniti, which allows you to:

- view information about your shareholding;
- have your dividend paid into your bank account;
- update your personal details; and
- appoint a proxy for the AGM.

Centrica FlexiShare

FlexiShare is an easy way to hold Centrica shares without a share certificate. Your shares are held by a nominee company, Equiniti Financial Services Limited. However, you are able to attend and vote at general meetings as if the shares were held in your own name. Holding your shares in this way is free and gives you:

- low cost share dealing rates (full details of which are available on centrica.com, together with dealing charges);
- quicker settlement periods for buying and selling shares; and
- no paper share certificates to lose.

Centrica.com

The Shareholder Centre on our website contains a wide range of information including a dedicated investors section where you can find further information about shareholder services including:

- share price information;
- dividend history;
- ownership profile;
- the Scrip Dividend Programme;
- telephone and internet share dealing;
- downloadable shareholder forms; and
- taxation.

This Annual Report and Accounts can also be viewed online by visiting centrica.com/ar19

Dividends

Centrica dividends can be paid directly into your bank or building society account instead of being dispatched to you by cheque. More information about the benefits of having dividends paid directly into your bank or building society account, and the mandate form to set this up, can be found in the Investors section of our website.

If you do not have a UK bank or building society account, Equiniti is able to pay dividends in local currencies in over 90 countries. For a small fee, you could have your dividends converted from sterling and paid into your designated bank account, usually within five days of the dividend being paid.

ShareGift

If you have a small number of shares and the dealing costs or the minimum fee make it uneconomical to sell them, it is possible to donate them to ShareGift, a registered charity, who provide a free service to enable you to dispose charitably of such shares. More information on this service can be found at sharegift.org or by calling +44 (0)20 7930 3737.

2020 calendar

7 May 2020	Ex-dividend date for 2019 final dividend
11 May 2020	Record date for 2019 final dividend
11 May 2020	Trading Update AGM
22 June 2020	Payment date for 2019 final dividend
24 July 2020	Half-year results announcement

Additional Information – Explanatory Notes (Unaudited)

Definitions and reconciliation of adjusted performance measures

Centrica's 2019 consolidated Financial Statements include a number of non-GAAP measures. These measures are chosen as they provide additional useful information on business performance and underlying trends. They are also used to measure the Group's performance against its strategic financial framework. They are not, however, defined terms under IFRS and may not be comparable with similarly titled measures reported by other companies. Where possible they have been reconciled to the statutory equivalents from the primary statements (Group Income Statement (I/S), Group Balance Sheet (B/S), Group Cash Flow Statement (C/F)) or the notes to the Financial Statements.

Adjusted operating profit, adjusted earnings and adjusted operating cash flow have been defined and reconciled separately in notes 2, 4 and 10 to the consolidated Group Financial Statements where further explanation of the measures is given. Additional performance measures are used within this announcement to help explain the performance of the Group and these are defined and reconciled below.

EBITDA

EBITDA is a business performance measure of operating profit, after adjusting for depreciation and amortisation. It provides a performance measure in its own right, and provides a bridge between the Income Statement and the Group's key cash metrics.

Year ended 31 December		2019 £m	2018 (restated) (i) £m	Change
Group operating profit	I/S	(849)	987	
Exceptional items included within Group Operating profit and certain re-measurements before taxation	I/S	1,750	405	
Share of profits of joint ventures and associates, net of interest and taxation	I/S	12	(3)	
Depreciation and impairments of property, plant and equipment	4(d)	880	736	
Amortisation, write-downs and impairments of intangibles	4(d)	326	322	
EBITDA		2,119	2,447	13%

(i) Comparatives have been restated on transition to IFRS 15: 'Revenue from contracts with customers'. See note 1 for further details.

The table below shows how EBITDA reconciles to AOCF.

		2019 £m	2018 (restated) (i) £m
EBITDA		2,119	2,447
Profit on disposals ⁽ⁱⁱ⁾		(2)	(12)
Decrease in provisions ⁽ⁱⁱ⁾		(191)	(154)
Cash contributions to defined benefit pension schemes, net of service cost income statement charge ⁽ⁱⁱ⁾		(233)	(75)
UK pension deficit payments	4(f)	235	98
Employee share scheme costs	C/F	41	43
Re-measurement of energy contracts ⁽ⁱⁱ⁾		(213)	41
Net movement in working capital ⁽ⁱⁱ⁾		119	(47)
Taxes paid	C/F	(92)	(61)
Dividends received from joint ventures and associates	C/F	1	22
Margin cash movements	4(f), 24(c)	46	(57)
Adjusted operating cash flow		1,830	2,245

(i) Comparatives have been restated on transition to IFRS 15: 'Revenue from contracts with customers'. See note 1 for further details.

(ii) These line items relate to business performance only and therefore differ from amounts quoted in the IFRS Financial Statements.

Definitions and reconciliation of adjusted performance measures**E&P free cash flow**

Free cash flow is used as an additional cash flow metric for the E&P business due to its asset-intensive nature. This metric provides a measure of the cash generating performance of the E&P business, taking account of its investment activity.

Year ended 31 December		2019 £m	2018 £m	Change
Upstream adjusted operating cash flow	4	635	1,012	
Non E&P adjusted operating cash flow		(48)	(49)	
E&P adjusted operating cash flow		587	963	
Capital expenditure (including small acquisitions)		(480)	(497)	
Net disposals		34	17	
Free cash flow		141	483	71%

E&P free cash flow is E&P's adjusted operating cash flow, as defined in note 2 and reconciled in note 4(f), less the business's capital expenditure and net disposals as defined above.

Return on average capital employed (ROACE)

Post-tax ROACE is one of the key performance metrics in the financial framework of the Group and represents the return the Group makes from capital employed in its wholly owned assets and its investments in joint ventures and associates.

Year ended 31 December		2019 £m	2018 £m
Adjusted operating profit	4	901	1,392
Taxation on profit – business performance	I/S	(218)	(461)
Exclude taxation on interest – business performance		(61)	(65)
Return attributable to non-controlling interests		(18)	(29)
Return		604	837
Net assets	B/S	1,795	3,948
Less: non-controlling interests		(583)	(803)
Less: net retirement benefit obligations	22	163	79
Less: net cash and cash equivalents, bank overdrafts, loans and other borrowings, securities and cash posted/(received) as collateral	24	3,415	2,889
Less: derivative financial instruments	19	332	(112)
Less: deferred tax liabilities associated with retirement benefit obligations and derivative financial instruments		(8)	130
Effect of averaging and other adjustments		1,350	215
Average capital employed		6,456	6,346
ROACE		9%	13%

Average capital employed takes the Group's net assets excluding net debt and deducts the net retirement benefit obligation and other derivative financial instruments (together with their associated deferred tax balances) because these represent unrealised positions and therefore do not reflect true capital employed. They are also subject to market driven volatility which could materially distort the ROACE calculation.

Responsible Business – Performance Measures

Non-financial key performance indicators (KPIs)

We engaged PricewaterhouseCoopers LLP (PwC) to undertake a limited assurance engagement using the International Standard on Assurance Engagements (ISAE) 3000 (Revised): 'Assurance Engagements Other Than Audits or Reviews of Historical Financial Information' and ISAE 3410: 'Assurance Engagements on Greenhouse Gas Statements'. PwC have provided an unqualified opinion in relation to six KPIs that are identified with the symbol '†' and feature on pages 2, 46, 50 to 51 and below. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in terms of the risk assessment procedures which include an understanding of internal control, as well as the procedures performed in response to the assessed risks. Non-financial performance and, in particular, greenhouse gas quantification is subject to more inherent limitations than financial information. It is important to read the responsible business information in the Annual Report and Accounts 2019 in the context of PwC's full limited assurance opinion and Centrica's Basis of Reporting, which are available at centrica.com/assurance.

[Read more on Delivering our Responsible Business Ambitions on Pages 48 to 54](#)

[Read more about our wider non-financial performance at \[centrica.com/datacentre\]\(http://centrica.com/datacentre\)](http://centrica.com/datacentre)

Progress against our 2030 Responsible Business Ambitions

Key: Progress against Ambitions ▲ On track ▼ Behind

Our Ambition for Customers: Delivering for our customers

2030 Ambition	2022 Milestone	2019 (Year 1 Progress)	Status
Help customers understand and manage their energy better	Deliver two innovations	10 innovations	▲
Give customers peace of mind through tailored propositions and connected technologies	Deliver two innovations	6 innovations	▲
Develop solutions to help our customers run their world	Deliver two innovations	6 innovations	▲
Make it simpler for people to deal with us in ways that work for them	Support more customers via digital channels	49% of customers using online account management	▲

Our Ambition for Climate Change: Enabling the transition to a lower carbon future

2030 Ambition	2022 Milestone	2019 (Year 1 Progress)	Status
Help our customers reduce emissions by 25%, by direct (3%) and indirect action (baseline: 2015)	Help our customers reduce emissions by 15%, by direct (2%) and indirect action (baseline: 2015)	3.9% ⁽ⁱ⁾	▲
Deliver 7GW of flexible, distributed and low carbon technologies as well as provide system access and optimisation services	Deliver 4GW of flexible, distributed and low carbon technologies as well as provide system access and optimisation services	2.7GW [†]	▲
Be net zero by 2050 and communicate our pathway to it by 2030	Reduce our internal carbon footprint by 35% by 2025 (baseline: 2015)	55,145tCO ₂ e [†] (39% reduction against baseline)	▲

(i) Direct savings only. We intend to enhance our understanding and disclosure of indirect customer carbon savings relating to decarbonising the energy system and advocating for cleaner energy policies. Read how we are advocating for cleaner energy policies on page 17.

† Included in PwC's limited assurance engagement referenced above.

Our Ambition for Colleagues: Building the workforce of the future

2030 Ambition	2022 Milestone	2019 (Year 1 Progress)	Status
Inspire and develop 100,000 people with essential STEM (Science, Technology, Engineering and Maths) skills	Inspire and develop 35,000 people with essential STEM skills	11,409 people ⁽ⁱ⁾	▲
Attract and develop more women into STEM with 40% of STEM recruits to be female	Attract and develop more women into STEM with 25% of STEM recruits to be female	17%	▼
Aspire for senior leadership to reflect the full diversity of our labour markets	Aspire for 33% female and 10% ethnic minority representation in senior leadership	29% female 10% ethnic minority ⁽ⁱⁱ⁾	▼ ▲
Help one million carers stay in or return to work via active promotion of carer-positive policies	Actively promote carer-positive policies to help carers stay in or return to work	1,000 carers	▲

(i) May involve double counting if someone has undertaken more than one STEM activity.

(ii) Based on 63% of employees who voluntarily disclosed that they are from a Black, Asian, Mixed/Multiple or other ethnic group across the UK and North America, which constitutes the majority of our workforce.

Our Ambition for Communities: Creating stronger communities

2030 Ambition	2022 Milestone	2019 (Year 1 Progress)	Status
Deliver £5 billion of value for communities through new and distributed energy technologies	Deliver £0.5 billion of value for communities through new and distributed energy technologies	£27.6 million	▲
Deliver £300 million in energy efficiency savings to public and essential services	Deliver £30 million in energy efficiency savings to public and essential services	£2.5 million	▲
Encourage our people to share their skills by volunteering over 100,000 days	Encourage our people to share their skills by volunteering over 20,000 days	2,452 days	▼
Deliver 2,500 skills development opportunities for young people not in education or employment	Deliver 700 skills development opportunities for young people not in education or employment	362 young people	▲

Progress across our Responsible Business Foundations**Customers**

Metric	2019	2018	What's next
Brand NPS ⁽ⁱ⁾	+15.1 ⁽ⁱⁱ⁾	+10.0 ⁽ⁱⁱⁱ⁾	Continue to deliver new services and solutions that satisfy the changing needs of our customers
Complaints per 100,000 customers ⁽ⁱ⁾	3,429 ^(iv)	3,453 ^(v)	Maintain focus on driving down complaints by improving customer service
Vulnerable customers helped through the UK Warm Home Discount scheme	618,881	629,500	Continue to ensure customers in vulnerable circumstances receive the help they need to stay warm, safe and debt-free
Customer safety incidents	28	26	Deliver strong customer safety performance through our focus on training, tools and work practices

(i) Measure linked to Executive Director remuneration arrangements. See pages 88, 91 and 93 for more information.

(ii) Aggregated scores across UK Home +8, North America Home +29, Ireland +23, Centrica Home Solutions +39, UK Business +1 and North America Business +32 and weighted by customer numbers. UK Home NPS differs from +12 communicated elsewhere in the Annual Report due to a change in methodology to focus on a British Gas only score.

(iii) Aggregated scores across UK Home +1, North America Home +32, Ireland +33, Centrica Home Solutions +38, UK Business -12 and North America Business +28 and weighted by customer numbers. Assured by PwC for the 2018 Annual Report. See centrica.com/responsibilitydownloads to view PwC's assurance statement and Centrica's Basis of Reporting. Elsewhere in the Annual Report, UK Home has been restated to +9 to show the British Gas only score.

(iv) Aggregated scores across UK Home Energy Supply 5,182 as reported to Ofgem, UK Home Services 2,388 as reported to the FCA, Ireland 4 as reported to the Commission for Regulation of Utilities, Water and Energy (CRU), North America Home Energy 65 as reported by various regulatory bodies, UK Business 3,825 as reported to Ofgem and North America Business 27 as reported by various regulatory bodies and weighted by customer accounts.

(v) Aggregated scores across UK Home Energy Supply 5,097, UK Home Services 2,827, Ireland 6, North America Home 83, UK Business 4,149 and North America Business 28.

Environment

Metric	2019	2018	What's next
Total carbon emissions ⁽ⁱ⁾	2,283,514tCO₂e †	1,737,122tCO ₂ e ⁽ⁱⁱ⁾	Continue to measure, report and reduce our emissions and those of our customers through our 2030 Responsible Business Ambitions – in particular, to be net zero by 2050 and communicate our pathway to it by 2030
Scope 1 emissions	2,246,167tCO₂e †	1,698,388tCO ₂ e ⁽ⁱⁱ⁾	
Scope 2 emissions	37,347tCO₂e †	38,734tCO ₂ e ⁽ⁱⁱ⁾	
Scope 3 emissions	127,209,632tCO₂e	126,137,878tCO ₂ e ⁽ⁱⁱ⁾	
Total carbon intensity by revenue	101tCO₂e/£m	74tCO ₂ e/£m ⁽ⁱⁱⁱ⁾	Continue to analyse the impact of our strategy on decoupling carbon emissions from value creation
Annual customer carbon savings from measures installed	2,629,198tCO₂e	906,801tCO ₂ e	Help reduce customer emissions by 25%, by direct (3%) and indirect action as part of our 2030 Responsible Business Ambitions
Total energy use	10,095,173,370kWh † ^(iv)	7,278,127,491kWh ^(v)	Reduce our internal carbon footprint by 35% by 2025 (baseline: 2015) and work to continuously improve our disclosure against the Streamlined Energy and Carbon Reporting (SECR) requirement
Total water use	516,836m³ ^(vi)	463,955m ³ ^(vii)	Effectively monitor, manage and reduce our water and waste consumption as well as our incidence of environmental non-compliance
Total waste generated	27,596 tonnes ^(viii)	30,212 tonnes ^(ix)	
Environmental non-compliance ^(x)	42	60	

† Included in PwC's limited assurance scope referenced on page 225.

(i) Comprises Scope 1 and Scope 2 emissions as defined by the Greenhouse Gas Protocol.

(ii) Assured by PwC for the 2018 Annual Report. See centrica.com/responsibilitydownloads to view PwC's assurance statement and Centrica's Basis of Reporting.

(iii) Restated due to a change in accounting methodology.

(iv) Comprises UK & Offshore 3,130,631,079kWh and Non-UK energy use 6,964,542,291kWh.

(v) Comprises UK & Offshore 1,642,646,626kWh and Non-UK energy use 5,635,480,865kWh.

(vi) Comprises office water 132,791m³ and process water 384,045m³.

(vii) Comprises office water 129,908m³ and process water 334,047m³.

(viii) Comprises office waste 1,878 tonnes and operational waste 25,718 tonnes.

(ix) Comprises office waste 1,973 tonnes and operational waste 28,239 tonnes.

(x) Includes breaches of environmental authorisation including permit, licence and consent coupled with wider environmental legislation where we are either required to notify the regulator or where an authority or regulator is involved. The majority of incidents relate to offshore activities.

Colleagues

Metric	2019	2018	What's next
Total recordable injury frequency rate (TRIFR) per 200,000 hours worked ⁽ⁱ⁾	1.06	1.02 ⁽ⁱⁱ⁾	Drive down our TRIFR and LTIFR by growing our safety culture to deliver an incident-free workplace, enabled through targeted safety interventions in key performance areas as well as full implementation of our improved management system
Lost time injury frequency rate (LTIFR) per 200,000 hours worked ⁽ⁱ⁾	0.58	0.49 ⁽ⁱⁱ⁾	
Process safety incident frequency rate (Tier 1 and 2) per 200,000 hours worked ⁽ⁱ⁾	0.08	0.06 ⁽ⁱⁱ⁾	Ensure operational controls and operator competences across our assets are robust, with effective performance management in place
Significant process safety events (Tier 1)	0	1 ⁽ⁱⁱ⁾	
Fatalities	0	0 ⁽ⁱⁱ⁾	Maintain zero fatalities
Female and male employees	29% female 71% male	29% female 71% male	Empower people with future skills and build a more inclusive workforce, including through our 2030 Responsible Business Ambitions:
Employees from ethnic minorities	12% ⁽ⁱⁱⁱ⁾	12% ^(iv)	
Gender pay gap ^(v)	14% mean 30% median	15% mean 31% median	<ul style="list-style-type: none"> inspire and develop 100,000 people with essential STEM skills; attract and develop more women into STEM with 40% of STEM recruits to be female; aspire for senior leadership to reflect the full diversity of our labour markets; and help one million carers stay in or return to work via active promotion of carer-positive policies.
Gender bonus gap ^(vi)	29% mean 23% median	15% mean 9% median	
Employee engagement ⁽ⁱ⁾	43% favourable	55% favourable ⁽ⁱⁱ⁾	Work towards our long-term engagement target to meet or exceed the external global benchmark of 72% by focusing on improving employee experience, which includes connecting colleagues with our purpose and enabling them to perform at their best
Retention	80%	85%	Support employees through restructuring and improve retention by focusing on enhancing employee experience and talent development
Absence per full time employee ^(vii)	14 days	13 days	Strive to drive down absence by continuing to embed good management practices and ensure our people have access to the right support, with a particular focus on proactive mental health provision

(i) Measure linked to Executive Director remuneration arrangements. See pages 89, 91 and 93 for more information.

(ii) Assured by PwC for the 2018 Annual Report. See centrica.com/responsibilitydownloads to view PwC's assurance statement and Centrica's Basis of Reporting.

(iii) Based on 63% of employees who voluntarily disclosed that they are from a Black, Asian, Mixed/Multiple or other ethnic group across the UK and North America, which constitutes the majority of our workforce.

(iv) Based on 65% of employees who voluntarily disclosed their ethnicity.

(v) Based on hourly rates of pay for all employees at full pay (including bonus and allowances) at the snapshot dates of 5 April 2018 and 2019. Read our Gender Pay Statement to find out more at centrica.com/genderpay.

(vi) Includes anyone receiving a bonus during the 12-month period leading up to the gender pay gap snapshot date and who are still employed on the snapshot date.

(vii) Relates to absence from sickness rather than wider forms of absence such as bereavement.

Communities

Metric	2019	2018	What's next
Total community contributions	£166.7 million ⁽ⁱ⁾	£148.1 million ⁽ⁱⁱ⁾	Help create stronger communities and tackle pressing social issues, including through our flagship charity partnerships with Carers UK, Focus Ireland and the Children's Miracle Network Hospitals in North America
Average sustainability risk rating of assessed suppliers (score out of 100) ⁽ⁱⁱⁱ⁾	59 (low risk)	54 (low risk)	Continue to assess sustainability risks among our strategic and higher-risk suppliers
Ethical site inspections undertaken for higher risk suppliers	9	14	
Employees committed to uphold Our Code	82%	96%	Ensure all of our people uphold Our Code as part of our commitment to doing the right thing and acting with integrity

(i) Comprises £164.0 million in mandatory and £0.3 million in voluntary contributions which largely support vulnerable customers, £1.4 million in contributions to our flagship charity partners alongside £1.1 million contributed to other charitable causes. Unlike mandatory and voluntary contributions which are solely funded by the business, charitable donations additionally include contributions from third parties such as employee fundraising. Aggregated component values differ to total due to rounding.

(ii) Restated following a re-alignment of methodology to focus on our strategic donation areas. Comprises £139.8 million in mandatory and £6.2 million in voluntary contributions, £1.0 million in contributions to our flagship charity partners alongside £1.1 million contributed to other charitable causes.

(iii) A score near 100 is low risk. High-risk companies have limited or no tangible actions on sustainability, medium-risk companies take partial tangible action on selected sustainability issues, low-risk companies have a structured sustainability approach with policies and action to manage major sustainability issues while lowest-risk companies have strong sustainability credentials and reporting embedded across their business.

Glossary

\$	Refers to US dollars unless specified otherwise
2P reserves	Proven and probable reserves
AGM	Annual General Meeting
AIP	Annual Incentive Plan
AOCF	Adjusted operating cash flow
bcf	Billion cubic feet
CHP	Combined heat and power
CCGT	Combined cycle gas turbine
CO ₂ e	Universal unit of measurement of the global warming potential (GWP) of greenhouse gases (GHG) expressed in terms of the GWP of one unit of CO ₂ e (carbon dioxide equivalent)
CPI	Consumer Price Index
CSS	Consolidated Segmental Statement
CUPS DB	Centrica Unfunded Pension Scheme defined benefit
CUPS DC	Centrica Unfunded Pension Scheme defined contribution
Data analytics	The process of examining data sets to draw conclusions and insights about the information they contain
DEEPAC	Direct Energy Employee Political Action Committee
EBITDA	Earnings before interest, tax, depreciation and amortisation
EBT	Employee Benefit Trust
EP	Economic profit
EPS	Earnings per share
EU	European Union
EU ETS	European Union Emissions Trading Scheme
FCA	Financial Conduct Authority
FRS	Financial Reporting Standards
GDPR	General Data Protection Regulation
GPS	Global Positioning System
GW	Gigawatt
GWh	Gigawatt hours
HVAC	Heating, ventilation and air conditioning
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards
KPI	Key performance indicators
kWh	Kilowatt hour
LGBTQ+	Lesbian, Gay, Bisexual, and Trans plus. The 'plus' is inclusive of other groups such as asexual, intersex and questioning

LNG	Liquefied natural gas
LTIFR	Lost time injury frequency rate
mmboe	Million barrels of oil equivalent
mmth	Million therms
NGO	Non-governmental Organisation
NPS	Net promoter score
NFRD	Non-Financial Reporting Directive
PP&E	Property, Plant and Equipment
ppt	Percentage point
Process safety	Process safety is concerned with the prevention of harm to people and the environment, or asset damage from major incidents such as fires, explosions and accidental releases of hazardous substances
PRA	Prudential Regulatory Authority
PRT	Petroleum Revenue Tax
PWR	Pressurised Water Reactor
RBD	Reconciliation by difference
ROACE	Return on average capital employed
ROC	Renewable Obligation Certificate
RPI	Retail Price Index
RRJ	Risk Requiring Judgement
RRS	Risk Requiring Standards
SAYE	Save As You Earn
SHESEC	Safety, Health, Environment, Security and Ethics Committee
SIP	Share Incentive Plan
STEM	Used in reference to skills relating to the subjects of science, technology, engineering and maths
tCO ₂ e	Tonnes of carbon dioxide equivalent
TCFD	Task Force on Climate-related Financial Disclosures
the Company	Centrica plc
the Group	Centrica plc and all of its subsidiary entities
TRIFR	Total Recordable Injury Frequency Rate
TSR	Total shareholder return
TWh	Terawatt hour
VIU	Value in use
WBCSD	World Business Council for Sustainable Development
WRI	World Resources Institute



Designed by SALTERBAXTER MSL

This report is printed on recycled silk papers made from 100% pre and post-consumer waste. The paper mills are based in the European Union and manufacture papers independently audited and certified by the Forest Stewardship Council® (FSC®) and accredited to the Environmental Management System 14001.

Printed by CPI Colour Limited ISO14001, FSC® certified and CarbonNeutral®.

Disclaimer

This Annual Report and Accounts does not constitute an invitation to underwrite, subscribe for, or otherwise acquire or dispose of any of the Company's shares or other securities.

This Annual Report and Accounts contains certain forward-looking statements with respect to the financial condition, results, operations and businesses of the Company. These statements and forecasts involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. There are a number of factors that could cause actual results or developments to differ materially from those expressed or implied by these forward-looking statements and forecasts.

Past performance is no guide to future performance and persons needing advice should consult an independent financial adviser.

Centrica plc

Registered office:
Millstream
Maidenhead Road
Windsor
Berkshire
SL4 5GD

Company registered
in England and Wales
No. 3033654

centrica.com