

Centrica plc preliminary results for the year ended 31 December 2021

CHRIS O'SHEA, GROUP CHIEF EXECUTIVE

"Our strong balance sheet and responsible business model has allowed us to ensure continued supply for customers whose suppliers have ceased trading and offer additional help to those most vulnerable through the ongoing energy crisis. 2021 financial performance was resilient, and we continue to make good progress towards the turnaround of Centrica, having materially completed our portfolio simplification. Our focus for 2022 is on building on the progress we have already made to drive improvements in colleague engagement and in particular customer service, while continuing to build our capabilities to help our customers on their path to net zero."

DELIVERING THE TRANSFORMATION AND TURNAROUND OF CENTRICA

- Portfolio simplification materially complete with sale of Direct Energy and agreed sale of Spirit Norway.
- Strengthened and de-risked the balance sheet. Closing net cash of £0.7bn compared to net debt of £3.0bn at the start of 2021.
- Significant Group organisational restructure largely complete and new terms and conditions in place for UK colleagues, enabling a more modern and flexible approach to serving our customers.

GOOD 2021 FINANCIAL PERFORMANCE

- Adjusted basic EPS from continuing operations up 46% to 4.1p (2020: 2.8p).
 - Positive impact from efficiencies, reduced impacts of Covid-19 across the Group and higher commodity prices in Upstream.
 - Partially offset by impacts of disappointing performance in British Gas Services, Whitegate CCGT outage in Bord Gáis and lower Energy Marketing & Trading profit.
 - Volatile wholesale commodity markets handled well, with additional resulting costs in energy supply businesses broadly offset by the positive impacts of weather.
- Higher wholesale commodity prices resulted in a £1.6bn exceptional net pre-tax write-back of Upstream assets and a £1.2bn pre-tax loss on net certain re-measurements. Statutory basic EPS from continuing operations of 10.0p (2020: loss of 4.7p).
- Total Group free cash flow from continuing operations up 71% to £1,174m. Statutory net cash flow from continuing operating activities up 68% to £1,611m.

WELL POSITIONED FOR THE FUTURE

- 2022 outlook broadly positive. Strong balance sheet and leading energy procurement and risk management capabilities leave us well placed to handle the energy market crisis.
- High and volatile wholesale commodity prices and a changing regulatory environment create a wider range of outcomes than normal for 2022.
- Focus remains on improving operational performance, in particular customer service levels.
- Continuing to build capabilities and launch new propositions to position ourselves for the significant opportunities created by net zero.
- Triennial pensions valuation process due to complete in H1 2022.
- Clear path to restart paying a dividend.

ACTING RESPONSIBLY THROUGH THE ENERGY CRISIS

- Ensured continued supply of energy for around 700,000 UK customers since the start of 2021 through the Supplier of Last Resort process.
- Additional help for vulnerable customers through new Winter Fund and British Gas Energy Trust.
- Repaying £27m received in 2020 through the UK Government's Coronavirus Job Retention Scheme.
- Over 600 apprentices recruited in the UK during 2021, creating new, highly skilled and well-paid jobs.

FINANCIAL SUMMARY

Year ended 31 December

	2021	2020	Change
From continuing operations ¹			
EBITDA	£1,850m	£1,336m	38%
Adjusted operating profit	£948m	£447m	112%
Adjusted effective tax rate	59%	26%	33ppt
Adjusted earnings attributable to shareholders	£237m	£165m	44%
Adjusted basic earnings per share (EPS)	4.1p	2.8p	46%
Full year dividend per share (DPS)	0.0p	0.0p	nm
Group free cash flow	£1,174m	£685m	71%
Group net (cash) / debt ²	(£680m)	£2,998m	nm
Statutory operating profit / (loss)	£954m	(£362m)	nm
Statutory earnings attributable to shareholders	£586m	(£274m)	nm
Statutory basic earnings per share	10.0p	(4.7p)	nm
Statutory net cash flow from operating activities	£1,611m	£957m	68%
From continuing and discontinued operations			
Statutory earnings attributable to shareholders	£1,210m	£41m	nm
Statutory basic earnings per share	20.7p	0.7p	nm

See notes 2, 3 and 10 to the Financial Statements and pages 84 to 87 for an explanation of the use of adjusted performance measures.

1. Excludes Direct Energy which is classified in discontinued operations. See note 5 for more information on segmental operating profit and free cash flow.

2. Net debt has been restated to remove collateral posted/(received). See note 11 for more information.

GROUP PERFORMANCE INDICATORS

Year ended 31 December

	2021	2020	Change
Total recordable injury frequency rate (per 200,000 hours worked) ¹	1.07	1.03	4%
Total customers (*000) ^{1,2}	10,067	9,794	3%
Group direct headcount ¹	19,783	20,381	(3%)
Group colleague engagement (%)	55%	42%	13ppt

1. 2020 excludes Direct Energy.

2. Includes British Gas Energy, British Gas Services and Bord Gáis Energy households and small and medium business customer sites in British Gas Energy and Centrica Business Solutions. 2020 restated to include business sites.

INVESTOR PRESENTATION

A pre-recorded results presentation will be available on Centrica.com at 8am UK time on 24 February 2022 and Centrica will host a conference call for institutional investors and analysts at 9.15am UK time on 24 February 2022. To register for the call please visit:

https://webcasts.centrica.com/centrica117/vip_connect

If you would like to join in listen only mode, please visit:

<https://Centrica.com/investors>

ENQUIRIES

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Group Overview

THE TURNAROUND OF CENTRICA CONTINUES

- Covid-19 has now been with us for almost two years and was still a factor in our 2021 performance, but had less of an impact than in 2020. In the second half of the year, we saw substantial increases in global wholesale energy prices, the many impacts of which we have had to manage. We handled these impacts well, demonstrating the importance of having a responsible business model and a disciplined approach to hedging and risk management, with our Energy Marketing & Trading capabilities proving particularly valuable. We have also remained focused on supporting our colleagues and customers, helping them through the energy crisis as best we can.
- Against this backdrop we have continued turning the Company around, having started on a major transformational journey in 2020 to rebuild shareholder value.
- Our portfolio simplification is now largely complete with the sale of Direct Energy and the announced sale of Spirit Energy's Norwegian and Statfjord UK oil and gas assets, which includes the transfer of significant decommissioning liabilities to the buyers. Combined with our ongoing strong focus on capital discipline and cash generation, our balance sheet has been strengthened and the Company ended the year in a net cash position.
- We are also focused on stabilising and improving operational performance in our customer-facing businesses. Our Group restructure is now largely complete and the difficult, but necessary, process to move colleagues onto new terms and conditions completed in the first half of the year. The increased flexibility this creates will be a key factor in enabling us to better serve the needs of our customers.
- Operationally, colleague engagement increased by 13 points over the year to 55%. However, customer service levels were disappointing, particularly in our British Gas Services & Solutions business. We let too many customers down and improving this will remain a major area of focus in 2022. Financial performance was resilient overall. Adjusted operating costs were around £100m lower than in 2020 and adjusted earnings per share from continuing operations was up 46% to 4.1p, with free cash flow from continuing operations up 71% to £1.2bn.
- The changes we have made to simplify and become more efficient also leave us well-placed to capitalise on future opportunities arising from the energy transition and the move towards 'net zero' in our core markets, as we look to deliver growth in jobs, profits and shareholder value.

PLAYING OUR PART IN THE STABILISATION OF THE UK ENERGY MARKET

- The second half of the year saw an unprecedented increase in global natural gas prices, resulting in a material increase in UK wholesale gas and power prices. As a responsible energy supplier built on a sustainable model, we were well-hedged for the 2021/22 winter, albeit still retaining weather and customer volume risk.
- However, 29 suppliers with over 4m customers have ceased trading since August 2021, which is when commodity prices started to increase materially. The collapse of these suppliers has resulted in millions of customers being moved to new suppliers through Ofgem's Supplier of Last Resort (SOLR) process. We have played our part to support customers and ensure they receive an uninterrupted supply of gas and electricity, taking on around 500,000 customers in the second half of 2021 and a further 176,000 in January 2022.
- Under Ofgem's regulatory framework, relevant costs, including costs of buying energy incurred by British Gas Energy that it is not able to directly recover as a result of taking on the customers, will be recoverable through the industry levy. In December, our claim for an initial £361m was accepted by Ofgem and a further claim will be made in 2022. Costs incurred and customer credit balances of

£234m recoverable through the SOLR framework have been recognised as a receivable in the 2021 financial statements.

- We believe we need to see significant change to address the underlying issues in the UK's complex energy regulations, by simplifying and strengthening regulations to protect customers and to ensure a crisis of this sort never happens again. Consumers ultimately pay for supplier failures through future energy tariffs or taxation, so we believe the energy retail market requires stronger prudential regulation to ensure those involved in the industry are fit and proper, companies have adequate capital and monitored risk management procedures, and customer deposits are protected. As a responsible supplier, we have voluntarily separated customer deposits and held £294m in a separate account on 31st December 2021. We have asked Ofgem to make this a requirement for all energy suppliers.
- In February 2022, Ofgem announced the new level of default tariff caps effective from 1 April 2022, which includes additional allowances for the recovery of SOLR-related costs and of additional costs incurred by suppliers as a result of rising wholesale prices and volatility over the 2021/22 winter. They also announced a series of consultations on potential medium-term changes to the price cap methodology, including reducing the notice Ofgem gives of the updated price cap from two months to one month and moving to a quarterly update of the price cap compared to the current half-yearly updates. Importantly, Ofgem also launched proposals to implement additional assessments for energy market participants from 1 April 2022 and launched a consultation on proposed changes to the supplier licence application guidance.
- We wait to see the exact nature and timing of any changes and will continue to engage constructively with the UK Government, Ofgem and other industry participants on the future of retail energy markets in the UK to drive sustainable market reform and ensure that well run, responsible suppliers can make a fair return.

SIMPLIFYING AND DE-RISKING THE BUSINESS THROUGH NON-CORE DIVESTMENTS

Sale of Direct Energy completed

- We completed the \$3.6bn (approximately £2.7bn) sale of Direct Energy to NRG Energy on 5 January 2021. The transaction plays an important part in simplifying our business model and creating a simpler, leaner Company focused on our core markets of the UK and Ireland.
- The transaction has helped increase the long-term strength of the Group's balance sheet, with the net cash proceeds leading to a significant reduction in net debt. It is also expected to result in a more stable financial profile for the Group, with the removal of volatility inherent within Direct Energy.

Sale of Spirit Energy Norway and Statfjord field announced

- In line with our strategy to decarbonise the portfolio and reduce our exposure to oil and gas production, on 8 December 2021 we announced the proposed sale of Spirit Energy's Norwegian exploration and production business excluding the Statfjord field to Sval Energi AS, and of its interests in the Statfjord field to subsidiaries of Equinor ASA. The transactions will result in a 98% reduction in Spirit Energy's 2021 closing oil and liquids proven and probable (2P) reserves and a 39% reduction in its 2021 closing gas 2P reserves.
- The transaction will further simplify Centrica's business model while strengthening and de-risking the balance sheet and reducing earnings and cash flow volatility.
- The headline consideration was \$1,076m (approximately £800m) with a commercial effective date of 1 January 2021 and includes the transfer to the buyers of all related decommissioning liabilities, which were approximately £830m as of the commercial effective date. Centrica owns 69% of Spirit Energy but fully consolidates Spirit Energy in the Group's financial statements.
- The final consideration will be adjusted to reflect working capital and debt-like items and will also be reduced by net post-tax cash flows generated by the sale businesses since 1 January 2021. The sale

businesses generated net cash flows of approximately £600m in 2021, with a tax liability of approximately £300m related to this expected to be paid by Spirit Energy in 2022.

- Spirit Energy will distribute the final consideration and post-tax net cash flows generated by the sale businesses to Centrica and its joint venture partners, SWM Group, in proportion to their ownership, after adjusting for certain transaction taxes and costs, and amounts in respect of certain liabilities to be retained by the Spirit Energy Group. SWM Group's share of this distribution from Spirit Energy is expected to be approximately £250 million.
- In addition, there was an estimated £64m cost of closing commodity price hedges related to Statfjord UK borne by Spirit Energy in 2021, with a further approximately £100m cost expected in 2022 given current commodity prices. There was also an estimated £27m cost of closing commodity price hedges at a Centrica Group level in 2021 related to its share of Spirit Energy's Norwegian Business and Statfjord Interests.
- Under an amended shareholders' agreement with SWM Group, Spirit Energy's future strategy will be to realise value from its remaining portfolio of assets in the UK and the Netherlands, while minimising further investment in oil and gas exploration and development, and to utilise cash from Spirit Energy's operations to meet and de-risk decommissioning obligations in respect of its remaining portfolio. Future cash flows generated from Spirit Energy's continuing operations will be retained within Spirit Energy until projected future pre-tax decommissioning costs are 1.5 times covered. Spirit Energy will also be able to pursue potential opportunities to leverage existing infrastructure for net zero projects.
- The transaction received Centrica shareholder approval in January 2022 and, subject to the receipt of various antitrust and regulatory approvals, is expected to complete in Q2 2022.

Further non-core divestments

- We will also consider further divestments of smaller assets or businesses, if they help to simplify and de-risk the Group and we can realise good value for shareholders.
- In 2021, we completed the sales of a number of non-core assets including the Peterborough gas-fired power stations and site, the data management business Io-Tahoe, and the site of the previous British Gas headquarters in Staines. The proceeds for these sales totalled approximately £60m. In February 2022, it was announced that we had sold our interest in Drivz, an electric vehicle charging software provider.

SIGNIFICANT GROUP RESTRUCTURE TO IMPROVE CORE BUSINESSES

Creating a simpler, leaner, more modern Company

- In 2020, we announced plans for a significant restructure designed to create a simpler, leaner Group focused on delivering for our customers. This included a proposed new organisational design and the start of a consultation process to simplify terms and conditions for colleagues in the UK. These changes will help to simplify and modernise the Group and allow us to put customers at the forefront of everything we do.

Organisational restructure substantially completed

- The reorganisation will lead to a reduction of around 4,000 roles across the Group, with 3,000 roles removed in 2020 and the majority of the remaining 1,000 roles expected to be removed in 2022.
- The new structure has now been embedded in the organisation. With the number of organisational layers having been reduced from eleven to seven, over half of the total reduction has come from management roles, and as a result a significantly higher proportion of colleagues are now in customer-facing roles.
- These changes are expected to result in a more competitive cost structure, in particular in our British Gas businesses, and an improved customer experience, while providing us with a platform to enable

growth. We are already seeing benefits of the restructure in British Gas Energy, with the annualised cost per customer falling by £9 to £93 over the year, despite an impact of around £4 cost per customer due to the dual running of IT systems.

- The expected cost to complete the restructuring was provided for in 2020, with a small credit recognised in 2021. Cash restructuring costs were £76m in 2021 compared to £120m in 2020, and there were also exceptional pensions strain payments of £193m relating to redundancies between 2019 and 2021.

Modernising British Gas Energy

- Moving forwards, the focus will be on continuous improvement. This includes more modern ways of working and the utilisation of a new, lower-cost 'software as a service' IT platform in British Gas Energy. This will allow us to compete more effectively with challenger brands and be able to capture the opportunities arising from increased numbers of electric vehicles and growth in the electrification of heating through the offer of dynamic time-of-use tariffs.
- The new platform will also allow us to launch customer propositions more quickly, improve the customer experience and further reduce our cost to serve.
- We expect to incur some additional operating costs as we run two systems for a period of time. Costs associated with the new platform will be treated as business as usual and not recognised as exceptional. However, we are also reducing capital expenditure on legacy IT systems as we migrate customers onto the new platform. Total capital expenditure in British Gas Energy was £37m lower in 2021 than in 2020.
- We now have over 350,000 customers on this platform compared to around 100,000 at the start of the year. We slowed the transition of customer accounts across to the new platform in the second half of the year, with the focus on onboarding new customers joining British Gas Energy through the Supplier of Last Resort (SOLR) process. However, we will continue with a controlled approach and currently expect to ramp up migration over 2022.

New terms and conditions in place for all UK colleagues

- The Company consulted to simplify colleague terms and conditions in the UK over the second half of 2020. Centrica had over 80 different employee contracts, each with multiple variants, with many of the agreements dating back over 35 years. We needed to modernise contracts to enable us to best serve the changing expectations of today's customers, while improving the quality of our service.
- 98% of our UK colleagues accepted the new terms. The increased productivity and flexibility are expected to improve our cost competitiveness and levels of customer service, providing a sustainable platform from which to deliver growth in customers and jobs.

Addressing challenges in British Gas Services & Solutions

- The process of implementing the new terms and conditions proved difficult in British Gas Services & Solutions and we saw industrial action from a portion of our UK services engineer base across Q1 and into Q2. We had contingency plans in place and prioritised emergency visits and vulnerable customers. However, we saw some deterioration in operational performance over the first quarter, which caused a drop in customer satisfaction levels and was a factor in the loss of customers.
- Engineer productivity, measured as the number of jobs per day completed by service and repair engineers, has improved since the first quarter and remains above 2019 levels. However, absence rates remained higher than usual, reflecting Covid-19-related absences. This resulted in an increased number of jobs having to be rescheduled, negatively impacting customer service levels, and in us using more contractor labour than planned which added to costs. In addition, broader UK supply chain issues have impacted the availability of some boilers, affecting the number of home heating installations we were able to carry out.

- Although we believe many of these factors to be temporary, they have continued into 2022. Absence rates remain higher than normal, while UK labour market pressures are also impacting our ability to recruit engineers. In response, we are focused on fixing those things within our control. Our new planning and dispatch system is expected to be in place by the end of 2022, which should enable much more efficient job scheduling and improve productivity rates. In addition, we will continue to focus on recruiting directly-employed qualified engineers to rebuild capacity, enabling us to complete a greater proportion of jobs through our own workforce, improving customer experience and customer retention and creating the capacity for growth.
- We will also continue to invest to drive long-term growth, including in improving our digital platforms, in net zero propositions and in apprenticeships, recruiting the engineers who will deliver the net zero future of the UK.

BUSINESS UNIT OPERATIONAL, COMMERCIAL AND FINANCIAL PERFORMANCE

- During the first half of 2021 the previously reported British Gas segment has been refined and separated into two operating segments, British Gas Energy and British Gas Services & Solutions, and small business customer sites previously reported in Centrica Business Solutions are now reported within British Gas Energy. All prior period comparators relating to adjusted operating profit and cost per customer metrics have been restated accordingly.

British Gas Services & Solutions negatively impacted by external factors and industrial action

British Gas Services & Solutions	2021	2020	Change
Services customers ('000) (closing) ¹	3,428	3,563	(4%)
Installs and on-demand jobs ('000)	282	283	(0%)
Services complaints per customer (%) ²	12.1%	5.7%	6.4ppt
Services Engineer NPS ³	60	66	(6pt)
Revenue per services customer (£)	361	359	1%
Cost per services customer (£)	338	299	13%
Adjusted operating profit (£m)	121	191	(37%)

All 2021 metrics and 2020 comparators are for the 12 months ended 31 December unless otherwise stated.

1. Services customers are defined as single households having a contract with British Gas.

2. Total complaints, measured as any oral or written expression of dissatisfaction, as a percentage of average customers over the year.

3. Measured independently, through individual questionnaires, the customer's willingness to recommend British Gas following an engineer visit.

- Customer retention increased by 1ppt to 82% in 2021, although British Gas Services customers fell by 135,000, or 4%, reflecting reduced sales opportunity. The number of services products per customer improved slightly to 2.23 from 2.22 at the start of the year.
 - Customer numbers fell by 144,000 in the first half, as proactive selling and marketing were reduced in Q1 due to the impacts of industrial action and Covid-19.
 - Customer numbers increased by 9,000 in the second half, despite the impact of significantly reduced activity on energy supply switching sites, reflecting our decision in Q4 to offer free services to 86,000 targeted energy customers to aid retention.
- The total number of installs and on-demand jobs for the year was broadly flat compared to 2020. Boiler installations were up 15%, with the impact of fewer Covid-19 related restrictions more than offsetting supply chain issues affecting boiler availability towards the end of the year. The number of on-demand jobs fell, as we prioritised serving contract customers during periods of constrained capacity.
- Service levels were impacted by Covid-19 related absence rates, industrial action and reduced engineer capacity over the year, with reduced appointment availability and higher levels of job rescheduling than in 2020. As a result, customer complaints more than doubled and engineer NPS reduced by 6 points to +60. Customer service improvement is a key focus for 2022.

- Revenue per services customer increased by 1% to £361. However, cost per services customer increased by 13% to £338 despite benefits from cost efficiencies, due to additional costs related to Covid-19 and industrial action, increased contractor rates, higher cost of materials and an increased proportion of higher-value boiler installation workload.
- British Gas Services & Solutions adjusted operating profit fell by 37% to £121m.
 - This reflects a £50m negative impact from the combination of Covid-19 and industrial action in H1 2021, which resulted in additional costs due to the increased use of third-party labour and refunds to some customers for annual service visits not completed. This was broadly similar to the Covid-19 impact in 2020, which also included around £25m of mitigating actions including use of the Government’s Coronavirus Job Retention Scheme.
 - It also includes the impact of continued higher Covid-19 related absence rates in H2 2021 resulting in a higher number of jobs completed by contractors than in 2020, inflationary pressures on contractor rates and materials and supply chain issues impacting boiler installations. These factors combined negatively impacted us by approximately £25m compared to 2020.
 - We were also impacted by lower customer numbers and a change in product mix towards lower-priced products. These negative impacts were partly offset by cost efficiency benefits and lower depreciation following the decision to write down some Home Solutions IT assets at the end of 2020.

Robust British Gas Energy performance against a backdrop of high and volatile prices

British Gas Energy	2021	2020	Change
Residential energy customers ('000) (closing) ¹	7,260	6,916	5%
Small business customer sites ('000) (closing) ²	455	450	1%
Energy complaints per customer (%) ³	8.5%	6.1%	2.4ppt
Energy Touchpoint NPS ⁴	14	9	5pt
Cost per energy customer (£) ⁵	93	102	(9%)
Adjusted operating profit (£m)	118	82	44%

All 2021 metrics and 2020 comparators are for the 12 months ended 31 December unless otherwise stated.

1. Residential energy customers are defined as single households buying energy from British Gas.

2. 2020 restated to reflect the number of small business customers moved across to British Gas Energy.

3. Total complaints, measured as an expression of dissatisfaction in line with submissions made to Ofgem, as a percentage of average customers over the year.

4. Measured independently, through individual questionnaires and the customer’s willingness to recommend British Gas following contact.

5. 2020 restated to reflect the transfer of smart metering to British Gas Services & Solutions.

- British Gas Energy residential customer numbers increased by 344,000, or 5%, over 2021.
 - The first half saw a fall of 114,000 customers, with a significant increase in default tariff price caps resulting in increased levels of market switching across March and April. In addition, the price comparison website market remained fiercely competitive, with some competitors continuing to price at negative gross margins, and as a result we reduced our activity through this channel. This reduction in customer numbers was partially offset by the impact of taking over supply for 53,000 customers from Simplicity Energy through Ofgem’s Supplier of Last Resort (SOLR) process and the acquisition of 36,000 customers from Nabuh Energy.
 - In the second half, we added 504,000 customers through the SOLR process as a number of competitors ceased trading. Including the impact of a small underlying decline in Q3, total customer numbers overall increased by 458,000.
- As of H1 2021, British Gas Energy also serves all of our small business customers, with their profile closely matching those of households. These customers were previously in Centrica Business Solutions. The number of small business customers increased by 1% in 2021.
- Energy Touchpoint NPS increased by 5 points to 14 over the year as our new operating model led to improved colleague empowerment and an improved focus on resolving customer issues first time.

- Call volumes and complaints increased, following a fall in 2020 during the first phase of the Covid-19 pandemic when we had encouraged customers to interact with us online so we could prioritise calls from more vulnerable customers. The onboarding of SOLR customers also increased operational pressures, while customer concerns over high energy prices impacted call volumes. This impact is likely to continue into 2022.
- Cost per customer reduced by £9 to £93, despite a £4 per customer impact from the dual running of IT systems. This reduction predominantly reflects lower overhead costs resulting from the significant Group restructure and a lower bad debt charge.
- British Gas Energy adjusted operating profit increased by 44% to £118m.
 - This includes the impact of weather, with colder than normal temperatures in H1 2021 resulting in higher energy consumption compared to a warm H1 2020, and warmer than normal temperatures in Q4 allowing a small portion of surplus gas and power to be sold back into a high-priced commodity market.
 - These positive impacts were broadly offset by additional costs associated with the commodity environment and the number of supplier failures, including additional balancing costs and the mutualisation of Renewable Obligation Certificate (ROC) costs across the industry. The rise in wholesale prices has also meant that default tariffs have become cheaper than fixed-price tariffs, resulting in an increasing number of customers moving onto default tariffs and requiring us to purchase more commodity from the market. In addition, current prices are higher than forward prices, resulting in a shift in profit towards the back end of fixed-term tariffs.
 - We also saw the benefit of cost efficiencies, plus reduced Covid-19 impacts which include a return to historic levels of bad debt provisioning and additional bad debt allowances in the price cap, worth approximately £30m in the year.
 - These benefits were largely offset by higher Energy Company Obligation (ECO) costs, the impacts of running two IT systems, and lower underlying consumption.

Covid-19 recovery in Centrica Business Solutions and growth in services order intake

Centrica Business Solutions	2021	2020	Change
Energy supply total gas and electricity volume (TWh) ¹	22.3	19.5	14%
Energy supply complaints per customer (%) ²	2.1%	2.1%	0.0ppt
Energy supply Touchpoint NPS ³	21	nm	nm
New Energy Services order intake (£m)	490	350	40%
New Energy Services order book (£m)	820	697	18%
Adjusted operating (loss) (£m)	(52)	(132)	(61%)

All 2021 metrics and 2020 comparators are for the 12 months ended 31 December unless otherwise stated.

1. 2020 restated to reflect the transfer of small business customers to from Centrica Business Solutions to British Gas Energy.

2. Total complaints, measured as any oral or written expression of dissatisfaction, as a percentage of average customers over the year.

3. Measured independently, through individual questionnaires and the customer's willingness to recommend. This was measured by CBS for the first time in 2021 to align to British Gas Energy methodology, therefore no comparative data is available for 2020.

- In Centrica Business Solutions energy supply, which consists of medium-sized entities and Commercial and Industrial (C&I) customers:
 - The total amount of energy supplied in the period was 14% higher than in 2020, reflecting a combination of recovery in energy demand due to the reduced impact of Covid-19 restrictions, and underlying volume growth.
 - Customer complaints were stable while Touchpoint NPS was positive at +21.
- In Centrica Business Solutions New Energy Services:
 - Order intake of £490m was 40% higher than in 2020, with reduced Brexit uncertainty and fewer Covid-19 restrictions. The order book of £820m was £123m higher than at the end of 2020.

- Centrica Business Solutions reported a reduced adjusted operating loss of £52m (2020: loss of £132m).
 - Business energy supply reported an adjusted operating profit of £1m (2020: loss of £47m), with no repeat of having to sell back excess commodity volumes at a loss due to Covid-19 related demand reductions, a lower bad debt charge and efficiency benefits. These benefits were partially offset by impacts of the increase in wholesale commodity prices and higher ROC mutualisation costs driven by supplier failures.
 - New Energy Services reported a reduced adjusted operating loss of £53m (2020: loss of £85m), reflecting growth in revenue and gross margin, in particular from increased asset optimisation activity. 2020 also included a £16m provision related to US solar liabilities previously in Direct Energy with no additional provision made in 2021.

Solid performance from Bord Gáis Energy with financial result impacted by Whitegate outage

Bord Gáis Energy	2021	2020	Change
Customers ('000) (closing) ¹	509	513	(1%)
Complaints per customer (%) ²	1.6%	1.8%	(0.2ppt)
Journey NPS ³	30	38	(8pt)
Adjusted operating profit (£m)	28	42	(33%)

All 2021 metrics and 2020 comparators are for the 12 months ended 31 December unless otherwise stated.

1. 2020 closing customer numbers have been restated, to reflect the methodology used in other customer-facing business units.

2. Total complaints, measured as any oral or written expression of dissatisfaction, as a percentage of average customers over the year.

3. Weighted NPS for the main customer interaction channels.

- The number of Bord Gáis Energy customers fell by 4,000 in 2021 in a competitive pricing environment. However, products per customer increased and the number of accounts was broadly stable.
- Customer complaints fell slightly, although Journey NPS fell by 8 points over the year, reflecting continued operational challenges caused by Covid-19 and broader customer concerns as retail tariffs increased in a price-sensitive market.
- The Whitegate CCGT was out of service for most of the year having gone offline in late 2020, with Bord Gáis capital expenditure £37m higher than 2020 as a result. The plant came back online in December 2021.
- Bord Gáis Energy adjusted operating profit reduced by 33% to £28m. This reflects the impact of the Whitegate power station outage, which was partly offset by a strong trading performance, the impacts of weather and an improved result in the B2B segment due to reduced Covid-19 restrictions.

Higher legacy gas contract losses and lower LNG contribution in Energy Marketing & Trading

Energy Marketing & Trading (EM&T)	2021	2020	Change
Renewable capacity under management (GW)	11.7	10.7	9%
Total EM&T adjusted operating profit (£m)	70	174	(60%)

All 2021 metrics and 2020 comparators are for the 12 months ended 31 December unless otherwise stated.

- Our core EM&T trading and optimisation activities performed well in the second half of the year, particularly in the fourth quarter during periods of high commodity volatility. This followed a first half where volatile and unpredictable commodity markets had created a challenging environment.
- EM&T renewable route-to-market capacity under management increased by 1.0GW to 11.7GW, with the Moray East offshore windfarm in Scotland coming online. Adding to our route-to-market capacity continues to be a focus area for growth as more renewable capacity comes online across Europe.
- Losses from the remaining legacy gas contract relating to the Sole Pit gas field, which runs until 2025, increased by £27m to £85m, within the previously guided range for losses from the contract of £50m-£100m.

- We also saw a reduced profit from LNG activities, following particularly strong optimisation performance in 2020.
- EM&T adjusted operating profit fell to £70m (2020: £174m), reflecting the lower profit from LNG activities and the increased loss on the legacy gas contract. These factors were partially offset by the impact of the strong trading and optimisation result in the second half.

Impact of lower volumes more than offset by higher achieved prices in Upstream

Upstream	2021	2020	Change
E&P total production volumes (mmbobe)	39.7	48.7	(18%)
Nuclear power generated (GWh)	8,342	9,134	(9%)
Adjusted operating profit (£m)	663	90	637%

All 2021 metrics and 2020 comparators are for the 12 months ended 31 December.

- Total E&P production was down 18% to 39.7mmbobe.
 - Spirit Energy volumes fell 18% to 36.8mmbobe, reflecting natural decline in the portfolio and production issues at a number of fields in H1 2021. This is in line with the guidance given in the Interim Results that production would be 15-20% lower than in 2020. 51% of 2021 production was from the Norway and Statfjord UK assets, currently held for sale; these assets generated 89% of Spirit Energy's 2021 adjusted operating profit.
 - Production volumes from CSL's Rough field fell by 26% to 2.9mmbobe, reflecting the natural decline in the late-life field and a 19 day unplanned outage at the Easington Terminal in Q4.
- Centrica's share of nuclear generation volumes of 8.3TWh was 9% lower than in 2020, reflecting a number of outages across the fleet.
- Having been offline since 2018, it was announced in June 2021 that the de-fuelling process would commence immediately at Dungeness B, while Hunterston B entered de-fuelling in January 2022 and Hinkley Point B will follow no later than July 2022. This is expected to result in reduced operating costs for the Nuclear business in 2022.
- Upstream adjusted operating profit increased to £663m (2020: £90m).
 - Spirit Energy adjusted operating profit increased from £84m to £624m, with the effect of higher wholesale commodity prices flowing through to achieved oil and gas prices. This more than offset the impacts of lower production volumes, an increase in cash lifting costs and higher depreciation rates following impairment write-backs at half year.
 - CSL adjusted operating profit was £77m (2020: £23m) with the higher wholesale prices more than offsetting the impact of lower production volumes.
 - Nuclear reported an adjusted operating loss of £38m (2020: £17m), reflecting the lower generation volumes, and a reduction in the achieved price versus 2020 as unplanned outages resulted in us having to buy power from the market to fulfil hedge obligations.
- E&P free cash flow increased 362% to £786m (2020: £170m), with higher achieved prices resulting in increased EBITDA and lower capital expenditure reflecting continued capital discipline.

SUMMARY GROUP FINANCIAL PERFORMANCE

Increased operating profit and earnings from continuing operations

- EBITDA from continuing operations increased by £514m, or 38%, to £1,850m and adjusted operating profit increased by £501m, or 112%, to £948m, reflecting the movements in business unit adjusted operating profit as described in the previous section.
- The net finance charge fell to £187m (2020: £215m) reflecting the redemption of our €750m hybrid bond at its first call date of 10 April 2021. The adjusted tax rate increased to 59% (2020: 26%),

largely due to the change in profit mix towards more highly taxed E&P activities. Earnings attributable to Spirit Energy minority partners increased to £70m (2020: £25m).

- Reflecting the above, adjusted earnings from continuing operations attributable to shareholders of £237m was up 44% on last year (2020: £165m) and adjusted basic EPS from continuing operations was 4.1p (2020: 2.8p).

Increased statutory profit reflecting high commodity price environment and Direct Energy sale

- A post-tax exceptional profit of £997m was recognised in continuing operations in 2021, largely relating to write-backs of impairments of Upstream assets. This compared to a total exceptional loss of £1,320m in 2020 which included significant impairment costs.
- When also including a total post-tax loss from certain net re-measurements of £755m (2020: profit of £698m), which includes an onerous supply contract provision representing the future cost to fulfil customer contracts on a current market price basis, the statutory profit from continuing operations after taxation was £549m (2020: loss of £432m). After non-controlling interests, statutory earnings from continuing operations were £586m (2020: loss of £274m) with a basic EPS of 10.0p (2020: loss of 4.7p).
- When including a £624m profit from discontinued operations relating to the sale of Direct Energy, the statutory profit attributable to shareholders was £1,210m (2020: £41m) and basic statutory EPS was 20.7p (2020: 0.7p).

Further robust cash flow generation resulting in a stronger balance sheet

- Free cash flow from continuing operations of £1,174m was £489m, or 71%, higher than in 2020, in line with the increase in EBITDA. This includes the impact of higher tax payments due to higher Upstream profits, but also reduced capital expenditure and exceptional restructuring cash flows reflecting our continued focus on capital and cash flow discipline.
- After including higher net interest payments, higher pension deficit payments which include pension strain payments related to redundancies in prior years, positive movements in margin cash, proceeds from the sale of Direct Energy and non-cash decreases to net debt, the Group had net cash of £680m at the end of 2021, compared to net debt of £2,998m at the end of 2020.
- The net cash position includes the impact of margin cash in of £481m in 2021 which is expected to reverse over time. It also includes a net negative working capital impact of £113m related to taking on SOLR customers in British Gas Energy which will continued to increase over Q1 2022 and will be recovered over 2022 and 2023.
- We redeemed a €750m hybrid bond at its first call date of 10 April 2021 and have no plans to replace this with new hybrid capital. Although we still have a legacy of long-dated and relatively expensive debt, we have some maturities due in 2022 which we currently don't expect to refinance.
- We also retain significant access to liquidity. As at the end of 2021, the Company had £3.9bn of unrestricted cash and cash equivalents (net of bank overdrafts) and £3.0bn of undrawn credit facilities.

Pensions triennial valuation process due to conclude in first half of 2022

- The Company had an IAS19 net pension deficit of £nil at the end of 2021 compared to a net deficit of £601m at the end of 2020. This reflects an increase in the real discount rate due to a rise in interest rates since the start of the year and deficit payments made during the year.
- The technical pension deficit is based on more conservative discount rate and determines the level of cash contributions into the schemes. On a roll-forward basis using the same methodology and consequent assumptions from the last valuation date in 2018, this technical provision deficit would be in the region of £1.3bn as of 31 December 2021, compared to £1.5bn as of 30 June 2021.

- The triennial valuation date was 31 March 2021 and under UK pensions regulations we have 15 months from this date to reach agreement with the pension trustees on the level of the deficit and any repair plan. Conversations with the trustees are proceeding constructively and we expect to conclude an agreement in the first half of 2022.

A strong balance sheet key to growing shareholder value

- The actions we have taken mean our balance sheet is in a robust position, supporting our credit metrics and our investment grade credit ratings. We are currently rated Baa2 with a negative outlook by Moody's and BBB with a stable outlook by S&P, with the latter having upgraded us from a negative outlook in December.
- The importance of having a strong balance sheet and investment grade credit ratings has been highlighted more than ever during the current market turmoil. It also means we are well placed to cope with any future changes the regulator may consider for the UK energy supply market and withstand any shorter-term working capital pressures resulting from the current energy crisis.
- Therefore, given the current level of volatility we are seeing in commodity markets we plan to continue with a prudent balance sheet approach to underpin our investment grade credit ratings.
- We will also seek to grow our operating cash flow over time, although we may need to look through timing movements in some years, such as those related to customer additions through Ofgem's SOLR process and the phasing of E&P decommissioning spend.
- This operating cash flow will in part be underpinned by focused cost management, and to ensure that our costs are productive we will increase our focus on the relationship between cost and gross margin. The business unit profit mix can have an influence on this number, but over time we would be looking to drive a reduction from the current ratio of 85%, excluding our Upstream businesses, as our transformation activities drive benefits.
- We will also remain disciplined in the deployment of capital. Maintenance capital expenditure in our customer-facing businesses is expected to remain at its current level of around £100 million per year, excluding Spirit Energy capital expenditure.
- We will also look to invest in growth opportunities in support of the energy transition, for example our potential investments in two gas peaking plants in Ireland, or in solar and battery projects, subject to appropriate returns.

A clear path to restarting the dividend

- We remain focused on delivering shareholder returns. Although no 2021 final dividend is being proposed, the balance sheet is in a much stronger position reflecting our divestments and our continued focus on free cash flow generation. With triennial pension negotiations due to conclude in the first half of 2022, we should soon be in a position to restart paying a dividend out of our adjusted earnings and free cash flow.

OUTLOOK FOR 2022 BROADLY POSITIVE

- Higher commodity prices should benefit our Upstream E&P businesses, although we will no longer report earnings or cash flows from Spirit Energy's Norwegian and Statfjord assets when the sale completes, currently expected in Q2 2022.
- For the retained Spirit Energy business, production volumes are expected to be around 10% lower in 2022 than in 2021, while depreciation rates are expected to be around £8/bbl higher given the impairment write-backs in 2021.
- Higher wholesale commodity prices should also benefit the Nuclear business, subject to the impact of operational performance on output, while operating costs should also be lower following the recent

closures of Dungeness and Hunterston B and the planned closure of Hinkley Point B no later than July 2022.

- In Energy Marketing & Trading, although we typically manage risk in the LNG business by selling cargoes from our US export contract from Sabine Pass around two years forward, the movement in commodity curves has allowed us to manage risk by selling cargoes a few years forward at a profit. This de-risking means that, should forward spreads broadly remain at current levels, this could be a profitable activity for us for the next few years. The outlook for the remaining legacy gas contract as a whole has improved by around £100m over the remaining four years of the contract. We now expect the loss on average to be around £50m each year, compared to the previously guided range of £50m-£100m each year. The exact figure is likely to fluctuate and in 2022 is currently expected to be slightly above £50m.
- In British Gas Energy, the high and volatile wholesale commodity prices create a wider range of outcomes for 2022 than is normal, as we remain exposed to any changes in the regulatory market structure and in customer behaviour, as well as to weather and bad debt. However, the inclusion of additional cost allowances in the default tariff cap from 1 April 2022 should allow us to recover costs we expect to incur from more customers switching from fixed tariffs to default tariffs, and stranded SOLR costs for customers on fixed price tariffs.
- In British Gas Services & Solutions, we don't expect to see an immediate bounce-back to historic levels of operating profit. Inflationary and supply chain pressures are likely to continue to impact us, and Covid-19-related absence rates have remained high in the first couple of months of 2022. We also plan to invest to improve customer services levels, to underpin retention and preserve the long-term value in the business.
- Overall, the outlook for 2022 is positive and we are well positioned to deliver growth in most of our customer facing businesses. However, we will remain focused on actively managing the risks we face and on maintaining our strong balance sheet position, for the long-term benefit of shareholders.

CREATING A MORE SUSTAINABLE AND PROFITABLE COMPANY

- Our leading capabilities in energy procurement and risk management and our strong balance sheet mean we are well positioned to manage any challenges the energy crisis, caused by high and volatile wholesale commodity prices, will bring.
- As well as navigating through the impacts of the level of high wholesale commodity prices, one of our main priorities for 2022 will be to drive operational improvements, in particularly customer service levels in British Gas Services & Solutions. We will also continue to work with colleagues across the Group to improve colleague engagement scores further, following a big improvement in 2021.
- The drive to net zero continues to present a significant opportunity for Centrica. We have the largest services field force in the UK, with around 7,000 engineers, and are looking to grow this through the recruitment of both qualified engineers and apprentices. We recruited around 600 apprentices in 2021, in line with our plans to have recruited more than 3,500 apprentices by the end of this decade. Our training academies provide us with a competitive advantage, allowing us to upskill our engineers to install newer technologies such as electric vehicle charging points and heat pumps.
- We expect to expand our net zero offers over 2022, having launched a Hive-branded Electric Vehicle proposition in 2021 and a heat pump proposition in early 2022, which we expect to roll out nationwide over the course of the year. In our Climate Transition Plan, published in November 2021, we set out our ambitions to be installing 100,000 electric vehicle charging points and 20,000 heat pumps a year by 2025.
- We are also engaged in a number of hydrogen initiatives, and in January 2021 joined the Hydrogen Taskforce coalition of companies. We are still looking at the possibility of repurposing the Rough field so it can act as a hydrogen storage facility. Spirit Energy also has options to pursue potential

opportunities to leverage existing infrastructure for net zero projects. We continue to view these as interesting options for Centrica should the economics look attractive.

- We said in our 2021 Interim Results in July that we were re-considering whether Nuclear can play a role for Centrica in the future, having announced in 2018 that we intended to divest our 20% interest in the UK's operating nuclear fleet. We currently have no plans to actively market our interest in Nuclear and therefore assume we will keep it. Our focus remains on the customer, however as we look to help our customers reduce their carbon emissions, our Nuclear stake provides us with an important source of zero-carbon electricity.
- With increased renewables penetration resulting in more intermittency in electricity generation, we will also continue to assess attractive opportunities to invest in flexible generation aligned to the energy transition, including gas-fired peaking plants, solar and battery. We were successful earlier this month in the Irish Capacity Auction with our bids to offer up to 200MW of capacity. We will now look at the possibility of building two 100MW gas-fired plants which will support the growth of renewables and maintain stability of energy supply in Ireland. The technology selected can also be converted to run on green hydrogen in the future.
- We started on the journey to turn Centrica around nearly two years ago and have made good progress. There is more to do, but our portfolio has been simplified and de-risked, our organisational restructure is materially complete, and our balance sheet has been strengthened. We are well positioned to manage any challenges the energy crisis will bring up and our focus in 2022 is on driving further significant improvements to our operational performance, to drive financial performance and add shareholder value. We also see significant opportunities from the energy transition and from the move to net zero and the actions we have taken mean we now have a clear path to restarting the dividend.

Group Financial Review

REVENUE

- Group statutory revenue from continuing operations increased by 20% to £14.7bn (2020: £12.2bn). Group revenue from continuing operations included in business performance increased by 23% to £18.3bn (2020: £14.9bn).
- Gross segment revenue from continuing operations, which includes revenue generated from the sale of products and services between segments, increased by 30% to £20.5bn (2020: £15.7bn). This was driven largely by the impact of higher wholesale commodity prices on Energy Marketing & Trading and Upstream, and the impact of higher wholesale prices on retail tariffs in British Gas Energy, Bord Gáis Energy and Centrica Business Solutions.
- A table reconciling different revenue measures is shown in the table below:

Year ended 31 December	2021			2020 (restated)		
	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m
Continuing operations						
British Gas Services & Solutions	1,513	(53)	1,460	1,547	(64)	1,483
British Gas Energy	7,513	–	7,513	7,007	–	7,007
Centrica Business Solutions	1,981	(28)	1,953	1,526	(8)	1,518
Bord Gáis Energy	1,111	–	1,111	820	–	820
Energy Marketing & Trading	6,082	(214)	5,868	2,917	(175)	2,742
Upstream	2,282	(1,887)	395	1,918	(539)	1,379
Group revenue included in business performance	20,482	(2,182)	18,300	15,735	(786)	14,949
Discontinued operations						
Direct Energy	–	–	–	9,483	–	9,483
Business performance revenue arising from continuing and discontinued operations	20,482	(2,182)	18,300	25,218	(786)	24,432
Less: revenue arising on contracts in scope of IFRS 9 included in business performance			(3,556)			(2,700)
Less: Discontinued operations			–			(9,483)
Group statutory revenue			14,744			12,249

Segmental revenues have been restated to reflect the new operating structure of the Group. As a result of the change in segments, gross segment revenue has been restated to reflect the updated inter-segment trading.

OPERATING PROFIT / (LOSS)

- Adjusted operating profit from continuing operations increased by 112% to £948m (2020: £447m). The statutory operating profit from continuing operations was £954m (2020: loss of £362m). The difference between the two measures of profit relates to exceptional items and certain remeasurements. A table reconciling the different profit measures is shown below:

Year ended 31 December	Notes	2021			2020		
		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
Continuing operations							
British Gas Services & Solutions		121			191		
British Gas Energy		118			82		
Centrica Business Solutions		(52)			(132)		
Bord Gáis Energy		28			42		
Energy Marketing & Trading		70			174		
<i>Core EM&T</i>		<i>155</i>			<i>232</i>		
<i>Legacy gas contract</i>		<i>(85)</i>			<i>(58)</i>		
Upstream		663			90		
<i>Spirit Energy</i>		<i>624</i>			<i>84</i>		
<i>CSL</i>		<i>77</i>			<i>23</i>		
<i>Nuclear</i>		<i>(38)</i>			<i>(17)</i>		
Group operating profit/(loss)	5(c)	948	6	954	447	(809)	(362)
Net finance cost	7	(187)	–	(187)	(215)	–	(215)
Taxation	8	(454)	236	(218)	(42)	187	145
Profit/(loss) from continuing operations		307	242	549	190	(622)	(432)
Profit attributable to non-controlling interests		(70)	107	37	(25)	183	158
Adjusted earnings from continuing operations		237	349	586	165	(439)	(274)
Discontinued operations		–	624	624	213	102	315
Adjusted earnings attributable to shareholders		237	973	1,210	378	(337)	41

Group operating profit from business performance (adjusted operating profit)

- The combined net negative impact of Covid-19 across the Group and the industrial action in British Gas Services & Solutions was estimated at approximately £60m in 2021. This compares to an estimated net negative impact of £110m in 2020 which included a number of mitigating actions not repeated in 2021, including use of the UK Government's Coronavirus Job Retention Scheme and the decision not to pay senior management bonuses relating to 2019 performance, resulting in the release of an accrual in 2020.
- Colder than normal weather in H1 had a positive effect on British Gas Energy and the other supply businesses, partially offset by the impact of buying incremental gas and power volumes at higher prices, and higher balancing costs. The significant increase in wholesale commodity prices in H2 meant that warmer than normal weather in H2 also had a positive effect, with the Group able to sell back gas and power it had already bought as part of its hedging approach at higher than the price at which it was purchased. The combined positive impact year-on-year was estimated at £95m.
- Excluding the impacts of weather, the high commodity price environment had a negative impact in British Gas Energy, as existing customers were incentivised to switch to, or remain on, the capped default tariff. Two-year small business contracts were less profitable in 2021, as commodity prices in the year were above the two-year averages used to price the contracts. This will even out across the

contracts' remaining duration. The business also bore a share of the mutualised costs of failed suppliers' Renewables Obligation Certificates (ROCs). The total negative impact of these factors was estimated at approximately £75m.

- The benefit of cost efficiencies was seen across the Group. However, these were more than offset by higher ECO costs in British Gas Energy, an outage at the Whitegate gas-fired power station in Ireland, margin pressures in British Gas Services & Solutions arising from customer losses and a changed product mix towards lower-priced products and no repeat of an exceptionally strong LNG performance in Energy Marketing & Trading from 2020.
- Upstream adjusted operating profit increased by £573m, with the impact of higher gas, oil and power prices more than offsetting the impact of lower gas and oil production and nuclear generation.
- More detail on specific business unit adjusted operating profit performance is provided in the Group Overview on pages 3 to 15.

GROUP FINANCE CHARGE AND TAXATION

Finance costs

- Net finance costs for continuing operations decreased to £187m (2020: £215m), with a reduced interest costs on bonds, bank loans and overdrafts reflecting our decision to redeem the €750m hybrid bond at its first call date of April 2021.

Taxation

- Business performance taxation on profit from continuing operations increased to £454m (2020: £42m). After taking account of tax on joint ventures and associates, the adjusted tax charge was £433m (2020: £67m).
- The resultant adjusted effective tax rate for the Group was 59% (2020: 26%), with a significant change in the profit mix towards more highly taxed E&P activities partly offset by the impact of a £22m one-off increase in net deferred tax assets in respect of decommissioning liabilities.
- The adjusted effective tax rate calculation is shown below:

Year ended 31 December	2021 £m	2020 £m
Adjusted operating profit from continuing operations before impacts of taxation	948	447
Add: JV/associate taxation included in adjusted operating profit	(21)	25
Net finance cost from continuing operations	(187)	(215)
Adjusted profit before taxation	740	257
Taxation on profit from continuing operations	(454)	(42)
Share of JV/associate taxation	21	(25)
Adjusted tax charge	(433)	(67)
Adjusted effective tax rate	59%	26%

EXCEPTIONAL ITEMS AND CERTAIN RE-MEASUREMENTS

- The significant increase in forecast commodity prices has led to large but broadly offsetting certain re-measurements and exceptional items from continuing operations.
- Total certain re-measurements and exceptional items from continuing operations generated a pre-tax profit of £6m (2020: loss of £809m), made up of a pre-tax loss on certain re-measurements of £1,241m (2020: gain of £784m) and an exceptional pre-tax credit of £1,247m (2020: charge of £1,593m). Total certain re-measurements and exceptional items and from continuing operations generated a tax credit of £236m (2020: £187m), with a credit of £486m (2020: charge of £86m) related to certain-remeasurements and a charge of £250m (2020: credit of £273m) related to exceptional items.

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.
- As a result of the significant commodity price movements, the Group has also had to recognise an onerous provision in 2021 for its UK downstream energy supply contract portfolio. Although gains on the commodity derivative hedge trades are already separately recognised in the income statement, the Group must assess whether downstream customer contracts have become onerous taking into account the reversal of these mark to market gains. Movement in the amount provided has also been recognised in certain re-measurements, as the supply contracts are economically related to both the hedges and forecast future profitability of supply and therefore do not reflect underlying performance.
- The operating profit in the statutory results includes a net pre-tax loss for continuing operations of £1,241m (2020: gain of £784m) relating to re-measurements, comprising:
 - A net gain of £1,289m on the re-measurement of derivative energy contracts. With the Group generally a net purchaser of commodity, the gain was predominantly due to the positive revaluation of UK downstream energy supply contract hedge purchases due for delivery in future periods as commodity prices rose over 2021, less the unwind of their in-the-money positions from December 2020 (totalling £3,917m). This was offset by the negative revaluation predominantly from the Upstream and Energy, Marketing and Trading sell trades due for delivery in future periods, plus the unwind of their out-the-money positions from December 2020 (totalling £2,628m).
 - An onerous energy supply contract provision charge of £2,530m. Although the Group has purchased the commodity required for future supply in advance, without these hedges the future costs of fulfilling downstream customer contracts would exceed the fixed/capped charges recovered from customers, due to commodity price increases in 2021. The gain from releasing this provision will offset losses from the unwinding of in-the-money hedge positions, without affecting the ultimate profitability of the underlying transactions.
- These re-measurements generated a taxation credit of £486m (2020: charge of £86m). As a result, the total loss from net re-measurements after taxation for continuing operations was £755m (2020: profit of £698m).
- The Group recognises the realised gains and losses on commodity derivative and onerous supply 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 6(a).

Exceptional items

- An exceptional pre-tax credit of £1,247m was included within the statutory Group operating profit from continuing operations in 2021 (2020: charge of £1,593m) including:
 - A credit of £747m relating to the write-back of the Group's nuclear investment, predominantly due to an increase in near-term liquid commodity prices, partially offset by reduced output assumptions following generation issues at a number of plants during the year. Due to current forecast baseload prices being higher in the near-term, coupled with the requirement for the

nuclear fleet depreciation to be calculated on a production/time basis rather than economic value, there is a likelihood of an impairment being required in 2022.

- A credit totalling £838m relating to the write-back of E&P assets, of which £774m related to Spirit Energy and £55m related to CSL. This was predominantly due to the increase in near-term liquid commodity prices. It also includes a net credit of £40m due to a reduction in decommissioning provisions related to assets previously impaired through exceptional impairments, and a £31m charge related to the farm down of the Pegasus field and an update to the loss on disposal from the prior year Danish gas and oil asset disposal.
- A charge of £244m related to the Spirit Energy Norwegian E&P and Statfjord disposal and the consequent strategic decision to focus the remaining Spirit Energy business on retained producing fields rather than exploration and evaluation. This included a goodwill impairment of £198m and a write-off of the remaining exploration and evaluation assets of £33m, with the remaining £13m related to an onerous provision for exploration spend and costs incurred for professional assistance relating to the divestment.
- A charge of £123m connected to an impairment of goodwill and specific assets in Centrica Business Solutions, as the business narrowed its geographical footprint and product offerings following a change in strategic direction.
- A credit of £15m from a fair value uplift on a historic minority investment made by Centrica Innovations in Drivz, which is subject to a signed disposal agreement at the year-end.
- A credit of £14m relating to the reversal of a portion of 2020 restructuring charges relating to pension strain estimates, partially offset by run off costs from the Group's restructuring programme. As stated in the 2020 Preliminary Results, there will be no further material exceptional charge relating to the Group's restructuring programme which was planned to result in £2bn of annualised efficiencies between 2015-22 and has resulted in £1.2bn of exceptional restructuring costs since 2015.
- These generated a taxation charge of £250m (2020: credit of £273m), including a £101m credit associated with deferred tax provisions related to E&P tax losses and decommissioning carry-back, due to the increase in forecast prices. As a result, the total post-tax exceptional profit recognised in continuing operations after taxation was £997m (2020: charge of £1,320m).
- Further details on exceptional items, including on impairment accounting policy, process and sensitivities can be found in notes 6(b) and 6(c).

DISCONTINUED OPERATIONS

- The sale of Direct Energy was announced on 24 July 2020 and completed on 5 January 2021. As such its activities are treated as a discontinued operation in the financial results.
- There was no adjusted operating profit or adjusted earnings from discontinued operations in 2021. Statutory earnings of £624m from discontinued operations are entirely related to the profit on disposal and release of a tax provision related to the disposal of Direct Energy.

GROUP EARNINGS

Adjusted earnings

- Profit for the year from business performance from continuing operations after taxation was £307m (2020: £190m). After adjusting for non-controlling interests relating to Spirit Energy, adjusted earnings were £237m (2020: £165m).
- Adjusted basic EPS from continuing operations was 4.1p (2020: 2.8p).

Statutory earnings

- After including exceptional items, certain re-measurements and earnings from discontinued operations, the statutory profit attributable to shareholders for the period was £1,210m (2020: £41m).
- The Group reported a statutory basic EPS of 20.7p (2020: 0.7p). The statutory basic EPS from continuing operations was 10.0p (2020: loss of 4.7p).

Dividend

- The Group is proposing no 2021 final dividend having also paid no 2021 interim dividend.

GROUP CASH FLOW, NET DEBT AND BALANCE SHEET

Group cash flow

- Free cash flow is the Group's primary measure of cash flow as management believe it provides relevant information to show the cash generation of the business after taking account of the need to maintain its capital asset base. Free cash flow is reconciled to statutory net cash flow from operating and investing activities in the table below. See the explanatory note in note 5(f) for further details.

Year ended 31 December	2021 £m	2020 £m
Statutory cash flow from continuing operating activities	1,611	957
Statutory cash flow from continuing investing activities	(325)	(263)
Statutory cash flow from continuing operating and investing activities	1,286	694
Add back/(deduct):		
Sale and settlement of securities	3	(121)
Interest received	(2)	(7)
Movements in collateral and margin cash	(481)	(56)
Defined benefit pension deficit payment	368	175
Free cash flow from continuing operations	1,174	685
Discontinued operations free cash flow	2,588	376
Free cash flow	3,762	1,061

- Net cash flow from continuing operating activities of £1,611m was up 68% (2020: £957m), reflecting higher EBITDA and margin cash inflows, partly offset by higher pension and tax payments.
- Net cash outflow from continuing investing activities increased to £325m (2020: £263m), largely due to a cash inflow from the maturity in 2020 of a gilt investment not recurring.
- Group total free cash flow from continuing operations was £1,174m (2020: £685m). When including £2,588m of free cash flow from discontinuing operations which relates to the proceeds from the sale of Direct Energy on 5 January 2021, Group free cash flow was £3,762m (2020: £1,061m).
- Net cash outflow from continuing financing activities increased to £938m in 2021 (2020: £466m) reflecting the repayment of the hybrid bond in April 2021.

Net debt/cash

- The above resulted in a £2,936m increase in cash and cash equivalents over the year, and when including the impact of reduced gross debt resulting from the hybrid bond repayment, non-cash movements and exchange adjustments, the Group's net cash position at the end of December 2021 was £680m, compared to net debt of £2,998m on 31 December 2020 (restated to remove the adjustment for collateral posted/received, in order to better align to external net debt definitions).
- Further details on the Group's sources of finance and net debt are included in note 11.

Pension deficit

- The Group had an IAS 19 net pension deficit of £nil at the year-end, compared to a net deficit of £601m on 31 December 2020, due to deficit contributions made during the year and the effect of rising interest rates leading to an increase in the discount rate and decreasing obligations.
- Further details on the post-retirement benefits are included in note 14.

Balance sheet

- Net assets increased to £2,750m (2020: £1,382m). This reflects the impact of the statutory profit in the year, in particular the write-back of impairments related to Upstream assets, and the decrease in net retirement benefit obligations.
- The higher commodity price environment also resulted in a significant increase in trade and other receivables, with a higher level of accrued income in the energy supply businesses and cash collateral posted relating to upstream activities, and derivative financial instrument assets which are used to manage the risk largely arising from fluctuations in the value of assets associated with energy sales and procurement and trading. However, it also resulted in a broadly similar increase in trade and other payables, with a higher level of accrued cost related to future commodity payments and cash collateral received due to downstream activities, and derivative financial instrument liabilities which are used to manage the risk largely arising from fluctuations in the value of liabilities associated with energy sales and procurement and trading.

2021 ACQUISITIONS, DISPOSALS AND DISPOSAL GROUPS CLASSIFIED AS HELD FOR SALE

- On 24 July 2020, the Group announced it had agreed to dispose of its North American supply, services and trading business, Direct Energy, to NRG Energy for headline consideration of \$3.6 billion (approximately £2.7bn) on a debt free, cash free basis. The transaction received all necessary approvals prior to 31 December 2020 and completed on 5 January 2021. This resulted in a profit on disposal of £0.6bn in 2021.
- On 8 December 2021, the Group announced that the Spirit Energy Group, of which the Group owns 69%, had agreed to dispose of its Norwegian oil and gas exploration and production business (excluding interests in the Statfjord field) to Sval Energi, and to dispose of its UK and Norwegian interests in the Statfjord field to Equinor, with a commercial effective date of 1 January 2021. Headline consideration for the transactions was \$1,076m (approximately £800m) on a debt-free cash-free basis (which will be reduced for the net post-tax cash flows generated by the sale business and interests after the commercial effective date, less any remaining tax payable on these cash flows), plus a deferred commodity price-linked contingent payment. Spirit Energy will distribute the net cash flow and net consideration to Centrica and its joint venture partners in proportion to their ownership. The transaction was approved by Centrica shareholders at a General Meeting on 13 January 2022.
- Further details on assets purchased, acquisitions and disposals are included in notes 5(e) and 15.

EVENTS AFTER BALANCE SHEET DATE

- Details of events after the balance sheet date are described in note 18.

RISKS AND CAPITAL MANAGEMENT

- The nature of the Group's principal risks and uncertainties are broadly unchanged from those set out in its 2020 Annual Report, with Climate Change now added as a Principal Risk to ensure it receives appropriate focus. Per the 2020 Annual Report, our top three Principal Risks are Commodity Risk, Weather Risk and Asset Production.
- The Group has also actively responded to those risks heightened by the record levels of global wholesale energy prices. Centrica's approach to risk management has enabled the implementation of agile hedging policies and effective demand forecasting processes. The extent to which the Group

may continue to be impacted by the consequences of the current high level of commodity prices, including the onboarding of around 700,000 customers through the SOLR process since the start of 2021 to date, will in part depend on government and regulatory policy, including the setting of future levels of default tariff caps, which could also be a factor in the level of customer bad debt we see.

- Details of how the Group has managed financial risks such as liquidity and credit risk are set out in note 4. Details of the Group's capital management processes are provided under sources of finance in note 11(a).

ACCOUNTING POLICIES

- The Group's accounting policies and specific accounting measures, including changes of accounting presentation and selected key sources of estimation uncertainty, are explained in notes 1, 2 and 3.

Appendix: Upstream performance metrics

Nuclear

Year ended 31 December	2021	2020	Change
Nuclear power generated (GWh)	8,342	9,134	(9%)
Nuclear achieved power price (£/MWh)	46.6	51.3	(9%)

Exploration & Production

Year ended 31 December	2021	2020	Change
Total recordable injury frequency rate (per 200,000 hours worked)	0.09	0.26	(65%)
Process safety incident rate – tier 1 & 2 (per 200,000 hours worked)	0.26	0.00	nm
Gas production volumes (mmth)			
Spirit Energy	1,447	1,705	(15%)
CSL	167	238	(30%)
Total gas production volumes (mmth)	1,614	1,943	(17%)
Liquids production volumes (mmboe)			
Spirit Energy	13.1	17.0	(23%)
CSL	0.04	0.05	(20%)
Total liquids production volumes (mmboe)	13.2	17.0	(22%)
Total production volumes (mmboe)			
Spirit Energy	36.8	44.9	(18%)
CSL	2.9	3.9	(26%)
Total production volumes (mmboe)	39.7	48.7	(18%)
Average achieved gas sales prices (p/therm)			
Spirit Energy	70.3	35.4	99%
CSL	85.0	46.3	84%
Average achieved liquid sales prices (£/boe)			
Spirit Energy	43.7	34.2	28%
CSL	37.9	21.5	76%
Lifting and other cash production costs (£/boe) ¹			
Spirit Energy	15.8	13.2	20%
CSL	17.8	17.7	1%
Gas and liquids realisations (£m) ²	1,737	1,297	34%
Unit DDA rate (£/boe)			
Spirit Energy	12.2	11.3	8%
CSL	4.6	3.5	31%
Net investment (£m) ³			
Capital expenditure (including small acquisitions)	297	432	(31%)
Net disposals	(44)	(32)	38%
Net investment (£m)	253	400	(37%)
Free cash flow (£m) ³	786	170	362%

1. Lifting and other cash production costs are total operating costs and cost of sales excluding depreciation and amortisation, dry hole costs, exploration costs and profit on disposal.

2. Realisations are total revenues from sales of gas and liquids including hedging and net of Spirit NTS costs.

3. See pages 84 to 87 for an explanation of the use of adjusted performance measures.

Statement of Directors' Responsibilities

The Directors are responsible for preparing the Group Financial Statements in accordance with applicable law, regulations and accounting standards. In preparing the Group Financial Statements, the Directors are required to:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRS Standards are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- make an assessment of the company's ability to continue as a going concern.

Each of the Directors confirms that, to the best of their knowledge:

- the Group Financial Statements, which have been prepared in accordance with the United Kingdom adopted International Accounting Standards, with International Financial Reporting Standards as issued by the IASB, give a true and fair view of the assets, liabilities, financial position and profit of the Group; and
- the Strategic Report contained in the Annual Report and Accounts, from which this narrative is extracted, 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.

On behalf of the Board on 23 February 2022

Chris O'Shea
Group Chief Executive

Kate Ringrose
Group Chief Financial Officer

Group Income Statement

Year ended 31 December	Notes	2021			2020		
		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
Continuing operations							
Group revenue	5,6	18,300	(3,556)	14,744	14,949	(2,700)	12,249
Cost of sales ⁽ⁱ⁾	6	(15,430)	2,749	(12,681)	(12,616)	4,118	(8,498)
Re-measurement and settlement of derivative energy contracts	6	–	(434)	(434)	–	(632)	(632)
Gross profit	5,6	2,870	(1,241)	1,629	2,333	786	3,119
Operating costs before exceptional items and credit losses on financial assets		(1,703)	–	(1,703)	(1,714)	–	(1,714)
Credit losses on financial assets	16	(116)	–	(116)	(195)	–	(195)
Exceptional items – net impairment reversals/(impairments)	6	–	1,218	1,218	–	(1,319)	(1,319)
Exceptional items – net restructuring cost reversals/(charge) and other	6	–	29	29	–	(274)	(274)
Operating costs		(1,819)	1,247	(572)	(1,909)	(1,593)	(3,502)
Share of (losses)/profits of joint ventures and associates, net of interest and taxation	12	(103)	–	(103)	23	(2)	21
Group operating profit/(loss)	5	948	6	954	447	(809)	(362)
Net finance cost	7	(187)	–	(187)	(215)	–	(215)
Profit/(loss) from continuing operations before taxation		761	6	767	232	(809)	(577)
Taxation on profit/(loss) from continuing operations	6,8	(454)	236	(218)	(42)	187	145
Profit/(loss) from continuing operations after taxation		307	242	549	190	(622)	(432)
Discontinued operations ⁽ⁱⁱ⁾	6,15	–	624	624	213	102	315
Profit/(loss) for the year		307	866	1,173	403	(520)	(117)
Attributable to:							
Owners of the parent		237	973	1,210	378	(337)	41
Non-controlling interests		70	(107)	(37)	25	(183)	(158)

Earnings per ordinary share		Pence	Pence
From continuing and discontinued operations			
Basic	10	20.7	0.7
Diluted	10	20.5	0.7
From continuing operations			
Basic	10	10.0	(4.7)
Diluted	10	9.9	(4.7)
Interim dividend paid per ordinary share	9	–	–
Final dividend proposed per ordinary share	9	–	–

(i) Cost of sales includes £2,530 million (2020: £nil) of onerous energy supply contract provision within the certain re-measurements column. See note 3.

(ii) Profit from discontinued operations is entirely attributable to equity holders of the parent.

The notes on pages 31 to 80 form part of these Financial Statements.

Group Statement of Comprehensive Income

Year ended 31 December	Notes	2021 £m	2020 £m
Profit/(loss) for the year		1,173	(117)
Other comprehensive income/(loss)			
Items that will be or have been reclassified to the Group Income Statement:			
Impact of cash flow hedging (net of taxation)		(6)	9
Exchange differences on translation of foreign operations ⁽ⁱ⁾		(49)	(54)
Exchange differences reclassified to Group Income Statement on disposal ⁽ⁱ⁾		(20)	12
(Losses)/gains on net investment hedging (net of taxation) ⁽ⁱⁱ⁾		(40)	40
Items that will not be reclassified to the Group Income Statement:			
Net actuarial gains/(losses) on defined benefit pension schemes (net of taxation)		144	(379)
Gains/(losses) on revaluation of equity instruments measured at fair value through other comprehensive income (net of taxation)		3	(4)
Share of other comprehensive income of associates, net of taxation	12	152	58
Other comprehensive income/(loss), net of taxation		184	(318)
Total comprehensive income/(loss) for the year		1,357	(435)
Attributable to:			
Owners of the parent		1,397	(277)
Non-controlling interests		(40)	(158)
Total comprehensive income/(loss) attributable to owners of the parent arises from:			
Continuing operations		833	(571)
Discontinued operations		564	294
		1,397	(277)

(i) Exchange differences on translation of foreign operations includes £46 million (2020: £50 million) of losses attributable to the equity holders of the parent, and £3 million (2020: £4 million) of losses attributable to non-controlling interests. Exchange differences reclassified to Group Income Statement on disposal includes a £20 million gain (2020: £8 million loss) attributable to the equity holders of the parent, and £nil (2020: £4 million loss) attributable to non-controlling interests.

(ii) The Group recommenced its strategy of net investment hedging in advance of the disposal of Direct Energy.

The notes on pages 31 to 80 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 2020	360	2,330	(869)	(609)	1,212	583	1,795
Profit/(loss) for the year	–	–	41	–	41	(158)	(117)
Other comprehensive loss	–	–	–	(318)	(318)	–	(318)
Total comprehensive income/(loss)	–	–	41	(318)	(277)	(158)	(435)
Employee share schemes and other share transactions	1	17	(8)	12	22	–	22
31 December 2020	361	2,347	(836)	(915)	957	425	1,382
Profit for the year	–	–	1,210	–	1,210	(37)	1,173
Other comprehensive income/(loss)	–	–	–	187	187	(3)	184
Total comprehensive income	–	–	1,210	187	1,397	(40)	1,357
Employee share schemes and other share transactions	2	30	3	(24)	11	–	11
31 December 2021	363	2,377	377	(752)	2,365	385	2,750

The notes on pages 31 to 80 form part of these Financial Statements.

Group Balance Sheet

	Notes	31 December 2021 £m	31 December 2020 £m
Non-current assets			
Property, plant and equipment		1,985	2,643
Interests in joint ventures and associates	12	1,628	843
Other intangible assets		760	1,011
Goodwill		401	929
Deferred tax assets		823	636
Trade and other receivables, and contract-related assets	16	233	145
Derivative financial instruments	13	1,005	366
Retirement benefit assets	14	231	–
Securities	11	135	134
		7,201	6,707
Current assets			
Trade and other receivables, and contract-related assets	16	5,881	2,801
Inventories		644	324
Derivative financial instruments	13	6,545	1,224
Current tax assets		83	132
Cash and cash equivalents	11	5,060	1,820
		18,213	6,301
Assets of disposal groups classified as held for sale	15	1,672	4,111
		19,885	10,412
Total assets		27,086	17,119
Current liabilities			
Derivative financial instruments	13	(4,929)	(747)
Trade and other payables, and contract-related liabilities		(7,513)	(3,722)
Current tax liabilities		(333)	(235)
Provisions for other liabilities and charges		(2,769)	(188)
Bank overdrafts, loans and other borrowings	11	(1,204)	(787)
		(16,748)	(5,679)
Liabilities of disposal groups classified as held for sale	15	(1,228)	(1,986)
		(17,976)	(7,665)
Non-current liabilities			
Deferred tax liabilities		(36)	(149)
Derivative financial instruments	13	(1,080)	(181)
Trade and other payables, and contract-related liabilities		(120)	(114)
Provisions for other liabilities and charges		(1,454)	(2,438)
Retirement benefit obligations	14	(231)	(601)
Bank loans and other borrowings	11	(3,439)	(4,589)
		(6,360)	(8,072)
Total liabilities		(24,336)	(15,737)
Net assets			
Share capital		363	361
Share premium		2,377	2,347
Retained earnings		377	(836)
Other equity		(752)	(915)
Total shareholders' equity		2,365	957
Non-controlling interests		385	425
Total shareholders' equity and non-controlling interests		2,750	1,382

The Financial Statements on pages 26 to 80, of which the notes on pages 31 to 80 form part, were approved and authorised for issue by the Board of Directors on 23 February 2022 and were signed below on its behalf by:

Chris O'Shea **Kate Ringrose**
Group Chief Executive **Group Chief Financial Officer**
Centrica plc Registered No: 03033654

Group Cash Flow Statement

Year ended 31 December	Notes	2021 £m	2020 £m
Continuing operations:			
Group operating profit/(loss) including share of results of joint ventures and associates		954	(362)
Add back/(deduct) share of losses/(profits) of joint ventures and associates, net of interest and taxation	12	103	(21)
Group operating profit/(loss) before share of results of joint ventures and associates		1,057	(383)
Add back/(deduct):			
Depreciation, amortisation, write-downs, impairments and write-backs		(415)	2,217
Loss on disposals		28	28
Increase in provisions		2,434	46
Cash contributions to defined benefit schemes in excess of service cost income statement charge		(388)	(42)
Employee share scheme costs		12	34
Unrealised gains arising from re-measurement of energy contracts		(1,159)	(666)
Exceptional charges reflected directly in operating profit		12	49
Operating cash flows before movements in working capital relating to business performance and payments relating to taxes and exceptional charges		1,581	1,283
(Increase)/decrease in inventories		(361)	4
(Increase)/decrease in trade and other receivables and contract-related assets relating to business performance		(3,358)	363
Increase/(decrease) in trade and other payables and contract-related liabilities relating to business performance		3,965	(571)
Operating cash flows before payments relating to taxes and exceptional charges		1,827	1,079
Taxes paid		(140)	(2)
Payments relating to exceptional charges in operating costs	6	(76)	(120)
Net cash flow from continuing operating activities		1,611	957
Net cash flow from discontinued operating activities	15	–	443
Net cash flow from operating activities		1,611	1,400
Continuing operations:			
Purchase of businesses, net of cash acquired		(14)	–
Sale of businesses	15	70	43
Purchase of property, plant and equipment and intangible assets	5	(420)	(489)
Sale of property, plant and equipment and intangible assets		36	–
Disposal of/(investments in) joint ventures and associates	12	2	(10)
Dividends received from joint ventures and associates	12	2	62
Receipt of sub-lease capital payments	11	–	3
Interest received		2	7
Settlement and sale of securities	11	(3)	121
Net cash flow from continuing investing activities		(325)	(263)
Net cash flow from discontinued investing activities	15	2,588	(22)
Net cash flow from investing activities		2,263	(285)
Continuing operations:			
Payments for own shares		–	(30)
Proceeds from sale of forfeited share capital		1	–
Financing interest paid	11	(233)	(202)
Repayment of borrowings and capital element of leases	11	(706)	(234)
Net cash flow from continuing financing activities		(938)	(466)
Net cash flow from discontinued financing activities	15	–	(16)
Net cash flow from financing activities		(938)	(482)
Net increase in cash and cash equivalents		2,936	633
Cash and cash equivalents including overdrafts, and cash classified as held for sale at 1 January		1,393	794
Effect of foreign exchange rate changes		(1)	(34)
Cash and cash equivalents including overdrafts at 31 December	11	4,328	1,393
Included in the following line of the Group Balance Sheet:			
Cash and cash equivalents		5,060	1,820
Overdrafts included within current bank overdrafts, loans and other borrowings		(750)	(534)
Assets of disposal groups classified as held for sale		18	107

The notes on pages 31 to 80 form part of these Financial Statements.

Notes to the Financial Statements

1. General information, 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 2021 or later years, and if and how these are expected to impact the financial position and performance of the Group.

(a) 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 Company has its listing on the London Stock Exchange.

The Financial Statements for the year ended 31 December 2021 included in this announcement were authorised for issue in accordance with a resolution of the Board of Directors on 23 February 2022.

The preliminary results for the year ended 31 December 2021 have been extracted from audited accounts which have not yet been delivered to the Registrar of Companies. The Financial Statements set out in this announcement do not constitute statutory accounts for the year ended 31 December 2021 or 31 December 2020. The financial information for the year ended 31 December 2020 is derived from the statutory accounts from that year. The report of the auditors on the statutory accounts for the year ended 31 December 2021 was unqualified and did not contain a statement under Section 498 of the Companies Act 2006.

(b) Basis of preparation

The accounting policies applied in these Financial Statements for the year ended 31 December 2021 are consistent with those of the Annual Financial Statements for the year ended 31 December 2020, as described in those financial statements, with the exception of standards, amendments and interpretations effective in 2021 and other presentational changes.

(c) New accounting policies, standards, amendments and interpretations effective or adopted in 2021

From 1 January 2021, the following standards and amendments are effective in the Group's consolidated Financial Statements:

- Amendments to IFRS 17 and IFRS 4: 'Insurance Contracts' - deferral of IFRS 9;
- Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 Interest Rate Benchmark Reform - Phase 2

Phase 2 of the Interest Rate Benchmark Reform, including the amendments to accounting standards noted above, became effective on 1 January 2021. Under Phase 2, to the extent that modifications are made to financial instruments that are necessary to implement Interest Rate Benchmark Reform, reliefs from the discontinuation of hedge accounting or immediate recognition of any gains or losses in the income statement on the modification of financial instruments measured at amortised cost are available on transition to alternative rates, provided that the modification is a direct consequence of the reform and the new basis for calculating cash flows is economically equivalent to the previous basis.

The Group will apply the International Swaps and Derivatives Associates (ISDA) fallback protocol to the derivative financial instruments held by the Group affected by the IBOR Reform where the interest rate benchmark is linked to GBP Libor. These instruments primarily comprise interest rate swap agreements designated in fair value hedge relationships. The ISDA fallback rates are derived from the Sterling Overnight Interbank Average (SONIA) rate and are calculated and published by Bloomberg. The Group has determined that Phase 1 reliefs no longer apply in respect of GBP Libor - the uncertainty regarding the timing and the amount of interest rate benchmark-based cash flows ceased on 31 December 2021, at the point of transition to the ISDA fallback protocol. The Group also has interest rate swap agreements designated in fair value hedge relationships linked to USD Libor which is expected to remain in place until 2023; uncertainty over its replacement still exists.

The Group has determined that the reliefs available under Phase 2 of the Reform are available and has amended the formal designation of hedge relationships; hedge accounting is expected to continue.

The amendments to IFRS 4 defer the date of application of IFRS 17 to 1 January 2023 and change the fixed date of the temporary exemption in IFRS 4 from applying IFRS 9 until 1 January 2023.

These changes and other amendments effective during the year did not materially impact the consolidated Financial Statements.

Accounting policy for Supplier of Last Resort claim

During the year the Group has been appointed as Supplier of Last Resort (SoLR) to a number of energy suppliers who have ceased to trade. Under Ofgem licence conditions, the Group is entitled to make a Last Resort Supplier Payment (LRSP) claim for incremental costs reasonably incurred to supply affected customers. The claim is permitted by Ofgem to ensure that energy suppliers can provide support and stability to the market, through a period of significant volatility. In accounting for the receivable arising under the claim, the Group has applied IAS 20 'Government Grants' on the basis that the LRSP is a form of assistance provided by Ofgem which permits suppliers to recover the incremental costs of supply associated with SoLR appointment. At the reporting date, the Group has recognised a receivable to the extent that these additional costs of supply have been incurred. A credit, offsetting the associated costs, has been recognised in cost of sales and operating costs in the Income Statement. The Group is entitled to recover the incremental costs of supply until six months post SoLR appointment. The Group submitted the first of two LRSP claims to Ofgem in December 2021 and this is expected to be settled in monthly instalments between April 2022 and April 2023. A second claim will be made in Autumn 2022 to both adjust the first claim for actual costs incurred, and to claim for additional costs not previously included. The second claim will be settled between April 2023 and April 2024.

1. General information, basis of preparation and summary of significant new accounting policies and reporting changes

Update to certain re-measurements accounting policy

The Group has determined that at the balance sheet date, the future cost to fulfil certain supply contracts in the Residential and Business portfolios will exceed the charges recovered from customers under these contracts. This is because at the reporting date, the Group has already recognised the gains on the related hedges, as certain re-measurements in the Income Statement. In applying IAS 37, the Group has estimated the unavoidable costs of fulfilling customer contracts, including reversing the hedging gains, and has recognised the expense as an onerous contract provision within cost of sales, also in certain re-measurements in the Income Statement.

Further detail on both of these policies is included in the Group's critical accounting judgements.

Change in accounting treatment of deferred tax movements arising from pension balances

IAS 12 allows for the reasonable allocation of current and deferred tax charges and credits in respect of items where the movements in those items are recognised outside of the Income Statement, such as movements on the Group's pension assets and liabilities. The Group previously allocated all deferred tax movements arising on the pension schemes, including those associated with a change in the rate of deferred tax, to the Income Statement and the Statement of Other Comprehensive Income, on the basis of the cumulative charges and credits to those statements. However, the Group has now simplified its policy, and movements on deferred tax associated with both actuarial gains and losses, and deficit payments are now recognised in the Statement of Other Comprehensive Income, including in respect of tax rate changes, as the majority of timing differences arise from actuarial movements which are dealt with in the Statement of Other Comprehensive Income.

The Group has therefore recognised a £19 million debit in the year in the Statement of Other Comprehensive Income, representing the impact of tax rate changes in respect of the opening pension scheme balance, including the impact of previous asset backed contributions, and payments made during the year. This approach will be consistently applied to all future re-measurement of the deferred tax balances in respect of the pension scheme as a result of tax rate changes.

As a result of this change, current tax associated with in-year pension deficit payments will also be recognised in the Statement of Other Comprehensive Income. A credit of £16 million has been recognised during the year (offset by an equivalent movement in deferred tax).

In 2020, the Group recognised part of the difference due to tax rate change, arising from the re-measurement of the deferred tax balance in respect of pension scheme balances, through the income statement giving rise to a tax charge of £22 million. The Group has not restated the comparatives as the amount is not material.

1. General information, basis of preparation and summary of significant new accounting policies and reporting changes

(d) Standards and amendments that are issued but not yet applied by the Group

At the date of authorisation of these consolidated Financial Statements, the Group has not applied the following new and revised standards and amendments that have been issued but are not yet effective:

- IFRS 17: 'Insurance contracts', effective from 1 January 2023;
- Amendments to IAS 37: 'Provisions, Contingent Liabilities and Contingent Assets', effective from 1 January 2022. The amendments specify which costs an entity should include when assessing whether a contract is onerous and therefore requires a provision;
- Amendments to IAS 1: 'Presentation of Financial Statements', effective from 1 January 2023. The amendments clarify the meaning of settlement in the context of liabilities, and the circumstances in which liabilities are classified as current or non-current;
- 'Annual Improvements to IFRS 2018-2020', effective from 1 January 2022;
- Amendments to IAS 8: 'Accounting policies, Changes in Accounting estimates and Errors'; effective from 1 January 2023;
- Amendments to IAS 1 relating to the disclosure of accounting policy and materiality judgements, effective from 1 January 2023;
- Amendments to IAS 12: 'Income Taxes'; effective from 1 January 2023; and
- Amendments to IAS 16: 'Property, Plant and Equipment'; effective from 1 January 2022.

IFRS 17 will be effective from 1 January 2023. The Group currently has fixed-fee service contracts that it accounts for as insurance contracts under IFRS 4: 'Insurance contracts'. The Group is currently carrying out an assessment of IFRS 17 and expects these contracts to fall within the scope of IFRS 17 where the Group reflects an assessment of the risk associated with an individual customer in setting the price of the contract. The Group expects to apply the simplified 'Premium Allocation Approach' to its contracts on the basis that the coverage period of the Group's insurance contracts is not greater than one year. Whilst work is ongoing, the Group does not expect a material impact from its application.

Management does not expect other issued but not effective amendments or standards, or standards not discussed above to have a material impact on the consolidated Financial Statements.

(e) Restatements

During 2020 the Group's reportable operating segments were amended due to a change in the way management review and make decisions about the business. During 2021 the British Gas segment has been further refined and separated into two operating segments, British Gas Energy and British Gas Services & Solutions, reflecting additional restructuring and management changes that have occurred. At the same time the results from the supply of energy to small business customers have been moved to British Gas Energy from Centrica Business Solutions to reflect how these customers are managed; comparatives have been restated.

The operating segments are now defined as:

- British Gas Services & Solutions;
- British Gas Energy;
- Centrica Business Solutions;
- Bord Gáis Energy;
- Energy Marketing & Trading;
- Upstream; and
- Direct Energy (Discontinued operation).

Collateral posted/(received) has been removed from the Group's definition of net debt. See note 11.

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 (revenue, margin, profit, earnings per share and 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 revenue, adjusted gross margin and adjusted operating profit to evaluate segment performance. They are defined as revenue/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.

Free cash flow is used by management to assess the cash generating performance of each segment. Segmental free cash flow is defined as net cash flow from operating and investing activities before:

- deficit reduction payments made to the UK defined benefit pension schemes;
- movements in variation margin and collateral;
- interest received;
- sale, settlement and purchase of securities; and
- taxes paid and refunded.

Segmental free cash flow as assessed by management excludes cash flows relating to tax. This is because the effect of group relief and similar reliefs could distort the measure of segment performance. As a Group-wide measure, free cash flow includes taxes paid and refunded.

Free cash flow gives a measure of the cash generation performance of the business after taking account of the need to maintain its capital asset base. By excluding deficit reduction payments and movements in variation margin and collateral, which are predominantly triggered by wider market factors and, in the case of collateral and margin movements, represent timing differences, free cash flow gives a measure of the underlying performance of the Group.

Interest received and cash flows from the sale, settlement and purchase of securities are excluded from Free Cash Flow as these items are included in the Group's net debt measure (as restated – see note 11), and are therefore viewed by the Directors as related to the manner in which the Group finances its operations.

2. Centrica specific accounting measures

(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: 'Financial Instruments' 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. Similarly, where our downstream customer supply contracts have become onerous as a result of significant market price movements (and the fact any associated commodity hedges have separately been recognised at fair value under IFRS 9 and therefore the onerous supply contract assessment must reflect the reversal of those gains in subsequent periods), movements in the required provision are also reflected as a certain re-measurement in the 'Cost of sales' line item and separately disclosed in note 6. Movements in this provision do not reflect the underlying performance of the business because they are economically related to both the hedges and forecast future profitability of the supply contracts. 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. The Group's results for the year presents the unrealised onerous supply contract provision movements within the 'Cost of sales' 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), 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 both current and previous years, as part of the smart meter roll-out, the Group renewed meter rental arrangements with third parties. 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.

A reassessment of the contracts was performed in accordance with IFRS 16, following renegotiations of the meter rental arrangements. 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 liquified natural gas (LNG) market, both procuring long-term LNG supply arrangements and transacting in shorter-term LNG cargoes. As part of its operations in the market, the Group optimises its contractual positions in order to meet customer demand for physical commodity. In response to the continuing development of the global LNG market which, consistent with prior years, is not considered to be active, the Group has reviewed its portfolio of LNG transactions and contracts. It has judged that its activities are carried out for the purpose of receipt or delivery of physical commodity in accordance with its expected purchase and sale requirements. As a result, the Group's contracts to buy and sell LNG are outside the scope of IFRS 9 and are accounted for on an accruals basis.

Assets held for sale and discontinued operations

On 24 July 2020, the Group announced that it had agreed to dispose of its North American supply, services and trading business, Direct Energy, to NRG for headline consideration of \$3.6 billion (£2.7 billion) on a debt free, cash free basis. The Group judged that the assets and liabilities of the business should be classified as a disposal group held for sale from that date and as at 31 December 2020. Additionally, because the disposal group represented a separate major line of business and geographic area of operation, its results have been presented as discontinued operations. The sale completed on 5 January 2021.

On 8 December 2021 the Group announced that it had agreed to sell Spirit Energy's entire Norwegian portfolio plus the Statfjord field to Sval Energi and Equinor for headline consideration of c.£800m. Completion is expected in the second quarter of 2022. See note 15.

In applying IFRS 5: 'Non-current assets held for sale and discontinued operations' to the Spirit Energy disposal group, the Group has judged that the assets and liabilities comprising the disposal group should be classified as held for sale as at 8 December 2021. This is on the basis that at that point, the disposal group was available for immediate sale, subject only to terms that are customary for sales of such assets, and the sale was highly probable.

The disposal group does not represent a separate major line of business or geographical operations, because the Upstream segment retains other European producing fields, and hence the Group has concluded the disposal group does not constitute a discontinued operation.

3. Critical accounting judgements and key sources of estimation uncertainty

Supplier of Last Resort (SoLR)

During 2021, the Group was appointed as the Supplier of Last Resort to eight suppliers who ceased trading during the year. Under Ofgem's licence conditions, the Group is entitled to make a Last Resort Supplier Payment (LRSP) claim for the shortfall between costs reasonably incurred in supplying gas and electricity to premises under the Last Resort Supply Direction, and the charges recovered from customers.

Ofgem published a decision setting out temporary changes to the process for claiming the LRSP and as a result, the Group submitted an initial claim, covering a six month period from the date of appointment, and received confirmation of Ofgem's acceptance in December 2021. The claim primarily covers incremental commodity costs, incurred as a result of procuring gas and electricity to supply affected customers. The Group expects this claim to be settled in monthly instalments between April 2022 and April 2023. The Group will submit a second claim to Ofgem by Autumn 2022, recognising both actual commodity costs incurred, and additional costs which were not included in the initial claim. This includes the recovery of customer credit balances, where the Group has not waived the right to do so. The second claim will be settled between April 2023 and April 2024. The value recognised for the receivable at 31 December 2021 is £234 million, offsetting costs incurred and customer credit balances recognised at the date.

The Group has concluded that the LRSP process represents an Ofgem support mechanism, enabling energy suppliers to provide stability to the customers of failed suppliers. The Group determines that the LRSP is within the scope of IAS 20 'Government Grants' and amounts receivable under the mechanism are recognised as a credit within cost of sales and operating costs, as the related expenses are incurred.

(b) Key sources of estimation uncertainty

The sections below detail the assumptions the Group makes about the future and other major sources of estimation uncertainty when measuring its assets and liabilities at the reporting date. The information given relates to the sources of estimation uncertainty that have a significant risk of resulting in a material adjustment to those assets and liabilities in the next financial year.

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.

British Gas Energy and Centrica Business Solutions Onerous Supply Contracts

The Group operates and manages a hedging strategy to ensure that the future costs of supplying customers of the British Gas Energy and Centrica Business Solution portfolios are appropriately managed.

Hedges are measured at fair value under IFRS 9 and are recognised as certain re-measurements in the Group's income statement until the point at which the related costs to purchase electricity and gas are incurred. Fair value movements on energy purchase contracts entered to meet the future needs of customers are economically related to customer demand; the supply contracts for which are measured on an accrual basis.

Gains arising from hedges have been recognised in the income statement (within certain re-measurements) in accordance with the requirements of IFRS 9. Because of this hedge value recognition, the assessment of whether the supply contracts are onerous must include the reversal of mark to market gains. The Group determines that at the reporting date, the future costs to fulfil customer contracts, including those mark to market reversals, will exceed the charges recovered from customers because the associated hedging gains have already been recognised in the income statement.

The Group has recognised an onerous supply contract provision of £2,530 million at 31 December 2021. This has been calculated by estimating the expected margins from energy supply customers, and deducting from this margin the expected costs to fulfil those arrangements, including energy purchase costs reflecting the mark to market gains, and directly attributable overhead costs. For customers where this results in a loss, an onerous contract provision is recorded.

Key sources of estimation uncertainty relate to the expected future tenure of the Group's customer portfolio at 31 December 2021, and the estimated gross margin attributable to them. Estimations are based on historic experience, adjusted to reflect non-recurring costs.

The British Gas Energy residential element of the provision is particularly sensitive to movements in tenure and gross margin assumptions. The model indicates that a customer tenure of eight years or more is not expected to be onerous. The gross margin for 31 December 2021 can be found in note 4. The element of the provision relating to business customers is much less sensitive to the assumptions made.

Sensitivities for residential customers are provided in the table below:

Assumption	Decrease/(increase) in provision £m
Customer tenure one year longer/(shorter)	170/(124)
Gross margin 10% increase/(decrease)	111/(150)

3. Critical accounting judgements and key sources of estimation uncertainty

Impairment and impairment reversal 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.

2021 has seen significant increases in forward commodity prices, both in terms of observable market prices and forecast forward prices. As a result impairment reversals have been booked related to our retained assets.

Upstream gas and oil assets

The recoverable amount of the Group's retained 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 (see gas and liquid reserves below) 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 impairment reversals booked during the year and sensitivity to the assumptions are provided in note 6.

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 likely operational lives of the stations.

Further details of the methodology, assumptions, impairment reversal booked during the year and related sensitivities are provided in note 6.

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.

The Group has determined that the small business supply portfolio is more closely aligned to the residential portfolio in terms of customer profile than the medium and large business portfolio who have more complex needs. As a result, this portfolio was transferred into the British Gas Energy segment during the year, and goodwill was reallocated based on a relative value calculation.

As a result of the proposed Spirit Energy Norway and Stafford field disposal (see note 15), the Goodwill associated with exploration and production in the Upstream segment had to be apportioned between the retained business and the disposal group. The Group judged that the entire goodwill balance of £408 million should be allocated to the Norway disposal group as it was only this group of assets that had historically justified the recoverable amount. Following this allocation, £198 million of goodwill has been written down so that the assets of the disposal group equal the expected recoverable amount.

Additionally, strategic changes in the Centrica Business Solutions customer business, with a re-focusing of product offerings and revised growth forecasts has led to a write-off of its entire goodwill balance of £103 million. Sensitivity to the assumptions is also found in note 6.

Credit provisions for trade and other receivables

The economic effects of the significant increase in wholesale gas and electricity costs, and resultant increase in consumer tariffs alongside wider inflationary pressures as well as the ongoing effects of the COVID-19 pandemic and cost of living pressures have impacted the ability of the Group's customers to pay amounts due. The level of estimation uncertainty in determining the credit provisions required for customers in different sectors and geographies continues to be raised.

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 16. 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 pension 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 year 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.

The Group's defined benefit schemes hold part of their plan asset portfolio as unquoted assets. These include private equity and property interests that are typically subject to valuation uncertainty. The valuation of these assets is based on the latest asset manager views and other relevant benchmarks.

Further details, including sensitivities to these assumptions, are provided in note 14.

3. Critical accounting judgements and key sources of estimation uncertainty

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. The primary source of estimation uncertainty relating to unread revenue arises in the respect of gas and electricity sales to UK downstream customers in British Gas Energy and Centrica Business Solutions. At 31 December 2021 unread revenue arising from these customers amounted to £1,740 million (2020: £1,544 million). The judgements applied, and the assumptions underpinning these judgements in arriving at this estimated amount, are considered to be appropriate. However, a change in these assumptions of 2% would impact revenue by £35 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 2021 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 predominantly incurred by 2030.

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 2021 is 0% (2020: 0%) on the basis that market risk-free rates remain suppressed. A 1% change in this discount rate would change the decommissioning liability by approximately £73 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 81.

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. A change in reserves estimates could also change the timing of decommissioning activity, which could change the carrying value of the Group's provisions. The complex interaction of field-specific factors means that it is not possible to give a meaningful sensitivity of the Group's financial position or performance to gas and liquids reserves estimates. Details of the Group's 2P reserves are given on page 81. Details of impairments of exploration and production fields and goodwill, along with associated sensitivities, are given in note 6.

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.

4. Risk management

The Group's normal operating, investing and financing activities expose it to a variety of risks. Risk management is fundamental to the way the Group is governed and managed. The system of risk management and internal control is set out in the 2020 Annual Reports and Accounts.

During 2021, the risks that were prioritised for leadership attention related to:

- risk of financial loss due to our exposure to market, credit and operational risk;
- the impact on present or future profitability resulting from deviations to normal weather;
- risk that failures in development or integrity of our investments in operated and non-operated assets could compromise asset production or the long term viability of the assets;
- risk of failure to prevent impacts from the denial of service, cyber espionage and the related theft/disclosure of confidential/customer data leading to reputational, regulatory and financial impacts;
- the risk of political or regulatory intervention and changes or a failure to influence such changes;
- risk of failure to attract and retain key talent and/or deterioration in the health and wellbeing of our employees;
- risk of failure to offer competitive and innovative product offerings whilst maintaining a market competitive cost to serve could hinder the delivery of our strategy;
- impact of market, regulatory and policy changes on climate change affecting the Group;
- 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; and
- risk of an unplanned or uncontrolled release of any material from primary containment that could result in fatalities, injury and/or environmental damage resulting in legal claims, reputational and financial impacts.

Current global wholesale energy prices are putting pressure on the energy market, with gas and electricity prices reaching record levels. Some smaller suppliers have ceased trading, leaving them unable to fulfil their commitments to supply gas and electricity to their customers. Centrica have been appointed as the Supplier of Last Resort (SoLR) for some of these energy suppliers, taking on over 700,000 residential and 6,600 business customers. Price volatility and exposure to any deviation from seasonal normal temperature have severely increased the commodity and weather risks, alongside potential unstable customer churn through Winter 21/22 and the increase in the price cap April 22. The Group is addressing this by implementing agile hedging policies/risk management and effective demand forecasting processes.

COVID-19 continues to pose significant challenges to the risk management and resilience of businesses globally, with the transmissibility of the Omicron variant causing concern. Centrica has a robust approach to risk management which enables rapid mobilisation of resources to react and mitigate the ongoing impacts of the pandemic, and working practices continue to be monitored and modified as required.

A key area of focus in the UK is the expansion in field engineer capacity following attrition in 2021 to enhance customer service levels. Centrica faces constraints in its efforts because of the shortage of skilled labour in the wider economy affecting many sectors and the time taken to train new apprentice engineers. Whilst temporary resources are actively being recruited, this labour shortage creates a short term risk in some parts of the country to the consistency in the level of service provided to customers.

Financial risks are assessed at a Business Unit (BU) level to determine the impact and likelihood. During the BU and Group level risk reviews, the adequacy of mitigating actions are considered given the net residual risk scores in comparison to the Group risk appetite.

Bi-annually, the Group Financial Risks are presented to the Centrica Leadership Team (CLT) for review and challenge. These include the aggregate risk assessments from the BU 'bottom-up' process and any Group level risk assessments. All Group Principal Risks including Financial risks as updated by the CLT are presented to the Audit and Risk Committee for review.

The four main areas of financial risk are managed as follows:

- commodity price risk management is carried out in accordance with the 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;
- wholesale credit risks associated with commodity trading and treasury positions are managed in accordance with the Group's credit risk policy; and
- downstream customer credit risk management is carried out in accordance with individual business unit credit policies.

Credit risk for financial assets

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 across 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.

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, and as at the reporting date, the analysis performed by the Group extends to 31 December 2023. 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 2021 the Group had undrawn committed credit facilities of £3,006 million (2020: £3,637 million) and £3,875 million (2020: £1,139 million) of unrestricted cash and cash equivalents, net of outstanding overdrafts. A further £18 million (2020: £107 million) of cash and cash equivalents is included in assets held for sale. 89% (2020: 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 10.9 years (2020: 10.3 years). The completion of the disposal of the Direct Energy business on 5 January 2021 led to a cash receipt of \$3.6 billion (£2.7 billion), significantly improving the Group's net debt position.

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.

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.

5. 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.

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
British Gas Services & Solutions	(i) The installation, repair and maintenance of domestic central heating and related appliances, and the provision of fixed-fee maintenance/breakdown service and insurance contracts in the UK; and (ii) the supply of new technologies and energy efficiency solutions in the UK.
British Gas Energy	(i) The supply of gas and electricity to residential and small business customers in the UK.
Centrica Business Solutions	(i) The supply of gas and electricity and provision of energy-related services to business customers in the UK ⁽ⁱ⁾ ; and (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.
Bord Gáis Energy	(i) The supply of gas and electricity to residential and commercial and industrial customers in the Republic of Ireland; (ii) the installation, repair and maintenance of domestic central heating and related appliances in the Republic of Ireland; and (iii) power generation in the Republic of Ireland. ⁽ⁱ⁾
Energy Marketing & Trading	(i) The procurement, trading and optimisation of energy in the UK and Europe ⁽ⁱ⁾ ; (ii) the global procurement and sale of LNG; and (iii) the generation of power from the Spalding combined cycle gas turbine tolling contract (the contract ended in 2021).
Upstream	(i) The production and processing of gas and oil, principally within Spirit Energy ⁽ⁱ⁾ ; and (ii) the sale of power generated from nuclear assets in the UK.
Direct Energy (Discontinued operation)	(i) The supply of gas and electricity, and provision of energy-related services to residential and business customers in North America; (ii) the installation, repair and maintenance of domestic central heating and cooling systems and related appliances, and the provision of fixed-fee maintenance/breakdown service and insurance contracts in North America; and (iii) the procurement, trading and optimisation of energy in North America ⁽ⁱ⁾ .

(i) Where income is generated from contracts in the scope of IFRS 9, this is included in re-measurement and settlement of energy contracts.

5. Segmental analysis

(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	2021			2020 (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
Continuing operations						
British Gas Services & Solutions	1,513	(53)	1,460	1,547	(64)	1,483
British Gas Energy	7,513	–	7,513	7,007	–	7,007
Centrica Business Solutions	1,981	(28)	1,953	1,526	(8)	1,518
Bord Gáis Energy	1,111	–	1,111	820	–	820
Energy Marketing & Trading	6,082	(214)	5,868	2,917	(175)	2,742
Upstream	2,282	(1,887)	395	1,918	(539)	1,379
Group revenue included in business performance	20,482	(2,182)	18,300	15,735	(786)	14,949
Discontinued operations						
Direct Energy	–	–	–	9,483	–	9,483
Business performance revenue arising from continuing and discontinued operations	20,482	(2,182)	18,300	25,218	(786)	24,432
Less: revenue arising on contracts in scope of IFRS 9 included in business performance			(3,556)			(2,700)
Less: discontinued operations			–			(9,483)
Group Revenue			14,744			12,249

(i) Segmental revenues have been restated to reflect the new operating structure of the Group. See note 1 for further details.

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	2021				
	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
Continuing operations					
Energy services and solutions	554				
British Gas Services & Solutions	554	906	1,460	–	1,460
Energy supply – UK	7,513				
British Gas Energy	7,513	–	7,513	–	7,513
Energy supply – UK	944				
Energy services and solutions	297				
Centrica Business Solutions	1,241	7	1,248	705	1,953
Energy supply – Republic of Ireland	903				
Bord Gáis Energy	903	–	903	208	1,111
Energy sales to trading and energy procurement counterparties	2,825				
Energy Marketing & Trading	2,825	35	2,860	3,008	5,868
Gas and oil production	760				
Upstream	760	–	760	(365)	395
	13,796	948	14,744	3,556	18,300

5. Segmental analysis

Year ended 31 December	2020 (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
Continuing operations					
Energy services and solutions	489				
British Gas Services & Solutions	489	994	1,483	–	1,483
Energy supply – UK	7,007				
British Gas Energy	7,007	–	7,007	–	7,007
Energy supply – UK	775				
Energy services and solutions	262				
Centrica Business Solutions	1,037	8	1,045	473	1,518
Energy supply – Republic of Ireland	725				
Bord Gáis Energy	725	–	725	95	820
Energy sales to trading and energy procurement counterparties	1,317				
Energy Marketing & Trading	1,317	–	1,317	1,425	2,742
Gas and oil production	672				
Upstream	672	–	672	707	1,379
	11,247	1,002	12,249	2,700	14,949

(i) Segmental revenues have been restated to reflect the new operating structure of the Group. See note 1 for further details. Furthermore, £40 million of prior year revenue relating to British Gas Services & Solutions has been reclassified from IFRS 15 to IFRS 4 revenue.

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)		Non-current assets (based on location of assets) (i)	
	2021 £m	2020 £m	2021 £m	2020 £m
Continuing operations				
UK	10,891	9,787	4,203	3,691
Republic of Ireland	903	725	139	114
Norway	212	265	–	1,149
North America	413	266	25	34
Rest of the world	2,325	1,206	505	552
	14,744	12,249	4,872	5,540

(i) 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. Assets of disposal groups held for sale are not included.

5. Segmental analysis

(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	
	2021 £m	2020 (restated) (i) £m	2021 £m	2020 (restated) (i) £m
Continuing operations				
British Gas Services & Solutions	574	664	121	191
British Gas Energy	849	890	118	82
Centrica Business Solutions	143	100	(52)	(132)
Bord Gáis Energy	136	154	28	42
Energy Marketing & Trading	242	281	70	174
Upstream	926	244	663	90
Adjusted gross margin/adjusted operating profit	2,870	2,333	948	447
Discontinued operations				
Direct Energy	–	862	–	252
Total Group adjusted gross margin/adjusted operating profit	2,870	3,195	948	699
Less discontinued operations	–	(862)	–	(252)
Business performance gross margin/operating profit from continuing operations	2,870	2,333	948	447
Certain re-measurements (continuing operations):				
Onerous energy supply contract provision	(2,530)	–	(2,530)	–
Derivative contracts	1,289	786	1,289	786
Share of re-measurement of certain associates' energy contracts (net of taxation)	–	–	–	(2)
Gross profit	1,629	3,119		
Exceptional items in operating profit (continuing operations)			1,247	(1,593)
Operating profit/(loss) after exceptional items and certain re-measurements			954	(362)

(i) Segmental results have been restated to reflect the new operating structure of the Group. See note 1 for further details.

5. 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 PP&E		Amortisation, write-downs and impairments of intangibles	
	2021 £m	2020 (restated) (i) £m	2021 £m	2020 (restated) (i) £m
Continuing operations				
British Gas Services & Solutions	(29)	(38)	(14)	(34)
British Gas Energy	(5)	(11)	(91)	(88)
Centrica Business Solutions	(14)	(16)	(34)	(37)
Bord Gáis Energy	(5)	(5)	(13)	(12)
Energy Marketing & Trading	(38)	(30)	(11)	(12)
Upstream	(461)	(519)	(25)	(26)
Other ⁽ⁱⁱ⁾	(31)	(40)	(28)	(44)
	(583)	(659)	(216)	(253)
Discontinued operations				
Direct Energy	-	(15)	-	(32)

(i) Segmental results have 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.

Impairments of PP&E

During 2021, £3 million of impairments of PP&E (2020: £2 million) were recognised within business performance - £2 million in the Centrica Business Solutions segment and £1 million in the Upstream segment.

Write-downs and impairments of intangible assets

During 2021, £25 million of write-downs (2020: £24 million) relating to exploration and evaluation asset dry holes were recognised in the Upstream segment. All such current and prior year write-downs were recognised within business performance as they were not deemed exceptional in nature. During 2021, £3 million of other intangible assets were impaired within business performance in British Gas Energy, Energy Marketing & Trading and Other (2020: £3 million).

The recoverable amount of these assets was £nil.

5. Segmental analysis

(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		Capital expenditure on intangible assets other than goodwill	
	2021 £m	2020 (restated) (i) £m	2021 £m	2020 (restated) (i) £m
Continuing operations				
British Gas Services & Solutions	32	19	20	25
British Gas Energy	–	–	474	636
Centrica Business Solutions	17	17	166	239
Bord Gáis Energy	40	4	6	7
Energy Marketing & Trading (ii)	–	206	34	61
Upstream	238	275	51	62
Other	8	8	–	5
	335	529	751	1,035
Discontinued operations				
Direct Energy	–	13	–	303
Group total capital expenditure	335	542	751	1,338
Less Discontinued operations	–	(13)	–	(303)
Related to continuing operations:				
Capitalised borrowing costs (note 7)	(8)	(7)	–	(6)
Inception of new leases and movements in payables and prepayments related to capital expenditure	(49)	(230)	24	43
Capital expenditure cash outflow subsequent to transfer to held for sale	21	–	–	–
Purchases of emissions allowances and renewable obligation certificates (iii)	–	–	(654)	(875)
Net cash outflow (continuing operations)	299	292	121	197

(i) Segmental results have been restated to reflect the new operating structure of the Group. See note 1 for further details.

(ii) During 2020, the Group commenced the lease of two new LNG vessels.

(iii) Purchases of emissions allowances and renewable obligation certificates of £472 million (2020: £597 million) in British Gas Energy, £27 million (2020: £55 million) in Energy Marketing & Trading, and £155 million (2020: £223 million) in Centrica Business Solutions.

5. Segmental analysis

(f) Free cash flow

Free cash flow is used by management to assess the cash generating performance of each segment, after taking account of the need to maintain its capital asset base. By excluding deficit reduction payments and movements in collateral and margin cash, which are predominantly triggered by wider market factors, and in the case of collateral and margin movements, represent timing movements, free cash flow gives a measure of the underlying cash generation of the business. Free cash flow excludes investing cash flows that are related to net debt. This measure is reconciled to the net cash flow from operating and investing activities.

Year ended 31 December	2021 £m	2020 (restated) (i) £m
Continuing operations		
British Gas Services & Solutions	170	260
British Gas Energy	16	(29)
Centrica Business Solutions	22	(50)
Bord Gáis Energy	3	35
Energy Marketing & Trading	206	241
Upstream	835	193
Other (ii)	62	37
Segmental free cash flow excluding tax	1,314	687
Discontinued operations		
Direct Energy	2,597	401
Group total segmental free cash flow excluding tax	3,911	1,088
Taxes paid from continuing operations	(140)	(2)
Taxes paid from discontinued operations	(9)	(25)
Group total free cash flow	3,762	1,061
Less Discontinued operations free cash flow (including tax)	(2,588)	(376)
Free cash flow from continuing operations	1,174	685
UK Pension deficit payments (note 14)	(368)	(175)
Movements in variation margin and collateral	481	56
Interest received	2	7
Sale and settlement of securities	(3)	121
	1,286	694
Net cash flow from continuing operating activities	1,611	957
Net cash flow used in continuing investing activities	(325)	(263)
Total cash flow from continuing operating and investing activities	1,286	694

(i) Segmental results have been restated to reflect the new operating structure of the Group. See note 1 for further details.

(ii) The Other segment includes corporate functions.

6. Exceptional items and certain re-measurements

(a) 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. In the current year, as a result of the significant market price increases and the consequent gains recognised on energy contracts entered into to meet the future needs of our customers, an onerous supply contract provision has also been recognised in certain re-measurements related to downstream demand.

Year ended 31 December	2021 £m	2020 £m
Certain re-measurements recognised in relation to energy contracts:		
Net (losses)/gains arising on delivery of contracts	(259)	520
Net gains arising on market price movements and new contracts	1,548	266
Net re-measurements included within gross profit before onerous supply contract provision	1,289	786
Onerous energy supply contract provision ⁽ⁱ⁾	(2,530)	–
Net re-measurements included within gross profit	(1,241)	786
Net losses arising on re-measurement of certain associates' contracts (net of taxation)	–	(2)
Net re-measurements included within Group operating profit	(1,241)	784
Taxation on certain re-measurements (note 8) ⁽ⁱⁱ⁾	486	(86)
Net re-measurements after taxation for continuing operations	(755)	698
Discontinued operations		
Net re-measurements from discontinued operations before taxation	–	184
Taxation on certain re-measurements in discontinued operations	–	(46)
Net re-measurements after taxation from discontinued operations	–	138
Total certain re-measurements	(755)	836

(i) The onerous supply contract provision represents the future costs to fulfil customer contracts on a current market price basis. The associated hedging gains are separately recognised within the gains arising on market price movements and new contracts.

(ii) Taxation on onerous energy supply contracts amounted to a £481 million credit (2020: £nil) and taxation on other certain re-measurements amounted to £5 million (2020: £(86) million).

Year ended 31 December	2021 £m	2020 £m
Total re-measurement and settlement of derivative energy contracts excluding:	(434)	(632)
IFRS 9 business performance revenue	(3,556)	(2,700)
IFRS 9 business performance cost of sales	5,279	4,118
Unrealised certain re-measurements recognised in relation to energy contracts included in gross profit	1,289	786
Onerous contract provision (cost of sales)	(2,530)	–
Total certain re-measurements	(1,241)	786

The table below reflects the certain re-measurement derivative movements by business segment:

Year ended 31 December	2021 £m	2020 £m
UK Energy Supply (British Gas Energy and Centrica Business Solutions)	3,917	1,382
Upstream/Energy Marketing & Trading/Bord Gais	(2,628)	(596)
Unrealised certain re-measurements recognised in relation to energy contracts included in gross profit	1,289	786

6. Exceptional items and certain re-measurements

(b) Exceptional items

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, pension change costs or credits, significant debt repurchase costs and asset write-downs/impairments and write-backs.

Year ended 31 December	2021 £m	2020 £m
Exceptional items recognised in continuing operations		
Impairment of E&P Norway disposal group assets (including disposal related costs) and related asset write-downs ⁽ⁱ⁾	(244)	–
Write-back/(impairment) of other exploration and production assets (including completed field disposals) ⁽ⁱⁱ⁾	838	(644)
Write-back/(Impairment) of power assets ⁽ⁱⁱⁱ⁾	747	(525)
Impairment of Centrica Business Solutions ^(iv)	(123)	(78)
Impairment of Centrica Home Solutions	–	(72)
Fair value uplift on minority investment prior to transfer to asset held for sale ^(v)	15	–
Restructuring credit/(cost) ^(vi)	14	(274)
Exceptional items included within Group operating profit ^(vii)	1,247	(1,593)
Net taxation on exceptional items (note 8)	(250)	273
Net exceptional items recognised in continuing operations after taxation	997	(1,320)
Net exceptional items recognised in discontinued operations after taxation	624	(36)
Total exceptional items recognised after taxation	1,621	(1,356)
Exceptional items recognised in discontinued operations		
Profit on disposal of Direct Energy (including disposal related costs) ^(viii)	613	(29)
Restructuring credit	–	7
Exceptional items before taxation	613	(22)
Net taxation on exceptional items ^(ix)	11	(14)
Net exceptional items recognised in discontinued operations after taxation	624	(36)

(i) In the Upstream segment, the proposed divestment of the exploration and production Norwegian and Stafford field disposal group (see note 15), and the consequent strategic decision to focus the remaining Spirit Energy business on its retained producing fields rather than exploration and evaluation, gave rise to a goodwill impairment of £198 million (post-tax £198 million) and the write-off of the remaining exploration and evaluation assets of £33 million (post-tax £20 million), together with a related onerous provision for exploration spend of £4 million (post-tax £2 million). Also included within this exceptional item is £9 million (post-tax £9 million) of costs incurred during the year for professional assistance related to the divestment.

(ii) In the Upstream segment, net impairment write-backs of exploration and production assets have been booked relating to the value of certain UK, Netherlands and Norwegian gas and oil fields. This amounted to £829 million (post-tax £476 million) and was predominantly due to the increase in near-term liquid commodity prices. Also included is the net reduction in decommissioning provisions (pre-tax £40 million, post-tax £24 million) related to assets previously impaired through exceptional items. Separately, in the taxation line, a credit of £101 million has been recorded associated with deferred tax positions related to exploration and production tax losses and decommissioning carry-back, due to the increase in forecast prices. The partial disposal of the Pegasus field and an update to the prior year Danish gas and oil asset disposal amounted to a loss on disposal (including related asset impairments) of £31 million (post-tax £22 million).

(iii) In the Upstream segment, an impairment write-back of the nuclear investment of £747 million (post-tax £747 million) has been recorded predominantly as a result of an increase in near-term liquid commodity prices, partially offset by reduced output assumptions, following generation issues at a number of stations during the year.

(iv) The Centrica Business Solutions energy solutions cash generating unit (i.e. excluding energy supply) fully impaired its goodwill by £103 million (post-tax £103 million), as well as impairing specific assets of £20 million (post-tax £20 million) following strategic changes, and revised growth forecasts.

(v) A minority investment made by the former Centrica Innovations business unit in Drivz (an electric vehicle charging software provider), previously reflected in Securities and accounted for as fair value through profit and loss, is subject to a signed disposal agreement at the year-end. As a result, the fair value of the investment has been uplifted (post-tax £12 million) to equal the expected disposal proceeds and the investment reclassified to Assets Held for Sale.

(vi) The net restructuring credit relates to the reversal of a prior year provision predominantly related to pension strain estimates, partially offset by property impairments and other run-off costs from the Group's restructuring programme (post-tax £11 million) which is not expected to recur. The Group's restructuring programme is now substantially complete and therefore we do not expect to recognise any further exceptional restructuring costs/credits in relation to this programme.

(vii) Continuing operation exceptional items for 2021 are all non-cash, with the exception of disposal costs associated with the Norwegian and Stafford field divestment and legacy project restructuring costs. The cashflows related to exceptional items of £76 million in the Group Cashflow statement relate to these items, together with cashflows associated with previous year exceptional restructuring costs.

(viii) The disposal of Direct Energy completed on 5 January 2021. See note 15 for further details.

(ix) Taxation on exceptional items in discontinued operations predominantly relates to the release of an uncertain tax provision associated with North American transfer pricing.

6. Exceptional items and certain re-measurements

(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 write-backs during the year.

Exceptional (impairments)/write-back of assets measured on a FVLCD basis

Segment	Asset/CGU (or group of CGUs)	Basis for (impairment)/write-back	Recoverable amount (i)		(Impairment)/Write-back £m
			£m	FV hierarchy	
Upstream	Goodwill	Allocation to E&P Norway disposal group and re-measurement prior to reclassification to Assets held for sale	–	L3	(198)
	Exploration and Evaluation assets	Decision to scale back exploration and development activities	–	L3	(33)
	UK and Netherlands fields (ii)	Increase in liquid commodity prices	817	L3	771
	Norwegian fields (ii)	Increase in liquid commodity prices in H1	N/A	L3	58
Centrica Business Solutions ^(iv)	Energy solutions CGU – Goodwill	Strategic changes and revised growth forecasts	–	L3	(103)
	Energy solutions CGU - Intangible assets/PPE	Strategic changes and revised growth forecasts impacting certain asset values	–	L3	(20)
Other	Property	Reduction in forecast sub-lease potential	–	L3	(8)

(i) Recoverable amounts include the impact of decommissioning and tax when related to Upstream assets. For fully written off assets (including Goodwill), the recoverable amount is stated as £nil.

(ii) Relates to 8 individual fields or cash-generating units that were subject to impairment/write-back. Recoverable amount disclosed relates to those 8 fields.

(iii) The Norwegian field write-back was recognised in the Interim accounts but the field is now part of the Norwegian and Stratford disposal group (see note 15) and therefore no separate recoverable amount has been disclosed.

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 gas and oil assets

For Upstream gas and oil 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 2022 to 2025, blended over a one-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.

The future post-tax cash flows are discounted using a post-tax nominal discount rate of 10.0% (2020: 10.0%).

As forward commodity prices are a key assumption in these valuations, average prices and associated impairment sensitivities for the Group's upstream gas and oil assets (including Goodwill) for the relevant periods are shown below. Note that following the reclassification of the exploration and production Norwegian and Stratford field disposal group into Assets and Liabilities held for sale (see note 15), the below sensitivities for 2021 do not include these assets.

	Five-year liquid and blended-period price (i)		Ten-year long-term average price (i)		Change in post-tax write-back/(impairment) (ii) (iii)			
	2022-2026	2021-2025	2027-2036	2026-2035	+10%		-10%	
	2021	2020	2021	2020	2021 £m	2020 £m	2021 £m	2020 £m
NBP (p/th)	83	40	44	47	8	289	(7)	(266)
Brent (\$/bbl)	64	47	63	68				
							-50% Five-year liquid and blended- period only	
							(340)	

(i) Prices are shown in 2020 real terms.

(ii) Sensitivity relates to Upstream exploration and production assets and CGUs. A 10% change was historically deemed to represent a reasonably possible variation across the entire period covered by both the liquid market and longer-term comparator curves used in upstream gas and oil impairment tests. Given the increases in commodity prices during 2021, a further sensitivity has been included based on a 50% fall in liquid and blend-period commodity prices only. The changes shown relate to further write-backs or impairments and are restricted because the most material fields have already been written back to their depreciated historic cost and have excess impairment headroom. The post-tax NPV movements of the fields in +/-10% scenario are £235 million/£(232) million and in the -50% liquid price period scenario are £(1,099) million.

(iii) In the -10% scenario, the 31 December 2020 sensitivity includes £199 million of goodwill.

6. Exceptional items and certain re-measurements

Furthermore, there is also uncertainty due to climate change and international governmental intervention to reduce CO2 emissions and the likely impact this will have on both gas and oil demand and forecast prices. As a result, a further sensitivity is disclosed below based on forecast prices aligned to the International Energy Agency's ('IEA') Net Zero Emissions by 2050, which assumes governmental policies are put in place to achieve the temperature and net zero goals by 2050. This sensitivity retains the prices for the liquid period (4 years) but replaces the longer term thereafter with the IEA's forecast prices for Net Zero Emissions by 2050.

	Ten-year long-term average price (i)	Change in post-tax write-back/ (impairment) (ii)
	2027-2036	
	2021	£m
NBP (p/th)	36	
Brent (\$/bbl)	45	(2)

(i) Prices shown in 2020 real terms

(ii) Change in impairment restricted due to the most material fields having already been written back to their depreciated historic cost and having excess impairment headroom. The post-tax NPV movements of the fields is £(28) million.

Centrica Business Solutions Energy solutions CGU

A FVLCD calculation has been used to assess the recoverable amount of Centrica Business Solutions Energy solutions CGU (i.e. excluding energy supply) following an internal review of the business resulting in certain strategic changes and revised growth forecasts. Cashflows have been projected over a 5-year period for each region and a terminal value has been applied to the 2026 cashflows using a growth rate in the range 1.5-3.0% which is jurisdictional and product specific. The future post-tax cashflows are predominantly discounted using a post-tax nominal discount rate of 6.5% (2020: 7.5%). Were the cashflows used in the terminal value calculation reduced by 10%, a further impairment to Property, Plant and Equipment of £25 million would be required.

Goodwill in the Centrica Business Solutions Energy Supply CGU is not affected.

Exceptional impairments/write-back assessments of assets measured on a VIU basis

Segment	Asset/CGU (or group of CGUs)	Basis for write-back assessment	Recoverable amount £m	Write-back £m
Upstream	Nuclear	Increase in short-term baseload power prices partially offset by a reduction in volumes following the closure of Dungeness and other generation issues	1,625	747

Nuclear

A VIU calculation has been used to determine the recoverable amount of the Group's investment in Nuclear. The cash flows incorporated in the valuation are based on detailed business forecasts in the short term, extrapolated to future years to account for the expected generation profile of the fleet for its remaining life. Assumptions include forward commodity prices, capacity rates, fuel and network costs, operating and capital expenditure requirements. Price assumptions are based on liquid market prices for 2022 to 2025 which are then blended over a one-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.

The VIU calculation assumes that the Sizewell plant operates until 2055, reflecting a 20-year extension beyond its original design life. In the absence of this extension, the carrying value of the Group's investment in Nuclear would be reduced by £142 million.

The VIU calculation is also sensitive to changes in outage assumptions, and the base level generation volumes assumed for the fleet were reduced during the period based on a review of outage levels in recent years. A further movement of 5% in the unplanned outage rate applied to volumes across the nuclear fleet would lead to a write-back movement of £170 million.

The future pre-tax cash flows generated by the investment in the associate are discounted using a pre-tax nominal discount rate 14.7% (2020: 8.0%). This equated to a post-tax rate of 5.75% (2020: 6.5%). The post-tax discount rate is initially derived from the Group weighted average cost of capital as adjusted for the risks associated with the asset and with reference to comparator companies. The pre-tax rate is then back-calculated by removing tax cash flows and assessing the rate that would give same result as the post-tax rate. Timing of cash flows has caused a significant increase in the pre-tax discount rate. A 1% increase in the post-tax discount rate would lead to a write-back reduction of £54 million. A 1% reduction in the post-tax discount rate would lead to an increased write-back of £64 million.

6. Exceptional items and certain re-measurements

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 write-back/(impairment) (ii)			
					+10%		-10%	
	2022-2026	2021-2025	2027-2036	2026-2035	31 December 2021	31 December 2020	31 December 2021	31 December 2020
	£/MWh	£/MWh	£/MWh	£/MWh	£m	£m	£m	£m
Baseload power	93	48	49	53	319	295	(317)	(293)
							-50% Five-year liquid and blended-period only (1,073)	

(i) Prices are shown in 2020 real terms.

(ii) A 10% change was historically deemed to represent a reasonably possible variation across the entire period covered by the liquid market and comparator curves used in the nuclear impairment test. Given the increases in commodity prices during 2021, a further sensitivity has been included based on a 50% fall in liquid and blend-period commodity prices only.

Note that due to current forecast baseload prices being higher in the near-term, coupled with the requirement for the nuclear fleet depreciation to be calculated on a production/time basis rather than economic value, there is a higher likelihood of impairment being required in 2022 as these items outturn.

Furthermore, there is also uncertainty due to climate change and international governmental intervention to reduce CO2 emissions and the likely impact this will have on both power demand and forecast prices. As a result, a further sensitivity is disclosed below based on forecast prices aligned to Aurora's Net Zero price curve, which assumes governmental policies are put in place to achieve the temperature and net zero goals by 2050. This sensitivity retains the prices for the liquid period (4 years) but replaces the longer term thereafter with Aurora's forecast prices for Net Zero.

	Ten-year long-term average price (i)	Change in post-tax write-back (ii)
	2027-2036	£m
Baseload power (£/MWh)	64	119

(i) Prices shown in 2020 real terms.

(ii) Change would lead to a further write-back in the carrying value.

7. 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 from the discounting of decommissioning provisions and pensions. An element of financing cost is capitalised on qualifying projects.

Investment income predominantly includes interest received from short-term investments in money market funds, bank deposits and government bonds.

Continuing operations

Year ended 31 December	2021			2020		
	Financing costs £m	Investment income £m	Total £m	Financing costs £m	Investment income £m	Total £m
Cost of servicing net debt:						
Interest income	-	5	5	-	7	7
Interest cost on bonds, bank loans and overdrafts	(191)	-	(191)	(206)	-	(206)
Interest cost on lease liabilities	(6)	-	(6)	(10)	-	(10)
	(197)	5	(192)	(216)	7	(209)
Net gains on revaluation	-	4	4	-	4	4
Notional interest arising from discounting	(7)	-	(7)	(23)	-	(23)
	(204)	9	(195)	(239)	11	(228)
Capitalised borrowing costs ⁽ⁱ⁾	8	-	8	13	-	13
Financing (cost)/income	(196)	9	(187)	(226)	11	(215)

(i) Borrowing costs have been capitalised using an average rate of 4.49% (2020: 4.47%).

8. 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.

Analysis of tax charge

Year ended 31 December	2021			2020		
	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
Continuing operations:						
Current tax						
UK corporation tax	(7)	(80)	(87)	(12)	7	(5)
UK petroleum revenue tax	24	–	24	71	–	71
Non-UK tax	(386)	(21)	(407)	47	(7)	40
Adjustments in respect of prior years – UK	(1)	18	17	42	8	50
Adjustments in respect of prior years – non-UK	6	–	6	7	–	7
Total current tax	(364)	(83)	(447)	155	8	163
Deferred tax						
Origination and reversal of temporary differences – UK	(63)	520	457	(38)	102	64
UK petroleum revenue tax	(9)	(129)	(138)	(22)	1	(21)
Origination and reversal of temporary differences – non-UK	(63)	(45)	(108)	(38)	77	39
Change in UK tax rate	6	(9)	(3)	(28)	8	(20)
Adjustments in respect of prior years – UK	36	(18)	18	(52)	(9)	(61)
Adjustments in respect of prior years – non-UK	3	–	3	(19)	–	(19)
Total deferred tax	(90)	319	229	(197)	179	(18)
Total taxation on profit/(loss) from continuing operations⁽ⁱ⁾	(454)	236	(218)	(42)	187	145
Discontinued operations:						
Current tax – non-UK	–	11	11	(23)	6	(17)
Deferred tax – origination and reversal of temporary differences – non-UK	–	–	–	(10)	(66)	(76)
Total taxation on profit from discontinued operations	–	11	11	(33)	(60)	(93)
Total taxation on profit/(loss) for the year	(454)	247	(207)	(75)	127	52

(i) 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% (2020: 19%). Upstream gas and oil production activities are taxed at a rate of 30% (2020: 30%) plus a supplementary charge of 10% (2020: 10%) to give an overall rate of 40% (2020: 40%). Certain upstream assets in the UK under the petroleum revenue tax (PRT) regime have a current rate of 0% (2020: 0%).

The UK corporation tax rate will increase to 25% with effect from 1 April 2023. At 31 December 2021, the relevant UK deferred tax assets and liabilities included in these consolidated Group Financial Statements were based on the increased rate having regard to their reversal profiles.

Non-UK tax rates

Norwegian upstream profits are taxed at the standard rate of 22% (2020: 22%) plus a special tax of 56% (2020: 56%) resulting in an aggregate tax rate of 78% (2020: 78%).

Taxation in other jurisdictions, where the Group has a substantial presence, is calculated at the rate prevailing in those respective jurisdictions. Jurisdictions and rates include the Republic of Ireland 12.5%, Denmark 22% and the US 21%. 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.

9. Dividends

Dividends represent the return of profits to shareholders and 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.

	2021			2020		
	£m	Pence per share	Date of payment	£m	Pence per share	Date of payment
Prior year final dividend	-	-	-	-	-	-
Interim dividend	-	-	-	-	-	-
	-	-	-	-	-	-

On 2 April 2020 the Directors announced that the Board had taken the decision to cancel the 2019 final dividend payment of 3.5p per share, or £204m, which was due to be paid in June 2020. The Directors did not propose the payment of an interim or final dividend for 2021.

The Group has sufficient distributable reserves to pay dividends to its ultimate shareholders. Distributable reserves are calculated on an individual legal entity basis and the ultimate parent company, Centrica plc, currently has adequate levels of realised profits within its retained earnings to support dividend payments. At 31 December 2021, Centrica plc's company-only distributable reserves were c.£2.5 billion (2020: c.£1.5 billion). On an annual basis, the distributable reserve levels of the Group's subsidiary undertakings are reviewed and dividends paid up to Centrica plc as appropriate to replenish its reserves.

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 profit attributable to equity holders of the Company for the year of £1,210 million (2020: £41 million) by the weighted average number of ordinary shares in issue during the year of 5,836 million (2020: 5,825 million). The number of shares excludes 35 million ordinary shares (2020: 11 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 69 million (2020: 91 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.

Continuing and discontinued operations

Year ended 31 December	2021		2020	
	£m	Pence per ordinary share	£m	Pence per ordinary share
Earnings – basic	1,210	20.7	41	0.7
Net exceptional items after taxation (notes 2 and 6) ⁽ⁱ⁾	(1,521)	(26.0)	1,220	21.0
Certain re-measurement gains after taxation (notes 2 and 6) ⁽ⁱ⁾	548	9.4	(883)	(15.2)
Earnings – adjusted basic	237	4.1	378	6.5
Earnings – diluted	1,210	20.5	41	0.7
Earnings – adjusted diluted	237	4.0	378	6.4

Continuing operations

Year ended 31 December	2021		2020	
	£m	Pence per ordinary share	£m	Pence per ordinary share
Earnings – basic	586	10.0	(274)	(4.7)
Net exceptional items after taxation (notes 2 and 6) ⁽ⁱ⁾	(897)	(15.3)	1,184	20.3
Certain re-measurement gains after taxation (notes 2 and 6) ⁽ⁱ⁾	548	9.4	(745)	(12.8)
Earnings – adjusted basic	237	4.1	165	2.8
Earnings – diluted ⁽ⁱⁱ⁾	586	9.9	(274)	(4.7)
Earnings – adjusted diluted	237	4.0	165	2.8

Discontinued operations

Year ended 31 December	2021		2020	
	£m	Pence per ordinary share	£m	Pence per ordinary share
Earnings – basic	624	10.7	315	5.4
Net exceptional items after taxation (notes 2 and 6)	(624)	(10.7)	36	0.7
Certain re-measurement gains after taxation (notes 2 and 6)	–	–	(138)	(2.4)
Earnings – adjusted basic	–	–	213	3.7
Earnings – diluted	624	10.6	315	5.3
Earnings – adjusted diluted	–	–	213	3.6

(i) Net exceptional items after taxation and certain re-measurement (gains)/losses after taxation are adjusted to reflect the share attributable to non-controlling interests.

(ii) Potential ordinary shares are not treated as dilutive when they would decrease a loss per share.

11. 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	2021 £m	2020 (restated) (i) £m
Net debt	(680)	2,998
Shareholders' equity	2,365	957
Capital	1,685	3,955

(i) Net debt has been restated to remove the adjustment for collateral posted/(received). See part (b) of this note.

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 since its inception. BGIL's capital management policy and plan are 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.

11. Sources of finance

(b) Net debt summary

Net debt predominantly includes capital market borrowings offset by cash, 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 (vi) £m
				Cash and cash equivalents, net of bank overdrafts (i) (ii) £m	Current and non-current securities (iii) £m	Sub-lease assets £m	
1 January 2020	(4,795)	234	(4,561)	794	255	5	(3,507)
Cash inflow from settlement and purchase of securities	–	–	–	121	(121)	–	–
Cash outflow for payment of capital element of leases	184	–	184	(184)	–	–	–
Cash outflow for repayment of borrowings	63	–	63	(63)	–	–	–
Remaining cash inflow and movement in cash posted/received under margin and collateral agreements	–	–	–	963	–	(3)	960
Revaluation	(79)	132	53	–	5	–	58
Financing interest paid	213	(20)	193	(204)	–	–	(11)
Increase in interest payable and amortisation of borrowings	(218)	–	(218)	–	–	–	(218)
New lease agreements and re-measurement of existing lease liabilities	(239)	–	(239)	–	–	–	(239)
Exchange adjustments	(6)	–	(6)	(34)	(1)	–	(41)
Group net debt at 31 December 2020	(4,877)	346	(4,531)	1,393	138	2	(2,998)
Disposal of business ^(iv)	36	–	36	(132)	(4)	–	(100)
Cash outflow from settlement and purchase of securities	–	–	–	(3)	3	–	–
Cash outflow for payment of capital element of leases	162	–	162	(162)	–	–	–
Cash outflow for repayment of borrowings ^(v)	650	(106)	544	(544)	–	–	–
Remaining cash inflow and movement in cash posted/received under margin and collateral agreements	–	–	–	4,010	–	–	4,010
Revaluation	122	(133)	(11)	–	19	–	8
Financing interest paid	206	(14)	192	(233)	–	–	(41)
Increase in interest payable and amortisation of borrowings	(195)	–	(195)	–	–	–	(195)
New lease agreements and re-measurement of existing lease liabilities	(28)	–	(28)	–	–	–	(28)
Exchange adjustments	25	–	25	(1)	–	–	24
Group net debt at 31 December 2021	(3,899)	93	(3,806)	4,328	156	2	680
Less assets and liabilities held for sale	6	–	6	(18)	(21)	–	(33)
Net debt excluding disposal groups held for sale at 31 December 2021	(3,893)	93	(3,800)	4,310	135	2	647

(i) Cash and cash equivalents includes £435 million (2020: £147 million) of restricted cash, of which £250 million relates to cash on escrow in favour of the UK defined benefit pension schemes. This includes cash totaling £31 million (2020: £11 million) within the Spirit Energy business that is not restricted by regulation but is managed by Spirit Energy's own treasury department.

(ii) Cash and cash equivalents are net of £750 million bank overdrafts (2020: £534 million).

(iii) Securities balances include £82 million (2020: £84 million) debt instruments and £53 million (2020: £50 million) equity instruments, all measured at fair value.

(iv) Disposal of business relates to the net debt items disposed of with the sale of Direct Energy in January 2021.

(v) Bond repayment comprises £650 million repayment of a 3% Euro bond which the Group had the right to repay at par on 10 April 2021 net of £106 million foreign exchange gain on a Euro bond derivative.

(vi) Net debt has been restated to remove the adjustment for collateral posted/(received), in order to better align to external net debt definitions. The impact of the change is set out on the following page.

11. 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. The below table highlights the net cash collateral posted by item on group balance sheet at 31 December 2020. Net debt was restated for these items.

31 December	2020 £m
Collateral (received)/posted included within:	
Trade and other payables	(68)
Trade and other receivables	56
Net derivative liabilities	86
Continuing operations net collateral posted	74
Discontinued operations net collateral posted	155
Group collateral posted	229
Disclosed net debt at 31 December 2020	2,769
Remove collateral posted	229
Restated net debt at 31 December 2020	2,998

(c) Borrowings, leases and interest accruals summary

31 December	Coupon rate %	Principal m	2021			2020		
			Current £m	Non-current £m	Total £m	Current £m	Non-current £m	Total £m
Bank overdrafts			(750)	–	(750)	(534)	–	(534)
Bank loans (> 5 year maturity)			–	(137)	(137)	–	(144)	(144)
Bonds (by maturity date):								
22 February 2022	3.680	HK\$450	(43)	–	(43)	–	(42)	(42)
10 March 2022 ⁽ⁱ⁾	6.375	£246	(241)	–	(241)	–	(253)	(253)
16 October 2023 ⁽ⁱⁱ⁾	4.000	US\$302	–	(228)	(228)	–	(233)	(233)
4 September 2026 ⁽ⁱⁱ⁾	6.400	£52	–	(55)	(55)	–	(59)	(59)
16 April 2027	5.900	US\$70	–	(51)	(51)	–	(51)	(51)
13 March 2029 ⁽ⁱⁱ⁾	4.375	£552	–	(559)	(559)	–	(604)	(604)
5 January 2032 ⁽ⁱⁱ⁾	Zero	€50	–	(63)	(63)	–	(65)	(65)
19 September 2033 ⁽ⁱⁱ⁾	7.000	£770	–	(788)	(788)	–	(823)	(823)
16 October 2043	5.375	US\$367	–	(267)	(267)	–	(264)	(264)
12 September 2044	4.250	£550	–	(538)	(538)	–	(538)	(538)
25 September 2045	5.250	US\$50	–	(36)	(36)	–	(36)	(36)
10 April 2075 ⁽ⁱⁱⁱ⁾	5.250	£450	–	(455)	(455)	–	(472)	(472)
10 April 2076 ^(iv)	3.000	€750	–	–	–	–	(671)	(671)
			(284)	(3,040)	(3,324)	–	(4,111)	(4,111)
Obligations under lease arrangements			(102)	(262)	(364)	(171)	(334)	(505)
Interest accruals			(68)	–	(68)	(82)	–	(82)
			(1,204)	(3,439)	(4,643)	(787)	(4,589)	(5,376)

(i) Bonds or portions of bonds maturing in 2022, 2023, 2026, 2029, 2033 and 2075 have been designated in a fair value hedge relationship.

(ii) €50 million of zero coupon notes have an accrual yield of 4.2%, which will result in a €114 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 had the right to repay at par on 10 April 2021 and that right was exercised.

12. 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%. Share of results of joint ventures and associates represents the Group's share of the results of these businesses.

(a) 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 2021 principally arises from its interest in Nuclear – Lake Acquisitions Limited, an associate, reported in the Upstream segment.

Year ended 31 December	2021			2020		
	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	334	–	334	557	–	557
Expenses before exceptional items and re-measurement of certain contracts	(459)	–	(459)	(501)	–	(501)
Exceptional items and re-measurement of certain contracts	–	–	–	–	(2)	(2)
Operating (loss)/profit	(125)	–	(125)	56	(2)	54
Financing income/(costs)	1	–	1	(8)	–	(8)
Taxation on (loss)/profit	21	–	21	(25)	–	(25)
Share of post-taxation results of joint ventures and associates	(103)	–	(103)	23	(2)	21

(b) Interests in joint ventures and associates

	2021	2020
	Investments in joint ventures and associates £m	Investments in joint ventures and associates £m
1 January	843	1,306
Additions	–	10
Write-backs/(Impairment) ⁽ⁱ⁾	747	(483)
Share of (loss)/profit for the year	(103)	21
Share of other comprehensive income	152	58
Dividends ⁽ⁱⁱ⁾	(2)	(72)
Disposals ⁽ⁱⁱⁱ⁾	(2)	–
Other movements	(7)	3
31 December	1,628	843

(i) The £747 million in 2021 relates to nuclear investment impairment write-back (2020: nuclear investment impairment £(481) million). See note 6 for further details.

(ii) In 2020, a non-cash £10 million tax credit was received in lieu of payment of a dividend.

(iii) In 2021, the group sold its 50% equity stake in Barrow Shipping Limited.

(c) Share of joint ventures' and associates' assets and liabilities

31 December	2021			2020
	Associates Nuclear £m	Other £m	Total £m	Total £m
Share of non-current assets	5,109	4	5,113	4,457
Share of current assets	705	1	706	755
	5,814	5	5,819	5,212
Share of current liabilities	(358)	(1)	(359)	(205)
Share of non-current liabilities	(3,139)	(1)	(3,140)	(2,720)
	(3,497)	(2)	(3,499)	(2,925)
Cumulative impairment	(692)	–	(692)	(1,444)
Interests in joint ventures and associates	1,625	3	1,628	843
Net cash included in share of net assets	50	–	50	105

13. Derivative financial instruments

The Group generally uses derivative financial instruments to manage the risk arising from fluctuations in the value of certain assets or liabilities associated with treasury management and energy sales and procurement, and for proprietary energy trading purposes. The Group also used derivatives to hedge the exchange risk arising on the net assets of its US dollar Direct Energy subsidiaries which were sold in January 2021. Derivatives are held at fair value.

For accounting purposes, derivatives are either classified as held for trading, in which case changes in their fair value are recognised in the Group Income Statement, or they are designated in hedging relationships. Where derivatives are in hedging relationships, the treatment of changes in their fair value depends on the nature of that relationship, and whether it represents a fair value hedge, a cash flow hedge, or a net investment hedge. The table below gives a high-level summary of the Group's accounting for its derivative contracts.

Purpose	Classification	Accounting treatment
Proprietary energy trading and treasury management.	Held for trading and fair value hedges.	Changes in fair value recognised in the Group's business performance results for the year.
Treasury management and hedging of exchange risk on net assets of US dollar Direct Energy subsidiaries.	Cash flow and net investment hedges.	Effective portion of hedge initially recognised in the Group Statement of Other Comprehensive Income. Gains and losses are recycled to the Group Income Statement when the hedged item impacts profit or loss. Ineffective portions of the hedge are recognised immediately in the Group's business performance results for the year.
Energy procurement and optimisation.	Held for trading.	Changes in fair value recognised in the Group's exceptional items and certain re-measurements results for the year.

The carrying values of derivative financial instruments by product type for accounting purposes are as follows:

31 December	2021		2020	
	Assets £m	Liabilities £m	Assets £m	Liabilities £m
Derivative financial instruments – held for trading under IFRS 9:				
Energy derivatives – for procurement/optimisation	3,611	(2,203)	585	(445)
Energy derivatives – for proprietary trading	3,775	(3,749)	726	(667)
Interest rate derivatives	4	–	3	–
Foreign exchange derivatives	60	(50)	49	(46)
Derivative financial instruments in hedge accounting relationships:				
Interest rate derivatives	67	–	182	(1)
Foreign exchange derivatives	33	(7)	204	(9)
Total derivative financial instruments	7,550	(6,009)	1,749	(1,168)
Included within:				
Derivative financial instruments – current	6,545	(4,929)	1,224	(747)
Derivative financial instruments – non-current	1,005	(1,080)	366	(181)
Assets and liabilities held for sale	–	–	159	(240)

Included in derivative liabilities above is £nil (2020: £77 million) relating to virtual gas storage arrangements. These contracts give the parties rights to put and call gas volumes over their term, economically mirroring physical storage arrangements. Optimisation of virtual storage contracts under related commodity sale and purchase arrangements with the same parties has given rise to net operating cash inflows of £nil during 2021 (2020: £40 million). These cash flows arise from the normal commodity trading activities of the Group, and are therefore operating in nature, but are separately disclosed because the timing of cash flows under the arrangements can give rise to a cash flow benefit akin to a financing arrangement.

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	2021 £m	2020 £m
Short-term forward market purchases and sales of gas and electricity:		
UK and Europe	69	(26)
North America ⁽ⁱ⁾	–	(81)
Other derivative contracts including structured gas sale and purchase arrangements	1,365	306
Net total	1,434	199

(i) Derivatives held by the Direct Energy business were classified as assets and liabilities held for sale at 31 December 2020.

14. 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 2021	Total membership as at 31 December 2021
Centrica Engineers Pension Scheme	Defined benefit final salary pension	Closed to new members in 2006	UK	1,756	8,465
Centrica Pension Plan	Defined benefit career average pension	Open to service engineers only	UK	2,791	6,477
Centrica Pension Scheme	Defined benefit final salary pension	Closed to new members in 2003	UK	1,566	8,491
Bord Gáis Energy Company Defined Benefit Pension Scheme	Defined benefit final salary pension	Closed to new members in 2003	UK	1	10,278
	Defined benefit career average pension	Closed to new members in 2008	UK	795	4,220
	Defined contribution pension	Open to new members	UK	9,718	18,935
Bord Gáis Energy Company Defined Contribution Pension Plan	Defined benefit final salary pension	Closed to new members in 2014	Republic of Ireland	99	171
Bord Gáis Energy Company Defined Contribution Pension Plan	Defined contribution pension	Open to new members	Republic of Ireland	230	357

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 agreed and finalised with the Pension Trustees were carried out at the following dates: the Registered Pension Schemes at 31 March 2018 and the Bord Gáis Energy Company Defined Benefit Pension Scheme at 1 January 2020. For the Registered Pension Schemes, a full actuarial valuation as at 31 March 2021 is currently being undertaken. These valuations (including insights from the current in-progress valuation) have been updated to 31 December 2021 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.

14. 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 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 significantly reduced their risk tolerance in 2019, increasing inflation and interest rate hedges from one third to two thirds, and have further de-risked since then to around an 85% hedge level at the 2021 year-end. 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.

Interest rate

A decrease in bond interest rates 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. This risk is reduced via the hedging referred to in the Asset volatility section.

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 2021.

Total liabilities of the Registered Pension Schemes	2021
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

14. Post-retirement benefits

(c) Accounting assumptions

The accounting assumptions for the Registered Pension Schemes are given below:

Major assumptions used for the actuarial valuation 31 December	2021 %	2020 %
Rate of increase in employee earnings:		
Subject to 2% cap	1.8	1.6
Other not subject to cap	2.6	2.2
Rate of increase in pensions in payment	3.1	2.8
Rate of increase in deferred pensions:		
In line with CPI capped at 2.5%	2.4	2.0
In line with RPI	3.1	2.8
Discount rate	1.8	1.5

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:

Life expectancy at age 65 for a member 31 December	2021		2020	
	Male Years	Female Years	Male Years	Female Years
Currently aged 65	22.5	24.0	22.6	24.0
Currently aged 45	23.8	25.1	24.0	25.2

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:

Impact of changing material assumptions 31 December	2021		2020	
	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%	+/-4	0.25%	+/-4
Discount rate	0.25%	-/+5	0.25%	-/+6
Inflation assumption	0.25%	+/-5	0.25%	+/-5
Longevity assumption	1 year	+/-4	1 year	+/-4

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	2021 £m	2020 £m
Fair value of plan assets	10,666	10,070
Present value of defined benefit obligation	(10,666)	(10,671)
Net liability recognised in the Group Balance Sheet	–	(601)
Pension liability presented in the Group Balance Sheet as:		
Retirement benefit assets	231	–
Retirement benefit liabilities	(231)	(601)

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.

14. Post-retirement benefits

(e) Movements in the year

	2021		2020	
	Pension liabilities £m	Pension assets £m	Pension liabilities £m	Pension assets £m
1 January	(10,671)	10,070	(9,162)	8,999
Items included in the Group Income Statement:				
Current service cost	(85)	–	(79)	–
Contributions by employer in respect of employee salary sacrifice arrangements ⁽ⁱ⁾	(20)	–	(28)	–
Total current service cost	(105)	–	(107)	–
Past service credit	1	–	–	–
Interest (expense)/income	(155)	150	(197)	197
Termination benefit/(cost)	52	–	(120)	–
Items included in the Group Statement of Comprehensive Income:				
Returns on plan assets, excluding interest income	–	301	–	936
Actuarial (loss)/gain from changes to demographic assumptions	(12)	–	55	–
Actuarial gain/(loss) from changes in financial assumptions	123	–	(1,434)	–
Actuarial loss from experience adjustments	(194)	–	(58)	–
Items included in the Group Cash Flow Statement:				
Employer contributions	–	420	–	241
Contributions by employer in respect of employee salary sacrifice arrangements	–	20	–	28
Other movements:				
Benefits paid from schemes	297	(297)	286	(286)
Other	(2)	2	(3)	3
Transferred to held for sale	–	–	69	(48)
31 December	(10,666)	10,666	(10,671)	10,070

(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.

In addition to current service cost on the Group's defined benefit pension schemes, the Group also charged £61 million (2020: £64 million) to operating profit in respect of defined contribution pension schemes. This included contributions of £15 million (2020: £20 million) paid via a salary sacrifice arrangement.

14. Post-retirement benefits

(f) Pension scheme assets

The market values of plan assets were:

31 December	2021			2020		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	20	462	482	19	396	415
Corporate bonds	2,393	31	2,424	2,649	–	2,649
High-yield debt	2,720	1,197	3,917	2,069	1,286	3,355
Liability matching assets	1,963	1,356	3,319	2,192	1,069	3,261
Property	–	439	439	–	352	352
Cash pending investment	85	–	85	38	–	38
	7,181	3,485	10,666	6,967	3,103	10,070

Unquoted private equity and debt funds are valued at fair value as calculated by the investment manager at the latest valuation date in accordance with generally accepted guidelines, adjusted for cash flow in the intervening period. Investment properties are valued in accordance with guidelines by independent valuers. These valuations are reviewed annually as part of the CCCIF audit. Included within equities are £nil of ordinary shares of Centrica plc (2020: £nil) via pooled funds that include a benchmark allocation to UK equities. Included within corporate bonds are £nil (2020: £nil) of bonds issued by Centrica plc, albeit minor exposure may be 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. The corporate bond, high-yield debt and liability matching asset categories headings above have segregated portfolio mandates which include the cash, cash funds and derivatives associated with the mandates.

Included within the Group Balance Sheet within non-current securities are £111 million (2020: £108 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, £66 million (2020: £66 million) relate to this scheme.

(g) Pension scheme contributions

The Group estimates that it will pay £59 million of ordinary employer contributions during 2022 for its defined benefit schemes, at an average rate of 23% of pensionable pay, together with £22 million of contributions paid via a salary sacrifice arrangement. At 31 March 2021 (the date of the current in-progress actuarial valuations) the weighted average duration of the liabilities of the Registered Pension Schemes was 22 years.

For the Registered Pension Schemes the last actuarial valuation agreed with the Pension Trustees was as at 31 March 2018. The technical provisions deficit (funding basis) at that time was £1,402 million. The Group committed to additional annual cash contributions to fund this pension deficit. The overall deficit contributions, including the previously disclosed asset-backed contribution arrangements, totalled £235 million in 2019, £175 million in 2020 and 2021 and will amount to £175 million per annum from 2022 to 2025, with a balancing payment of £93 million in 2026. As part of this agreement, a deferral arrangement was also agreed for pension strain liabilities resulting from redundancies made between 1 July 2019 and 30 June 2021, up to a limit of £240 million. A security package over the Group's equity shareholding in the Direct Energy business, enforceable in the unlikely event the Group was unable to meet its obligations, was also provided and amounted to £1,235 million.

In January 2021, as part of the Direct Energy disposal, this security package was released by the Pension Trustees. In exchange, the Group provided replacement security of £745 million of letters of credit and £250 million cash in escrow. The pension strain liability deferral arrangement was cancelled, resulting in payments to the Schemes of £193 million during 2021, with further amounts expected in the future as other redundancies are finalised.

On a pure roll-forward basis, from 31 March 2018, using the same methodology and consequent assumptions, the technical provisions deficit (funding basis) would be c.£1.3 billion on 31 December 2021. Note that the current, in process triennial review has an effective date of 31 March 2021, and the valuation methodology and assumptions used for that assessment may differ from those previously used.

15. Acquisitions, disposals and disposal groups classified as held for sale

This section details acquisitions and disposals made by the Group.

(a) Business combinations and asset acquisitions

During the year, the Group have been appointed by Ofgem as the Supplier of Last Resort for eight energy companies who have ceased trading. These have not been accounted for as business combinations or asset acquisitions as the incremental costs associated with supplying the affected customers will be recoverable through the established Last Resort Supplier Payment (LRSP) claim mechanism under Ofgem supplier licence conditions. A customer intangible asset of £10 million has been recognised in 2021 in respect of certain customer credit balances that the Group did not include in their LRSP claims.

There have been no material acquisitions during the period. No material measurement period adjustments have been made to acquisitions completed in prior periods.

(b) Disposals and discontinued operations

On 24 July 2020, the Group announced that it had agreed to sell its North American energy supply, services and trading business, Direct Energy, to NRG Energy Inc, for \$3.6 billion in cash on a debt free, cash free basis. The transaction received all necessary approvals prior to 31 December 2020 and completed on 5 January 2021. The working capital adjustment has been finalised and led to a further receipt of \$22 million in December 2021.

Details of the assets and liabilities of the disposal group at 5 January 2021 are shown below.

	Direct Energy £m
Non-current assets	
Property, plant and equipment	82
Other intangible assets	228
Goodwill	1,490
Deferred tax assets	342
Derivative financial instruments	93
Other non-current financial assets	14
	2,249
Current assets	
Trade and other receivables, and contract-related assets	1,543
Inventories	79
Derivative financial instruments	67
Current tax assets	79
Cash and cash equivalents	132
	1,900
Assets of disposal groups classified as held for sale	4,149
Current liabilities	
Derivative financial instruments	(181)
Trade and other payables, and contract-related liabilities	(1,236)
Current tax liabilities	(20)
Provisions for other liabilities and charges	(21)
Lease liabilities	(12)
	(1,470)
Non-current liabilities	
Deferred tax liabilities	(404)
Derivative financial instruments	(59)
Provisions for other liabilities and charges	(12)
Retirement benefit obligations	(21)
Lease liabilities	(24)
	(520)
Liabilities of disposal groups classified as held for sale	(1,990)
Net assets of disposal groups classified as held for sale	2,159
Consideration received (net of transaction costs of £31 million) ⁽ⁱ⁾	2,703
Recycling of foreign currency translation and net investment hedge reserves on disposal	69
Gain on disposal before taxation	613

(i) The net cash inflow from the disposal of Direct Energy of £2,588 million reported in the Group Cash Flow Statement is stated net of cash disposed of £132 million and hedging receipts net of tax £17 million

15. Acquisitions, disposals and disposal groups classified as held for sale

The results of the Direct Energy business for 2021 and 2020 are as follows:

Year ended 31 December	2021			2020		
	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
Revenue	-	-	-	9,483	(912)	8,571
Cost of sales	-	-	-	(8,621)	1,495	(7,126)
Re-measurement and settlement of energy contracts	-	-	-	-	(399)	(399)
Gross profit	-	-	-	862	184	1,046
Operating costs	-	613	613	(610)	(22)	(632)
Operating profit	-	613	613	252	162	414
Finance costs	-	-	-	(6)	-	(6)
Profit before taxation	-	613	613	246	162	408
Taxation on profit/(loss) ⁽ⁱ⁾	-	11	11	(33)	(60)	(93)
Profit from discontinued operations, net of tax	-	624	624	213	102	315

(i) During 2020 a historic Canadian exploration and production deferred tax asset was written off. The associated charge of £20 million is included as an exceptional item within discontinued operations. See note 6 for further details.

Because the disposal group represents a separate major line of business and geographical operations, its results have been presented as discontinued operations in the Group Income Statement, Group Statement of Other Comprehensive Income and Group Cash Flow Statement. Set out below are the cash flows arising from discontinued operations, which have been presented net within the Group Cash Flow Statement.

Year ended 31 December	2021 £m	2020 £m
Group operating profit including share of results of joint ventures and associates	-	414
Add back/(deduct):		
Depreciation, amortisation, write-downs, impairments and write-backs	-	57
Decrease in provisions	-	(4)
Employee share scheme costs	-	18
Unrealised gains arising from re-measurement of energy contracts	-	(100)
Exceptional charges reflected directly in operating profit	-	20
Operating cash flows before movements in working capital relating to business performance and payments relating to taxes and exceptional charges	-	405
Decrease in inventories	-	17
Decrease in trade and other receivables and contract-related assets relating to business performance	-	139
Decrease in trade and other payables and contract-related liabilities relating to business performance	-	(81)
Operating cash flows before payments relating to taxes and exceptional charges	-	480
Taxes paid	-	(25)
Payments relating to exceptional charges in operating costs	-	(12)
Net cash flow from operating activities	-	443
Purchase of property, plant and equipment and intangible assets	-	(22)
Sale of businesses	2,588	-
Net cash flow from investing activities	2,588	(22)
Financing interest paid	-	(4)
Repayment of borrowings and capital element of leases	-	(12)
Net cash flow from financing activities	-	(16)
Net increase in cash and cash equivalents	2,588	405

Continuing operations disposals

On 31 July 2021 the Group sold its Peterborough site, which comprises freehold land, the 245MW Peterborough open cycle gas turbine (OCGT) and the 49MW reciprocating gas engine to Whitetower Holdings UK Limited, an affiliate of Rockland Capital, LP. The consideration amounted to £21 million and resulted in a £nil profit on disposal.

The Spirit Energy disposal of the Norway portfolio has resulted in an upfront payment of \$50 million (£35 million). All other disposals undertaken by the Group were immaterial, both individually and in aggregate. The overall net cash inflow was £70 million, including the above.

15. Acquisitions, disposals and disposal groups classified as held for sale

(c) Assets and liabilities of disposal groups held for sale

On 8 December 2021 the Group announced that it had agreed to sell Spirit Energy's entire Norwegian portfolio excluding the Statfjord fields to Sval Energi for a headline consideration of \$1,026 million (£758 million), and the Statfjord fields to Equinor for headline consideration of \$50 million (£37 million). Further, deferred commodity price linked contingent payment will be payable post completion currently valued at £47 million.

The sales have a commercial effective date of 1 January 2021, and the consideration payable at closing will be reduced for the net cash flows generated by the sale business and interests since 1 January 2021. At 31 December 2021 net consideration receivable (including costs to dispose) has reduced to £574 million from Sval Energi, with a net consideration payable to Equinor of £(17) million. Further, upon completion a tax indemnity will be provided to Sval Energi, currently valued at £(116) million. Distribution of the net consideration payable and net cash flows generated will be pro-rata to the ownership share, with 31% attributable to the non-controlling interests. Completion is expected in the second quarter of 2022.

In applying IFRS 5: 'Non-current assets held for sale and discontinued operations', the Group has judged that there are two separate disposal groups being the Statfjord fields and the remainder of the Norwegian portfolio. The assets and liabilities comprising the disposal groups are to be classified as held for sale as at 8 December 2021. This is on the basis that at that point, the disposal groups were available for immediate sale, subject only to terms that are customary for sales of such assets, and the sale was highly probable.

The disposal groups do not represent a separate major line of business or geographical operations and hence the Group has concluded that they do not constitute discontinued operations.

Details of the assets and liabilities of the disposal groups at 31 December 2021 are shown below.

	Statfjord £m	Norway portfolio excluding Statfjord £m	Total £m
Non-current assets			
Property, plant and equipment	254	900	1,154
Other intangible assets	–	63	63
Goodwill ⁽ⁱ⁾	19	191	210
Deferred tax assets ⁽ⁱⁱ⁾	58	–	58
Other non-current financial assets	–	8	8
	331	1,162	1,493
Current assets			
Trade and other receivables, and contract-related assets	43	64	107
Inventories	18	15	33
Cash and cash equivalents	–	18	18
	61	97	158
Assets of disposal groups classified as held for sale	392	1,259	1,651
Current liabilities			
Trade and other payables, and contract-related liabilities	(45)	(94)	(139)
Current tax liabilities ⁽ⁱⁱⁱ⁾	–	(116)	(116)
Provisions for other liabilities and charges	(3)	(1)	(4)
Lease liabilities	–	(3)	(3)
	(48)	(214)	(262)
Non-current liabilities			
Deferred tax liabilities ⁽ⁱ⁾	146	(348)	(202)
Provisions for other liabilities and charges	(522)	(236)	(758)
Lease liabilities	–	(3)	(3)
	(376)	(587)	(963)
Liabilities of disposal groups classified as held for sale	(424)	(801)	(1,225)
Net (liabilities)/assets of disposal groups classified as held for sale	(32)	458	426

(i) The proposed divestment of the entire Norwegian portfolio, and attributing exploration and production goodwill of £408 million, has resulted in an impairment of £198 million, before transfer of the remaining balance of £210 million to assets of disposal groups classified as held for sale.

(ii) Deferred tax assets of £58 million represents tax attributable to Statfjord UK, part of a UK tax group. Deferred tax liabilities are categorised between Statfjord Norway, and the portfolio excluding Statfjord purely for presentational purposes. The net deferred tax liability being transferred to held for sale is £202 million.

(iii) Spirit Energy Norway is providing a tax indemnity, the potential liabilities under which Centrica has valued at £116 million, to be recognised upon completion as a provision for other liabilities and charges.

Included within the Group's foreign currency translation reserve is £270 million loss in respect of the disposal groups. These amounts have previously been recognised in the Group Statement of Comprehensive Income and will be recycled to the Group Income Statement on disposal.

Additionally, within the Other segment a minority investment made by the former Centrica Innovations business unit in Drivz (an electric vehicle charging software provider), previously reflected in Securities and accounted for as fair value through profit and loss, is subject to a signed

disposal agreement at the year-end. As a result, the fair value of the investment has been included in assets held for sale, amounting to £21 million of assets and £3 million of associated tax liabilities.

16. 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	2021		2020	
	Current £m	Non-current £m	Current £m	Non-current £m
Financial assets:				
Trade receivables	1,546	–	1,379	–
Unbilled downstream energy income	726	–	532	–
Trading and energy procurement accrued income ⁽ⁱ⁾	2,546	–	731	–
Other accrued energy income	175	–	60	–
Other accrued income	108	–	114	–
Cash collateral posted	888	–	56	–
Other receivables (including loans and contract assets) ⁽ⁱⁱ⁾	333	135	219	31
	6,322	135	3,091	31
Less: provision for credit losses	(633)	–	(591)	–
	5,689	135	2,500	31
Non-financial assets: prepayments, other receivables and costs to obtain or fulfill a contract with a customer	192	98	301	114
	5,881	233	2,801	145

(i) Trading and energy procurement counterparty receivables are typically with customers with external, published credit ratings. Such receivables have typically much lower credit risk than downstream counterparties and expected credit losses are not significant.

(ii) Other receivables include £234 million (2020: £nil) of SoLR claims, see note 3(a) for further details.

The amounts above include gross amounts receivable arising from the Group's IFRS 15 contracts with customers of £1,419 million (2020: £1,302 million). Additionally, accrued income of £797 million (2020: £624 million) arising under IFRS 15 contracts is included.

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	2021		2020	
	Current £m	Non-current £m	Current £m	Non-current £m
Financial assets by class:				
Residential customers	1,664	110	1,249	–
Business customers	1,019	21	930	25
Treasury, trading and energy procurement counterparties	3,639	4	912	6
	6,322	135	3,091	31
Less: provision for credit losses	(633)	–	(591)	–
	5,689	135	2,500	31

16. Trade and other receivables, and contract-related assets

Credit loss charge for trade and other receivables

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:

	2021				2020 (v)			
	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	(400)	(187)	(4)	(591)	(346)	(165)	(4)	(515)
Increase in impairment of trade receivables (predominantly related to credit impaired trade receivables) ^{(i) (ii) (iii)}	(84)	(39)	–	(123)	(132)	(78)	–	(210)
Receivables written off ^(iv)	58	19	4	81	78	56	–	134
31 December	(426)	(207)	–	(633)	(400)	(187)	(4)	(591)

(i) Includes £107 million (2020: £182 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 and contract assets.

(iii) Excludes recovery of previously written-off receivables of £7 million (2020: £15 million). Due to the large number of individual receivables and the matrix approach employed, any reduction in provision is reflected in a reduced charge for the relevant period, rather than in separately identifiable reversals of previous provisions.

(iv) Materially all write-offs relate to trade receivables where enforcement activity is ongoing.

(v) 2020 has been presented excluding discontinued operations.

Year ended 31 December	2021 £m	2020 (i) £m
Increase in impairment provision for trade receivables (per above)	(123)	(210)
Less recovery of previously written-off receivables	7	15
Credit losses on financial assets (per Group Income Statement)	(116)	(195)

(i) 2020 has been presented excluding discontinued operations.

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.

16. Trade and other receivables, and contract-related assets

Credit losses and provisions for Trade and other receivables

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 sixty 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 thirty days from receipt.

The table below shows credit impaired balances in gross receivables (those that are past due) and those that are not yet due and therefore not considered to be credit impaired.

Gross trade and other receivables 31 December	2021 £m	2020 (i) £m
Balances that are not past due	5,032	2,029
Balances that are past due	1,290	1,062
	6,322	3,091

(i) 2020 has been presented excluding discontinued operations.

The IFRS 9 impairment model is applicable to the Group's financial assets including trade receivables, contract assets and other financial assets. 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 and contract assets is based on an expected credit loss model that calculates the expected loss applicable to the receivable balance over its lifetime. Expected credit losses on receivables due from treasury, trading and energy procurement counterparties are not significant. For residential and business customers default rates are calculated initially by 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 are 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 thirty days past due.

Concentration of credit risk in Trade and other receivables

Treasury, trading and energy procurement counterparty receivables are typically with customers with external, published credit ratings. Such receivables have typically much lower credit risk than downstream counterparties, and that risk is assessed primarily by reference to the credit ratings rather than to the ageing of the relevant balance.

The Group was appointed as a Supplier of Last Resort to a number of energy suppliers who have ceased to trade. Under Ofgem licence conditions, the Group is entitled to make a Last Resort Supplier Payment claim for incremental costs reasonably incurred to supply affected customers; a total of £234 million has been recognised in other receivables at 31 December 2021. This, together with further costs incurred in the first three months of 2022 will be recovered as part of a two-step claim process. An initial claim, based on expected costs, has been submitted and approved by Ofgem, and will be recovered between April 2022 and April 2023. A second claim, based on actual costs will be submitted in Autumn 2022 and recovered between April 2023 and April 2024. The claims are settled by network operators who have strong credit ratings, and Ofgem have the power under licensing conditions to take enforcement action against default.

The Group's cash collateral balance has increased to £888 million in 2021 (2020: £56 million) as a result of higher commodity prices. The related liability for collateral received has increased by a similar proportion. Collateral counterparties typically have strong credit ratings and accordingly have low credit risk; the Group does not expect credit losses to arise on these balances.

The majority of the Group's credit exposure arises in the British Gas Energy and Centrica Business Solutions segments and relates to residential and business energy customers. The credit risk associated with these customers is assessed as described above, using a combination of the age of the receivable in question, internal ratings based on a customer's payment history, and external data from credit rating agencies. The disclosures below reflect the information that is reported internally for credit risk management purposes in these segments.

16. Trade and other receivables, and contract-related assets

British Gas Energy credit risk

Of the Group total of £1,546 million billed trade receivables, the British Gas Energy reporting segment contributes £1,033 million. British Gas Energy now includes small business customers previously included within Centrica Business Solutions on the basis that their profile closely matches those of residential customers. As described above, credit risk is concentrated in receivables from energy customers who pay in arrears. Gross receivables from British Gas Energy residential customers amount to £601 million (2020: £562 million) and are analysed below.

Trade receivables due from British Gas residential energy customers as at 31 December ⁽ⁱ⁾

Days beyond invoice date (ii)	2021				2020			
	< 30 days £m	30-90 days £m	>90 days £m	Total £m	< 30 days £m	30-90 days £m	>90 days £m	Total £m
Risk profile								
Direct debits ⁽ⁱⁱⁱ⁾								
Gross receivables	55	28	53	136	28	20	34	82
Provision	–	–	(2)	(2)	–	–	(2)	(2)
Net	55	28	51	134	28	20	32	80
Payment on receipt of bill ^(iv)								
Gross receivables	87	22	194	303	76	21	222	319
Provision	(3)	(4)	(102)	(109)	(2)	(3)	(106)	(111)
Net	84	18	92	194	74	18	116	208
Final bills ^(iv)								
Gross receivables	7	8	147	162	11	10	140	161
Provision	(2)	(4)	(122)	(128)	(2)	(5)	(114)	(121)
Net	5	4	25	34	9	5	26	40
Total net British Gas residential energy customers trade receivables	144	50	168	362	111	43	174	328

(i) The receivables information presented in this table relates to downstream customers who pay energy bills using the methods presented. It excludes low residual credit risk amounts, such as balances in the process of recovery through pay-as-you-go energy (PAYGE) arrangements and amounts receivable from PAYGE energy vendors. Gross amounts in the process of recovery through PAYGE arrangements at 31 December 2021 are £201 million (2020: £168 million), against which a provision of £136 million is held (2020: £126 million). The credit risk associated with PAYGE arrangements has improved due to enforcement activity returning to pre-COVID levels.

(ii) This ageing analysis is presented relative to invoicing date and presents receivables according to the oldest invoice outstanding with the customer. There are a range of payment terms extended to residential energy customers. Amounts paid on receipt of a bill (PORB), which are settled using bank transfers, cash or cheques are typically due within fourteen days of invoicing. Direct debit customers typically pay in equal installments over a twelve-month period.

(iii) Receivables settled by direct debit are deemed to present a lower credit risk than PORB amounts. This is reflected in the relative level of provision held for these types of receivables.

(iv) Final bill customers are those who are no longer customers of the Group and have switched energy supplier. These balances are deemed to have the highest credit risk.

During 2021 the British Gas segment has been further refined and separated into two operating segments, British Gas Energy and British Gas Services & Solutions. As a result of this change, small business customers in the UK are now included in British Gas Energy. Gross receivables from British Gas Energy small business customers amount to £232 million (2020: £176 million) and are analysed below.

Trade receivables due from British Gas small business energy customers as at 31 December

Days beyond invoice date (i)	2021				2020			
	< 30 days £m	30-90 days £m	>90 days £m	Total £m	< 30 days £m	30-90 days £m	>90 days £m	Total £m
Risk profile								
Small businesses								
Gross receivables	48	18	166	232	23	12	141	176
Provision	–	(1)	(128)	(129)	–	(1)	(100)	(101)
Total net British Gas small business energy customers trade receivables	48	17	38	103	23	11	41	75

(i) This ageing analysis is presented relative to invoicing date and presents receivables according to the oldest invoice outstanding with the customer. There are a range of payment terms extended to business energy customers. Average credit terms for small business customers are ten working days.

Unbilled downstream energy income at 31 December 2021 includes gross balances of £535 million in respect of British Gas energy customers (2020: £373 million), against which a provision of £21 million is held (2020: £20 million).

16. Trade and other receivables, and contract-related assets

Centrica Business Solutions energy credit risk

Of the Group total of £1,546 million billed trade receivables, the Centrica Business Solutions reporting segment contributes £299 million. As described above, credit risk is concentrated in receivables from business energy customers who pay in arrears. Gross receivables from these customers amount to £251 million (2020: £199 million) and are analysed below.

Trade receivables due from Centrica Business Solutions business energy customers as at 31 December

Days beyond invoice date (i)	2021				2020			
	< 30 days £m	30-90 days £m	>90 days £m	Total £m	< 30 days £m	30-90 days £m	>90 days £m	Total £m
Risk profile								
Commercial and industrial (ii)								
Gross receivables	116	3	47	166	18	35	76	129
Provision	–	–	(18)	(18)	–	–	(27)	(27)
Net	116	3	29	148	18	35	49	102
Medium-sized entities (ME)								
Gross receivables	22	7	56	85	13	7	50	70
Provision	–	–	(36)	(36)	–	–	(32)	(32)
Net	22	7	20	49	13	7	18	38
Total net Centrica Business Solutions business energy customers trade receivables	138	10	49	197	31	42	67	140

(i) This ageing analysis is presented relative to invoicing date and presents receivables according to the oldest invoice outstanding with the customer. There are a range of payment terms extended to business energy customers. Average credit terms for ME customers are ten working days. Credit terms for Commercial and Industrial customers are bespoke and are set based on the commercial agreement with each customer.

(ii) This category includes low credit risk receivables, including those from public sector and customers with high turnover (greater than £100 million).

Unbilled downstream energy income at 31 December 2021 includes gross balances of £193 million in respect of Centrica Business Solutions business energy customers (2020: £118 million), against which a provision of £5 million is held (2020: £5 million).

16. Trade and other receivables, and contract-related assets

Sensitivity to changes in assumptions

Typically, 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 that 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 the recoverability of the balance.

The specific consideration of forward-looking information in the impairment model does not usually give rise to significant changes in the levels of credit losses. However, inflationary pressures, increasing wholesale gas and electricity costs and the impacts of the global COVID-19 pandemic, continue to cause uncertainty in economic outlook. The economic recovery remains vulnerable and there remains a level of estimation uncertainty inherent in determining credit loss provisions for the Group's trade receivables.

Where customers experience difficulties in settling balances, the increased ageing of these amounts results in an increase in provisions held in respect of them under the provision matrix approach employed. The Group has also considered changes in customer payment patterns, the specific circumstances of the customers and the economic impacts of the factors identified above, on the sectors in which they operate. Whilst economic recovery is expected, a level of unpredictability remains apparent.

The Group has considered macroeconomic forecasts in determining the level of provisions for credit losses. Customers are facing increases to their cost of living, including increased energy bills, higher inflation and higher interest rates. Support received under COVID-19 assistance programmes has now been withdrawn. Unbilled energy income is more susceptible to credit risk from such forward-looking factors due to the length of time between the balance sheet date and collection of the amounts in cash. The Group considers that future economic growth remains modest.

During 2021 the Group recognised impairment charges of £116 million (2020: £195 million) in respect of financial assets, representing 0.8% of Group revenue (2020: 1.6%) and 0.6% of Group revenue from business performance (2020: 1.3%). The lower impairment charges in 2021 are driven by a reversion to a normalised level of bad debt charges. The prior year included a £30 million macroeconomic uplift. As described above, the majority of the Group's credit exposure arises in respect of downstream energy receivables in British Gas Energy and Centrica Business Services. Credit losses in respect of these assets amounted to £104 million (2020: £179 million). This represents 1.1% (2020: 2.2%) of total UK downstream energy supply revenue from these segments of £9,162 million (2020: £8,262 million). Further details of segmental revenue are provided in note 5.

Due to the different level of risks presented by billed and unbilled receivables, these asset groups are considered separately in the analysis below.

Billed trade receivables

	31 December 2021 £m	31 December 2020 £m
Gross billed receivables	1,546	1,379
Provision	(607)	(566)
Net balance	939	813
	31 December 2021 %	31 December 2020 %
Provision coverage	39	41
Sensitivity	£m	£m
Impact on billed receivables/operating profit from 1 percentage point (increase)/decrease in provision coverage ⁽ⁱ⁾	(16)/16	(14)/14

(i) Credit risk in the Group is impacted by a large number of interacting factors.

Cash collection relative to billing has remained strong throughout the whole of 2021, continuing the trends seen during the first year of the pandemic. Provision rates by customers in the Group's downstream operations have fallen marginally, as both ageing and deemed credit quality improved. This is driven by improved macroeconomic conditions and partly benefiting from field activity resuming with fewer Covid restrictions. However, the credit risk arising from the macroeconomic outlook remains challenging; with significantly higher energy bills expected, rising inflation and higher interest rates expected. These factors are yet to be reflected to date in the underlying matrix output model used to book provision coverage, due in part to protection offered to domestic consumers via the Price Cap. However there remains significant uncertainty around the possible increase in bad debt as a result of these factors. Therefore, as part of management's assessment of the adequacy of bad debt provisions, no material change has been made to the £30 million macroeconomic provision that was booked for the year ended 31 December 2020. It remains highly uncertain when and how these factors will reduce the collectability of debt and what impact proposals by Ofgem or future interventions by Government may have to limit the impact of these. The table above and the unbilled section below provides details of the sensitivity of moving the bad debt provision by a further 1%.

The Group's services, upstream and trading operations are less susceptible to credit risk. No significant deterioration of credit risk has been experienced or is expected in the relevant segments in respect of billed trade receivables recognised at 31 December 2021, taking into account cash collection cycles in those areas of the Group and credit rating information.

16. Trade and other receivables, and contract-related assets

Unbilled downstream energy income

The table below shows the IFRS 15 unbilled downstream energy income for the Group as a whole.

	31 December 2021 £m	31 December 2020 £m
Gross unbilled receivables	726	532
Provision	(26)	(25)
Net balance	700	507

	31 December 2021 %	31 December 2020 %
Provision coverage	4	5
Sensitivity	£m	£m
Impact on unbilled receivables/operating profit from 1 percentage point (increase)/decrease in provision coverage ⁽ⁱ⁾	(7)/7	(5)/5

(i) Credit risk in the Group is impacted by a large number of interacting factors.

Unbilled downstream energy income is typically provided at a significantly lower rate than billed debt. This is because a large proportion of this debt once billed will be subject to the very short cash collection cycles of the Group's downstream energy supply businesses.

17. 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 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 £3.5 billion (included in 'LNG capacity' below) between 2021 and 2039. It also allows the Group to make up to £6.0 billion of commodity purchases based on market gas prices and foreign exchange rates as at the balance sheet date.

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 is committed to make commodity purchases expected to amount to £6.2 billion based on market gas and oil prices at the reporting date.

These LNG contracts are deemed to be own use and therefore are accounted for on an accruals basis. Based on forecast gas spreads, they are predicted to be profitable, and remain so even under net zero scenario analysis, but due to their duration are exposed over a long period of time to the impact of climate change governmental policy decisions.

31 December	2021 £m	2020 (i) £m
Commitments in relation to the acquisition of PP&E	255	146
Commitments in relation to the acquisition of intangible assets:		
Renewable obligation certificates	3,289	3,624
Other intangible assets	250	827
Other commitments:		
Commodity purchase contracts	44,443	34,819
LNG capacity	3,892	4,086
Transportation capacity	292	1,093
Other long-term commitments (ii)	526	600

(i) Of the commitments at 31 December 2020 £5,649 million relates to discontinued operations, predominantly from commodity purchase contracts.

(ii) Other long-term commitments include amounts in respect of executory contracts 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			
	Fixed price commodity commitments		Commodity commitments that float with indices	
	2021 £billion	2020 £billion	2021 £billion	2020 £billion
<1 year	6.8	5.2	9.2	4.4
1–2 years	1.5	1.8	7.3	3.3
2–3 years	0.3	0.6	4.4	3.0
3–4 years	0.1	0.2	3.1	2.5
4–5 years	–	0.1	1.3	2.1
>5 years	–	0.4	10.4	11.2
	8.7	8.3	35.7	26.5

17. 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 2021, £525 million (2020: £665 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.

18. 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 2021 and the date of this report.

Together Energy Retail Limited

On 24 January 2022, as part of Ofgem's Supplier of Last Resort (SoLR) process, British Gas was appointed to supply energy to the c.176,000 customers of Together Energy Retail Limited, which ceased trading on 18 January 2022. This takes the cumulative total of customers acquired through the SoLR process in 2021 and 2022 to around 700,000 customers.

Disposal of Spirit Energy Norway and Statfjord field

On 13 January 2022, the Group held a general meeting in relation to the proposed sale of its Norwegian portfolio plus the Statfjord field. See note 15. The resolution to proceed with the transaction was approved by Centrica shareholders, and is subject to our partners SWM also receiving approval. Completion is now expected to occur in the second quarter of 2022.

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 retained fields in Spirit Energy are Cygnus, South and North Morecambe, Rhyl and Chiswick. The principal fields in the Norwegian/Statfjord disposal group are Kvitebjørn, Statfjord, Ivar Aasen and Maria. 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 - Norway/Statfjord ⁽ⁱ⁾	Spirit Energy - retained fields ⁽ⁱ⁾	Rough	Total
1 January 2021	220	353	45	618
Revisions of previous estimates ⁽ⁱⁱ⁾	2	6	(3)	5
Extensions, discoveries and other additions	–	1	–	1
Production ⁽ⁱⁱⁱ⁾	(33)	(64)	(16)	(113)
31 December 2021	189	296	26	511

Estimated net 2P reserves of liquids (million barrels)	Spirit Energy - Norway/Statfjord ⁽ⁱ⁾	Spirit Energy - retained fields ⁽ⁱ⁾	Rough	Total
1 January 2021	69	5	–	74
Revisions of previous estimates ⁽ⁱⁱ⁾	(6)	(2)	–	(8)
Production ⁽ⁱⁱⁱ⁾	(8)	(2)	–	(10)
31 December 2021	55	1	–	56

Estimated net 2P reserves (million barrels of oil equivalent)	Spirit Energy - Norway/Statfjord ⁽ⁱ⁾	Spirit Energy - retained fields ⁽ⁱ⁾	Rough	Total
31 December 2021 ^(iv)	88	50	4	142

(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) Represents total sales volumes of gas and oil produced from the Group's reserves.

(iv) Includes the total of estimated gas and liquids reserves at 31 December 2021 in million barrels of oil equivalent.

Liquids reserves include oil, condensate and natural gas liquids.

Five Year Summary (Unaudited)

	2017 (restated) ⁽ⁱ⁾ (ii) £m	2018 (restated) ⁽ⁱ⁾ (ii) £m	2019 (restated) (ii) £m	2020 (restated) (ii) £m	2021 £m
Group revenue from continuing operations included in business performance ⁽ⁱ⁾	17,126	16,465	15,958	14,949	18,300
Operating profit/(loss) from continuing operations before exceptional items and certain re-measurements:					
British Gas Services & Solutions ^{(i) (ii)}	151	101	187	191	121
British Gas Energy ^{(i) (ii)}	593	490	117	82	118
Centrica Business Solutions ^{(i) (ii)}	(45)	(40)	(20)	(132)	(52)
Bord Gáis Energy ^{(i) (ii)}	47	44	50	42	28
Energy Marketing & Trading ^{(i) (ii)}	77	35	138	174	70
Upstream ^{(i) (ii)}	256	567	178	90	663
	1,079	1,197	650	447	948
Operating profit from discontinued operations before exceptional items and certain re-measurements ^{(i) (ii)}	161	195	251	252	-
Exceptional items and certain re-measurements after taxation	(407)	(416)	(1,531)	(520)	866
Profit/(loss) attributable to equity holders of the parent	328	183	(1,023)	41	1,210
	Pence	Pence	Pence	Pence	Pence
Earnings per ordinary share	5.9	3.3	(17.8)	0.7	20.7
Adjusted earnings per ordinary share	12.5	11.2	7.3	6.5	4.1
Dividend per share in respect of the year	12.0	12.0	1.5	-	-

Assets and liabilities

	2017 £m	2018 £m	2019 £m	2020 £m	2021 £m
31 December (restated) ^(v)					
Goodwill and other intangible assets	4,326	4,456	4,033	1,940	1,161
Other non-current assets ^(iv)	7,190	7,435	5,826	4,767	6,040
Net current assets/(liabilities)	1,705	284	(696)	622	1,465
Non-current liabilities ^(iv)	(9,789)	(8,227)	(7,474)	(8,072)	(6,360)
Net assets of disposal groups held for sale	-	-	106	2,125	444
Net assets	3,432	3,948	1,795	1,382	2,750
Net debt ^(v) (note 11)	(2,932)	(2,946)	(3,507)	(2,998)	680

Cash flows

	2017 £m	2018 £m	2019 £m	2020 £m	2021 £m
Year ended 31 December (restated) ^(v)					
Cash flow from operating activities before exceptional payments	2,016	2,182	1,548	1,532	1,687
Payments relating to exceptional charges in operating costs	(176)	(248)	(298)	(132)	(76)
Net cash flow from investing activities	32	(1,007)	(503)	(285)	2,263
Cash flow before cash flow from financing activities	1,872	927	747	1,115	3,874

(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. Earlier periods have not been restated and therefore are not presented on a comparable basis.

(ii) Results have been restated to reflect the new operating structure of the Group. See note 1 for further details.

(iii) Adjusted operating profit has been restated to include the impact of business performance interest and taxation of joint ventures and associates.

(iv) Results from the years ended 2017 and 2018 figures have not been presented in line with IFRS 16: 'Leases'.

(v) Results have been restated to reflect the change in definition of Net Debt in 2021. See note 11 for further details.

Ofgem Consolidated Segmental Statement

The Ofgem Consolidated Segmental Statement (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.

The following is an extract from the audited CSS and is prepared in accordance with Standard Condition 19A of the Electricity and Gas Supply Licences and Standard Condition 16B of the Electricity Generation Licences. This extract should be read in conjunction with the full CSS which includes the Statement, the audit opinion and the basis of preparation. This is available at www.centrica.com/investors/results-centre/preliminary-results-2021

Ofgem consolidated segmental statement

Year ended 31 December 2021

	Unit	Electricity Generation		Aggregate Generation Business	Electricity Supply		Gas Supply		Aggregate Supply Business
		Nuclear	Thermal		Domestic	Non-Domestic	Domestic	Non-Domestic	
Total revenue	£m	415.5	187.3	602.8	3,410.3	1,872.1	3,253.7	621.9	9,158.0
Sales of electricity & gas	£m	383.4	165.3	548.7	3,403.9	1,872.1	3,247.9	621.9	9,145.8
Other revenue	£m	32.1	22.0	54.1	6.4	–	5.8	–	12.2
Total operating costs	£m	(355.9)	(158.1)	(514.0)	(3,474.2)	(1,902.2)	(2,980.0)	(570.4)	(8,926.8)
Direct fuel costs	£m	(82.7)	(83.1)	(165.8)	(1,278.1)	(812.6)	(1,344.6)	(400.6)	(3,835.9)
Direct costs	£m	(222.7)	(71.2)	(293.9)	(1,784.2)	(954.5)	(1,109.5)	(116.3)	(3,964.5)
Transportation costs	£m	(62.4)	(1.3)	(63.7)	(844.7)	(437.6)	(887.2)	(88.7)	(2,258.2)
Environmental and social obligation costs	£m	–	(47.4)	(47.4)	(848.0)	(471.5)	(134.5)	–	(1,454.0)
Other direct costs	£m	(160.3)	(22.5)	(182.8)	(91.5)	(45.4)	(87.8)	(27.6)	(252.3)
Indirect costs	£m	(50.5)	(3.8)	(54.3)	(411.9)	(135.1)	(525.9)	(53.5)	(1,126.4)
WACOF/E/G	£/MWh, P/Th	(10.0)	(46.6)	N/A	(73.9)	(70.1)	(47.7)	(66.8)	N/A
EBITDA	£m	59.6	29.2	88.8	(63.9)	(30.1)	273.7	51.5	231.2
DA	£m	(119.1)	(11.0)	(130.1)	(43.0)	(13.3)	(51.5)	(5.4)	(113.2)
EBIT	£m	(59.5)	18.2	(41.3)	(106.9)	(43.4)	222.2	46.1	118.0
Volume	TWh, MThms	8.3	2.8	N/A	17.3	11.6	2,818.1	599.6	N/A
Average customer numbers/sites	'000s	N/A	N/A	N/A	5,289.5	441.0	6,332.5	178.2	N/A

Supply EBIT	margin	(3.1)%	(2.3)%	6.8%	7.4%	1.3%
Supply PAT	£m	(85.8)	(35.1)	178.4	37.1	94.6
Supply PAT	margin	(2.5)%	(1.9)%	5.5%	6.0%	1.0%

2020 Summarised CSS

Year ended 31 December 2020

	Unit	Electricity Generation		Aggregate Generation Business	Electricity Supply		Gas Supply		Aggregate Supply Business
		Nuclear	Thermal		Domestic	Non-Domestic	Domestic	Non-Domestic	
Total revenue	£m	511.4	199.2	710.6	3,181.9	1,528.7	3,193.3	428.0	8,331.9
EBIT	£m	16.0	10.7	26.7	15.6	(69.8)	96.2	4.8	46.8
Supply EBIT	margin				0.5%	(4.6)%	3.0%	1.1%	0.6%
Supply PAT	£m				12.6	(56.5)	77.9	3.8	38.0
Supply PAT	margin				0.4%	(3.7)%	2.4%	0.9%	0.5%

Additional Information – Explanatory Notes (Unaudited)

Definitions and reconciliation of adjusted performance measures

Centrica's 2021 Preliminary Results 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 revenue, adjusted gross margin, adjusted operating profit, adjusted earnings and adjusted cash flow have been defined and reconciled separately in notes 2, 5 and 10 to the 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	Notes	2021 £m	2020 £m	Change
Continuing group operating profit/(loss)	I/S	954	(362)	
Exceptional items included within Group operating profit and certain re-measurements before taxation	6	(1,247)	1,593	
Certain re-measurements before taxation		1,241	(784)	
Share of losses/(profits) of joint ventures and associates, net of interest and taxation ⁽ⁱ⁾	I/S	103	(23)	
Depreciation and impairments of PP&E ⁽ⁱ⁾	5	583	659	
Amortisation, write-downs and impairments of intangibles ⁽ⁱ⁾	5	216	253	
Continuing EBITDA		1,850	1,336	38%
Discontinued operations EBITDA		–	299	
Group total EBITDA		1,850	1,635	13%

(i) These line items relate to business performance only.

The below table shows how EBITDA reconciles to free cash flow:

Year ended 31 December	Notes	2021 £m	2020 £m
Continuing EBITDA		1,850	1,336
Group operating profit/(loss) including share of joint ventures and associates, from exceptional items and certain re-measurements	I/S	6	(809)
Share of losses of joint ventures and associates, net of interest and taxation, from exceptional items and certain re-measurements	I/S	–	2
Depreciation, amortisation, write downs, impairments and write-backs, from exceptional items and certain re-measurements	6	(1,214)	1,305
Loss on disposals	C/F	28	28
Increase in provisions	C/F	2,434	46
Cash contributions to defined benefit schemes in excess of service cost income statement charge	C/F	(388)	(42)
Employee share scheme costs	C/F	12	34
Unrealised gains arising from re-measurement of energy contracts	C/F	(1,159)	(666)
Exceptional charges reflected directly in operating profit	C/F	12	49
Net movement in working capital	C/F	246	(204)
Taxes paid	C/F	(140)	(2)
Payments relating to exceptional charges in operating profit	C/F	(76)	(120)
Net cash flow from continuing operating activities		1,611	957
Purchase of businesses, net of cash acquired	C/F	(14)	–
Sale of businesses	C/F	70	43
Purchase of property, plant and equipment and intangible assets	C/F	(420)	(489)
Sale of property, plant and equipment and intangible assets	C/F	36	–
Disposal of/(investment in) joint ventures and associates	C/F	2	(10)
Dividends received from joint ventures and associates	C/F	2	62
Receipt of sub-lease capital payments	C/F	–	3
UK Pension deficit payments	5	368	175
Movements in variation margin and collateral	5	(481)	(56)
Free cash flow from continuing operations	5	1,174	685

Definitions and reconciliation of adjusted performance measures

Profit/(loss) on disposals

Year ended 31 December	Notes	2021 £m	2020 £m
Loss on disposal	C/F	28	28
Less: Exceptional loss on disposal	6	(31)	(32)
Profit on disposals relating to business performance		(3)	(4)

Group net investment

With an increased focus on cash generation, capital discipline and reducing net debt, Group net investment provides a measure of the Group's capital expenditure from a cash perspective and allows the Group's capital discipline to be assessed.

Year ended 31 December		2021 £m	2020 £m	Change
Capital expenditure (including small acquisitions) ⁽ⁱ⁾		434	489	
Net disposals ⁽ⁱⁱ⁾		(108)	(33)	
Group net investment		326	456	(29%)
Dividends received from joint ventures and associates	C/F	(2)	(62)	
Receipt of sub-lease capital payments	C/F	–	(3)	
Interest received	C/F	(2)	(7)	
Sale and settlement of securities	C/F	3	(121)	
Net cash flow used in continuing investing activities	C/F	325	263	24%

(i) Capital expenditure is the net cash flow on capital expenditure and purchases of businesses (less than £100 million). See table (a).

(ii) Net disposals is the net cash flow from sales of businesses, property, plant and equipment and intangible assets, net of investments in joint ventures and associates. See table (b).

Group net investment is capital expenditure including acquisitions less net disposals. It excludes cash flows from investing activities not associated with capital expenditure as detailed in the table above.

(a) Capital expenditure (including small acquisitions)

Year ended 31 December		2021 £m	2020 £m	Change
Purchase of property, plant and equipment and intangible assets	C/F	420	489	
Purchase of businesses, net of cash acquired	C/F	14	–	
Less: material acquisitions (>£100 million)		–	–	
Capital expenditure (including small acquisitions)		434	489	(11%)

(b) Net disposals

Year ended 31 December		2021 £m	2020 £m	Change
Sale of businesses	C/F	(70)	(43)	
Sale of property, plant and equipment and intangible assets	C/F	(36)	–	
(Disposal of)/investments in joint ventures and associates	C/F	(2)	10	
Net disposals		(108)	(33)	227%

Definitions and reconciliation of adjusted performance measures

The following tables provide additional information to help readers when reconciling between different parts of the consolidated Group Financial Statements, and the Group Cash Flow Statement.

Reconciliation from free cash flow to change in net debt

Year ended 31 December	Notes	2021 £m	2020 £m
Free cash flow from continuing operations	5	1,174	685
Free cash flow from discontinued operations	5	2,588	376
Group total free cash flow	5	3,762	1,061
Financing interest paid ⁽ⁱ⁾		(233)	(210)
Interest received	C/F	2	7
UK Pension deficit payments	5	(368)	(175)
Proceeds from sale of forfeited share capital/(payments for own shares)	C/F	1	(30)
Movements in variation margin and collateral ⁽ⁱ⁾		481	101
Cash flows affecting net debt		3,645	754
Discontinued operations non-cash movements in net debt		32	–
Non-cash movements in net debt		1	(245)
Change in net debt		3,678	509
Opening net debt	11	2,998	3,507
Closing net debt	11	(680)	2,998

(i) Financing interest paid includes £(8) million, and movements in variation margin and collateral includes £45 million, that relates to discontinued operations.

Payments relating to exceptional charges in operating costs

Year ended 31 December		2021 £m	2020 £m
Restructuring costs incurred during the year and utilisation of prior year liabilities		76	120
Payments relating to exceptional charges in continuing operating costs	C/F	76	120

Depreciation, amortisation, write-downs, impairments and write-backs

Year ended 31 December	Notes	2021 £m	2020 £m
Movement from depreciation, amortisation, write-downs, impairments and write-backs, from exceptional items (continuing) included in the Group Cash Flow Statement	6	(1,214)	1,305
Made up of:			
(Write-back)/impairment of E&P assets	6	(598)	634
(Write-back)/impairment of power assets	6	(747)	506
Impairment of Centrica Business Solutions	6	123	78
Impairment of Centrica Home Solutions	6	–	72
Impairment of property	6	8	15
Movement from depreciation, amortisation, write-downs, impairments and write-backs, from business performance (continuing) included in the Group Cash Flow Statement		799	912
Made up of:			
Business Performance PP&E depreciation	5	580	657
Business Performance PP&E impairments	5	3	2
Business Performance intangibles amortisation	5	188	226
Business Performance intangibles impairments and write-downs	5	3	3
Business Performance E&E write-downs	5	25	24
Movement from depreciation, amortisation, write-downs, impairments and write-backs (continuing) included in the Group Cash Flow Statement		(415)	2,217

Definitions and reconciliation of adjusted performance measures

Reconciliation in receivables and payables to Group Cash flow Statement

Year ended 31 December		2021 £m	2020 £m
Receivables opening balance	B/S	2,946	4,993
Less receivables closing balance	B/S	(6,114)	(2,946)
Payables opening balance	B/S	(3,836)	(5,685)
Less payables closing balance	B/S	7,633	3,836
Net reduction in receivables and payables		629	198
Non-cash changes, and other reconciling items:			
Transferred to held for sale and business disposals		(29)	(281)
Movement related to discontinued operations prior to transfer to held for sale		–	(48)
Movement in capital creditors		10	61
Movement in ROCS and emission certificate intangible assets		(8)	(92)
Other movements (including foreign exchange movements)		5	(46)
Non-cash charges, and other reconciling items		(22)	(406)
Movement in trade and other receivables, trade and other payables and contract related assets relating to business performance	C/F	607	(208)

Pensions

Year ended 31 December		2021 £m	2020 £m
Cash contributions to defined benefit schemes in excess of service cost income statement charge	C/F	(388)	(42)
Employer contributions	14	420	241
Contributions by employer in respect of employee salary sacrifice arrangements	14	20	28
Total current service cost	14	(105)	(107)
Past service credit	14	1	–
Termination benefit/(cost)	14	52	(120)

Discontinued operations Free Cash Flow

Year ended 31 December	Note	2021 £m	2020 £m
Discontinued operations Free Cash Flow	5	2,588	376
Movement in variation margin and collateral		–	45
		2,588	421
Net cash flow from discontinued operating activities	C/F	–	443
Net cash flow from discontinued investing activities	C/F	2,588	(22)
		2,588	421

Disclosures

Disclaimers

This announcement does not constitute an invitation to underwrite, subscribe for, or otherwise acquire or dispose of any Centrica shares or other securities.

This announcement contains certain forward-looking statements. . Forward-looking statements can be identified by the use of terminology such as 'project', 'anticipate', 'estimate', 'plan', 'believe', 'expect', 'forecasts', 'may', 'could', 'should', 'will', 'continue' or similar words. The forward-looking statements appear in a number of places throughout this announcement and include statements regarding the current intentions, beliefs or expectations of the Directors, the Company and/or the Group concerning, among other things, the financial condition, goals and commitments, prospects, growth, strategies, results, operations and businesses of the Company.

Although we make such statements based on assumptions that we believe to be reasonable, by their nature, these forward-looking statements are subject to risk and uncertainties because they relate to, and may be impacted by, events and circumstances that will occur in the future which are beyond the Company's ability to control or estimate precisely. There can be no assurance that the Company's actual future results, financial condition, performance, operations and businesses will not differ materially from those expressed or implied in the forward-looking statements due to a variety of factors, including, but not limited to, those disclosed in our last published Annual Report and Accounts under 'Our Principal Risks and Uncertainties' section of the Strategic Report, which is available on the Company's website. Readers are cautioned that these forward-looking statements are not guarantees or predictions of the Company's future performance and undue reliance should not be placed on them when making investment decisions.

At any time, subsequent to the time of the announcement, neither the Company nor any other person assumes responsibility for the accuracy and completeness or undertakes any obligation to update or revise any of these forward-looking statements to reflect any new information or any changes in events, conditions or circumstances on which any such forward-looking statement is based save in respect of any requirement under applicable law or regulation.

Past performance is no guide to future performance and persons needing advice should consult an independent financial adviser.

For further information

A pre-recorded results presentation will be available on Centrica.com at 08.00am (UK) on 24 February 2022 and Centrica will host a conference call for institutional investors and analysts at 09.15am (UK) on 24 February 2022. To register for the conference call please visit: https://webcasts.centrica.com/centrica117/vip_connect

If you would like to join in listen only mode, please visit [Centrica.com/investors](https://www.centrica.com/investors)

An archived webcast and full transcript of the presentation and the conference call will be available on the Centrica website by Monday 28 February 2022.

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Financial calendar

For more information on Centrica's financial calendar please visit: <https://www.centrica.com/investors/financial-calendar/>

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