Centrica plc 2017 Capital Markets Day
Wednesday 21 June 2017
Main presentation and Q&A

Iain Conn
Group Chief Executive

Good morning everyone and thank you very much for coming and welcome to Centrica's Capital Markets Day. We are going to try and keep the temperature cool in here, it is going to be challenging I suspect, but we will do our best.

The purpose of today is to update you on our progress since we announced our strategy in July 2015 and to provide you with a much deeper understanding of our customer-facing divisions, their focus areas, propositions, business models and capabilities. I hope this is going to give you confidence in our strategy and our ability to deliver both returns and growth for our shareholders.

Before we begin, just a word on safety in this building. There are no planned fire alarms today. In the event of an alarm you will be directed or we will all be directed to the muster point which is by Caffè Nero on Mayfair Place, by the hotels Operations Manager and fire marshals.

I am joined here today by the other Executive Directors, Jeff Bell, Group Chief Financial Officer and Mark Hodges and Mark Hanafin, Chief Executives of the Centrica Consumer and Centrica Business divisions respectively. We will be making a presentation for the next hour and 40 minutes. There will be 30 minutes for questions at the end of the presentation and again at the end of the day following a number of interactive breakout sessions. We are also joined by various members of the management teams of both Consumer and Business, many of whom you will meet later today in the breakouts. Our Chairman, Rick Haythonthwaite is also here this morning.

So again, what do we hope you will get out of today? We will provide an update on where and what Centrica is today and the progress we have made in implementing the Group's strategy. The Company's focus has changed a lot over the past two years as we reposition the Group more towards being a customer-facing energy and services company. We will provide you with an enhanced understanding of our Consumer and Business divisions and their strategy and growth potential. We will demonstrate the strong capabilities and technology we now have in these divisions, which will help to underpin our growth. And we will evidence our ability to deliver long-term shareholder value through returns and growth.

I am excited about Centrica's future as are the wider team that you will hear from over the course of today and I hope that you will get that sense to from today's interactions in the breakouts as well.

Here is an outline agenda for the day. After this presentation and Q&A we will have a short break before moving into six breakout groups. There is an agenda allegedly on the back of your lanyard which will tell you the order you will attend the breakout sessions. Before lunch half will rotate around the Consumer sessions: Customer Data in Action, Offer Innovation and Hive Connected Home. And the other half around the Business and Technology sessions: Energy Supply, Wholesale & Optimisation, Energy

Insight & Solutions and Technology & Innovation. You will then swap around in the afternoon before coming back into the auditorium at 15:40 all going well for our wrap up and the opportunity to ask any outstanding questions. Following the conclusion of the agenda at 16:30 you are then welcome to join the wider management team for drinks in the hotel's private dining area.

So this morning I would like to begin with our purpose and strategy and remind you of the trends which underpin both. In 2015 our Strategic Review was founded on an analysis of market trends and sources of growth and our own capabilities and efficiency necessary to pursue them profitably. Today the trends we identified are even clearer and are playing out in line with our views at the time.

There are three fundamental trends which are changing the landscape. First, as globally we pursue lower carbon and more efficient solutions, the energy system is becoming decentralised with more technologies available and viable close to the consumer. The customer I should say. This is beginning to put huge pressure on returns in the central generation and distribution system. Many industries are seeing such changes as more of the action and value capture occurs nearer to the customer, nearer to the market edge.

Second, as a result of increased choice and alternatives, the customer is becoming more powerful with rent shifting to the interface with the customer. Owning the relationship with the customer and satisfying their needs is fundamental.

Finally, digitisation and technology developments, both physical and digital are accelerating the pace of change, and capability in these areas is key to keeping up with the customer and their changing needs. These trends demand more decentralised technologies and propositions, more customer intimacy and better service, more agility and stronger technology capability. The strategic frameworks of both Consumer and Business divisions which we introduced in February, represent a direct response to this and you may be surprised by some of the capabilities we have been developing. You will hear more from Mark and Mark shortly.

So in light of these trends, and the changing world of opportunity our customers are experiencing, let me remind you of Centrica's refreshed purpose as laid out in July 2015. Our purpose is to provide energy and services to satisfy the changing needs of our customers. Serving customers is what we are good at and where we have distinctive positions. We aim to be at the centre of our customers' daily lives, central to helping them run their world. It is also what we have been doing for over 200 years, since 1812. It is who we are.

With that purpose, let me also remind you of our strategy. We are an energy and services company and we know how to operate customer-facing businesses at scale, a source of real competitive advantage. Central to our strategy is to deliver for those changing needs of our customers. Through this we aim also to deliver long-term shareholder value through returns and cash flow growth. To achieve these aims sustainably we must be a trusted corporate citizen and an employer of choice, necessary for us to attract the best talent and win in the long-term. We must turn ourselves into a 21st century energy and services company.

And on this last point, we are not only an energy supply company. For a long time our core activities have included Services, Energy Wholesaling and Optimisation. This large scale platform will endure and has given us the expertise and capabilities to increase the types of propositions and services we can offer. Some of these, particularly in Consumer are no longer energy led. We are also not really a regulated utility, a traditional regulated utility. We don't have a large central power generation base and even smaller after this morning. Nor do we have a large regulated rate base of pipes and wires. Against the trends we have identified, we believe building a broad portfolio, closer to the customer, will ultimately be more valuable and attract more growth.

As the trends we identify develop and we shift our focus so the relevant competition is also changing. This slide shows some of the traditional energy companies, but also many of the new companies with whom we are competing. We have also shown our own businesses, established and new. In addition to some of those shown on this slide, an increasing number of companies have approached us about partnering in a number of our propositions. This includes customer-facing companies in energy supply, distributed energy, retailing and telecoms as well as leading digital technology companies. The competitive landscape is indeed changing and we find ourselves learning to take advantage of it rather than fearing it.

So I have covered the key trends in our purpose, strategy and the competitive landscape. Against this backdrop, to deliver our strategy in 2015 we set ourselves a number of medium term objectives to 2020. We decided to refocus the business to deliver customer led growth in five areas, in Energy Supply, Services, the Connected Home, Distributed Energy & Power and Energy Marketing & Trading. These are all areas where we already had some or all of the characteristics of material market shares, ability to manage large customer books and risk, strong product brands, competitive and or distinctive capabilities and emerging products and offerings.

We continue to build our human process and technology capability to underpin them. You will see many examples of this later. We said that we would refocus the E&P business. The role of E&P would be to provide balance sheet strength and diversified cash flows from a smaller more focused and stronger business. We would reallocate £1.5 billion of capital and operating resources to our customer-facing businesses from our E&P and Central Power Generation businesses by 2020. We said we would deliver £750 million of like-for-like efficiency savings per annum by 2020 enabling us to compete to win, driving operating cash flow growth in the short term and creating the space for revenue investment into new areas. And we said we would maintain strong financial discipline managing the Group within a clear financial framework, including delivering underlying adjusted operating cash flow growth of 3-5% per annum on average to 2020 with a progressive dividend linked to this growth.

So what are the headlines so far? We are executing on all of these medium term objectives and at the end of 2017 the first phase of the portfolio transformation of Centrica will be complete. We have continued to reposition the asset businesses and have established the two global customer-facing divisions of Centrica Consumer and Centrica Business. In line with our 2015 goals, we have accelerated investment into our customer-facing activities with around £450 million invested in growth areas in 2016 and further investment underway in 2017.

Through these investments we are increasingly well positioned as we respond to the major customer trends I outlined earlier. We delivered 14% underlying adjusted operating cash flow growth in 2016, providing a strong underpinning to our 3-5% per annum target on average from 2015 to 2020.

Our efficiency programme is ahead of schedule with £384 million delivered in 2016 and we are on track for a further £250 million this year. We expect therefore to have delivered the vast majority of the five year programme within these two years and we will be in a position to update on our cost efficiency plans for 2018 to 2020 at our Preliminary results in February next year.

We are on track to deliver on our targets for 2017 which we published in February and to have the balance sheet we need in the current environment. By the end of 2017 we expect our net debt to be in the £2.5-3.0 billion range, the optimum sustainable level with our current portfolio and financial framework and in the current environment. As a result we would expect that the balance sheet will no longer make demands on our operating cash flow from 2018 onwards.

Finally despite the pressures of the current environment, including potential price caps in the UK, we are targeting to continue to balance sources and uses of cash flow in 2018. Jeff will come back to talk about cash flow at the Group level following the divisional presentations.

Before I move towards the future and introduce our two new divisions, I want to remind you of our portfolio today, its relative scale and where the business units fit in.

This slide is a reminder of our portfolio make-up today and also the relative scale of the main areas by gross revenue. In 2016, Centrica's gross revenues were £28.3 billion spread across a range of business units. On the left we have our asset businesses with total revenues of about £2.4 billion. The right hand three columns represent our customer-facing businesses with total revenues of just under £26 billion. More than £20 billion of today's annual revenues are in energy supply. This is the core of today's activity and where much of our capability to manage large customer books and operate at scale comes from. We will be spending a lot of time exploring new areas in the breakouts. But I want us all to be reminded that today we are anchored in energy supply and we have strong capabilities in this area.

Beyond energy supply we already have two other material established areas of business, Services and Trading, with total revenues of £5.4 billion per annum and an employee base of about 16,000 people. These areas give us the capabilities to offer customers infield services where we are strongly trusted, and optimisation and route to market services to our business customers. The businesses of Energy Supply, Services and Trading give us the platform from which to deliver new propositions and businesses serving both the residential consumer and the business customer.

This brings me to the right hand side of the chart, our new businesses. As you can see their total revenues are relatively small. Let me now superimpose market growth rates on this portfolio. What you can see is that we are in a combination of very large, very low revenue growth businesses, which require constant attention to efficiency to deliver net margin growth, medium scale established businesses with market revenue growth rates of about 4% per annum and relatively small business units serving new high growth sectors with annual growth rates of 3-18% per annum.

In order to deliver underlying adjusted operating cash flow growth from this portfolio we must focus strongly on gross margin capture and drive cost efficiency in the asset and energy supply businesses. We must develop new skills and propositions to grow the customer base and scale of Services and Trading, shift the resource emphasis towards the right of the chart and develop the necessary capabilities and businesses to access the high growth rates available, use the new propositions we develop in Services, Trading and the new businesses to enhance the customer relationship and overall proposition back in Energy Supply.

This is what our portfolio strategy is all about. We fully recognise that a central question on your minds today is whether we can do this and will the net effect be one of growth as well as returns. We think we can, but clearly as we invest to grow some of these businesses we are investing ahead of revenue growth and creating a 'J curve' which will impact near term earnings. However I strongly believe there is sufficient quality in these areas to warrant this pre-investment to ensure we capitalise on the skills we have and create material and growing businesses in the medium term.

So let me now briefly introduce our two new divisions: Centrica Consumer and Centrica Business. Starting with some overarching comments across the two divisions. The customer needs each division is addressing are global and we have built strategic frameworks around those needs going beyond energy supply and targeting those areas where we believe we have real competitive advantage. We are pursuing home owners, not only home energy consumers. We are pursuing business customers who are seeking more than just energy, they want help with efficiency, productivity and optimisation.

We have built some exciting new capabilities, propositions and technology in both divisions. The targeted acquisitions of Bord Gáis Energy, Alert Me, Panoramic Power, Neas Energy, ENER-G Cogen and Flowgem, have all contributed to developing these key capabilities. Financially so far they have met or exceeded what we expected at the time. We are no longer constrained to the UK and North America. The customer needs we are serving are global and the propositions we have developed in both divisions makes Centrica much more scalable. Making Centrica more standardised, replicable and scalable has been to the heart of our repositioning over the last two years. We are now present in 17 countries and serve customers in 40.

As we complete phase one of our transformation we would expect to continue to expand geographically both in existing markets such as in the United States and into other countries. We will be open to making further acquisitions and developing new partnerships in all our focus areas including in Energy Supply, provided we have the resources within our financial framework to do so.

As we have stated previously, large acquisitions could not be managed within the investment limits of our financial framework and we would need an expansion of the balance sheet if we were to pursue these.

The size of the markets we are addressing vary but all of them are large. Other than in Energy Supply in which revenue growth rates are flat to negative in the established markets, as I indicated, we estimate most others are growing at 3-18% per annum. The unit gross margins we are seeing are in healthy double digit territory.

Finally technology and innovation are central to many of our new propositions. We are increasingly offering a suite of propositions integrated into technology platforms rather than single products. You will see a number of examples of this later. Digital and data capability are crucial. The ability of the divisions to access, incubate and accelerate technology development will be aided by our new unit, Centrica Innovations.

These factors and the capabilities we are developing give us confidence that we will be able to deliver a strong income stream for our investors and on average to net grow Centrica's underlying adjusted operating cash flow over the medium term.

Each division has a five pillar framework. In Consumer, in addition to Energy Supply, the strategic framework is about providing fulfilment services in customers' homes, delivering propositions that give customers peace of mind, and providing the ability for customers to manage the energy in their homes and for home automation. Here we have superimposed our 2016 revenues across the customer needs and focus areas we are addressing, rather than by business unit. Mark Hodges will bring the Consumer framework to life and we will be seeing some exciting examples in the breakout sessions.

Similarly in Business, the framework starts with Energy Supply and then we are targeting the pillars of Energy Wholesale, providing Energy Insights, Optimisation and route to market services and delivering physical solutions direct to the customers operation. Again we have superimposed 2016 revenues and we have some excellent examples to show you in the breakouts. Mark Hanafin will introduce this in a moment.

Before I hand over to Mark and Mark to develop these themes in much more detail, there are two things I would like to cover, our progress in repositioning the asset base to businesses and a brief word on the UK energy market and price cap proposals.

In line with our strategy we have been successfully repositioning and reducing the scale of our E&P and Central Power Generation businesses. In 2015 we announced a £500 million to £1 billion pound disposal programme and despite the significant fall in commodity prices since then, the divestments of our remaining two wind generation assets, GLID and Lincs, our non-core E&P assets in Trinidad and Tobago and Canada and our two large CCGTs in the UK which we announced today, we will have delivered proceeds of over £900 million by the end of 2017.

Following the divestments our E&P business will now be focussed on Europe. We have made good progress in strengthening our E&P business over the last two years with material cost efficiencies delivered, Cygnus coming on-stream and new projects such as Maria and Oda, being sanctioned. We will continue to evaluate all options to strengthen and improve the sustainability of our E&P business, including potential partnerships and joint ventures with other industry participants where there is a good strategic fit.

Regarding the rest of Central Power Generation, we have continued to shift the portfolio to more distributed assets, have converted some sites to peaking plant, our redevelopment of Kings Lynn A and have a number of projects underway to build new gas-fired rapid response generation sites under 49MW, rapid response battery which is one of the largest in Europe. We consider our Nuclear position as a financial investment.

Regarding Centrica Storage, we announced yesterday, that following our extensive well testing programme, because of the age of the asset and well integrity issues, we intend to cease storage operations at the Rough facility and will be seeking appropriate permissions to do so. And to produce the remaining cushion gas before the facility enters decommissioning.

Let me now turn to the UK Energy Supply market and recent proposals to introduce a price cap. We do not believe in interventions through price regulation. Evidence from other countries suggests a cap could lead to reduced competition and choice and potentially higher average prices. However we believe we are competitively well positioned for a price cap and our focus on value through cost efficiency and cost leadership, improving service levels, rewarding loyalty and delivering propositions which customers want is good for all seasons. Although a price cap is undesirable, we will therefore be able to compete effectively. And there is enough flexibility in the Group's uses of cash flow to handle a degree of negative impact on operating cash flow in the short term while we adapt to the new regulatory environment.

As I said earlier, we would target to and believe we can, balance sources and uses of cash flow in 2018 even in the event of a price cap, without materially impacting our ability to invest in the businesses and while continuing to deliver all aspects of our financial framework.

It is too early to know how the outcome of the General Election might impact proposals to intervene in the UK Energy Supply market. We have proposed an alternative path involving ending evergreen contracts and changing the way default tariffs work. We have regular and constructive dialogue with the UK Government and Ofgem and we will continue to engage to ensure that any outcome is in the best interest of our customers and/or stakeholders. And we may find out momentarily in the Queen's Speech what the Government has decided to do, in which case I will comment on it at the end of the day.

So those are the key points at the Group level. In summary, Centrica has a clear purpose and strategy. We have been doing what we said we would and executing against all aspects of this strategy over the last two years. The portfolio will have been fundamentally repositioned by the end of 2017 with a relative shift away from E&P and Central Power Generation towards our customer-facing businesses. Centrica is in a much stronger position given the progress made on cost efficiency and in reducing net debt. And Centrica is capable of delivering customer led growth with the establishment of Consumer and Business divisions and their strategies, our new businesses demonstrating growth with attractive unit margins and our capabilities materially enhanced.

All of these actions give us the confidence in delivering the medium term underlying growth and returns which underpin our shareholder proposition, including delivery of a progressive dividend over time and we have a clear financial framework to guide us.

I will now hand over to Mark Hodges who will take you through the Consumer strategy in a lot more detail before he hands over to Mark Hanafin who will do the same for Business. Jeff will then bring it all together from a financial perspective before I summarise and we start the first question and answer session.

So thank you. I will hand over to Mark and grab a couple of bits of paper. Mark.

Mark Hodges
Chief Executive, Centrica Consumer

Well good morning everybody and thank you Iain. It is great to be with you here this morning. Let me briefly introduce to you the members of the Consumer Management Team. Here today are Nina Bhatia, Managing Director of Connected Home, Sarwjit Sambhi, Managing Director of UK Home, Dave Kirwan, Managing Director of Bord Gáis Energy and Mathew Bateman, Managing Director of UK Field Operations. Manu Asthana and Claire Miles sadly can't be with us today.

In my session today I will cover the key external consumer trends, provide a quick reminder of the progress we have made over the past two years before expanding on our strategy.

Let me start by sharing those key consumer trends we see over the next 10 years. In terms of demographics, the UN estimates that globally there will be 350 million more over 65s by 2030. They require support to live and thrive in their homes. At the same time the wealth and purchasing power of the millennials is set to increase significantly.

Bringing a higher expectation of digital solutions. Technology will become ubiquitous if it isn't already as the world connects. Consumers will adopt and integrate it into all aspects of their lives. There is a clear trend towards mobile closely linked to this is self service, empowering consumers to interact with ease and flexibility. We see a blurring of traditional competitive boundaries as consumers turn to trusted brands and businesses and businesses seek to broaden and deepen their relationships with customers. And we are witnessing an exponential growth in the volume, variety and velocity of data captured, enabling more intimate customer relationships. These trends are seen across all sectors and we believe will continue at pace.

Understanding and satisfying consumer needs is critical to our success. We have around 26 million customer accounts in the Consumer division. Take over 40 million telephone calls a year and support 30 million online transactions a year. So extensive surveys, we hear from millions of consumers in our core markets and globally. So when we talk about consumer needs we do so from a position of knowledge.

Consumers are seeking value for money and solutions, not just products, especially in the home. They desire frictionless service when and how they need it. And the reassurance of trusted brands.

Finally a growing trend is that consumers expect their personal data to be used responsibly and held securely. Increasingly they understand the value of their own data. We believe these trends presents us with a number of opportunities.

Next I would like to just update you on the progress we have made over the past two years. On this slide and a number of other slides that Mark and I will present, we highlight some key facts. We will not talk to every fact, but they are there to give you some additional insight and obviously to refer back to later.

Today we have a material presence in four geographies. The UK, Ireland, the United States and Alberta in Canada. Revenues total £13 billion, operating expenses are £2 billion and our brands are valued at around £4 billion. I will highlight this final figure as it is something we are paying much closer attention to given trusted brands are a key need of consumers. In the last two years we have made significant progress transforming our business. We have improved service levels, reducing complaints and improving net promoter scores. The amount of work to improve service has been and continues to be substantial. Improving customer journeys like our direct debit process for 4.5 million UK customers. Improving intelligent call routing to ensure customers get to the right person to support their needs. Expanding call centre hours, improving training and redesigning our mobile apps, to name but a few of the interventions we have made.

We are realising operational synergies across the Consumer division. We have established a Group Marketing function to manage our brands and improve our return on marketing investment. We are sharing approaches to customer segmentation and proposition development across all of the business units. In the UK the organisational changes we announced last year replicated the structure we have in the US. We have created one customer operations team in the UK dealing with all customer contact and we have combined seven independent field forces into one. These changes have allowed us to reduce cost as part of the Group efficiency programme.

We are also improving our organisational capabilities, hiring from banking, retail, technology, telephony and insurance companies. We are embedding digital and data science, adopting agile methodologies to ensure that we are quicker to market with service improvements and innovation. We have introduced web chat and chat bots into our service mix and they will play an increasingly important role.

Recognising the importance of voice control, we will be launching voice activated account management through Amazon Alexa later this year in the UK. So you can tell there is a lot happening in the business.

Having set the scene, I would now like to move to what you can expect from us in the future. Our focus is squarely on the home, providing services and solutions that meet householders needs. As Iain outlined, we have a five pillar strategic framework, it describes our areas of focus as we seek to increase our presence in the home. We have deliberately stayed close to our current core where we can leverage our strengths and capabilities. You are very familiar with the two pillars on the left of the framework, Energy Supply and Services. These will continue to deliver material cash flows remaining core to our business and demanding a significant amount of our attention. These are the bedrock around which our strategy is formed. However we want to grow revenues from the close adjacencies of peace of mind, home energy management and home automation. In peace of mind, our understanding of insurance from our protection plan and warranties business and the 12 million visits our field teams make to customers homes each year, allows us to really understand risks in the home.

In home energy management, we understand energy use through smart meter data and hive thermostats. This means we can help customers manage their energy use more actively. And in home automation our hive propositions provide customers with a connected home entry point. Within our framework there are some clear and consistent priorities. We will differentiate ourselves by cross-selling, peace of mind home energy management and home automation solutions to our core energy supply and services customers. This will build greater customer intimacy, reduce churn and drive higher customer value.

We are designing attractive bundles that aggregate propositions across pillars. For example we recently trialled, and it was a trial, a UK energy tariff priced at £900 if it was bought with HomeCare cover.

Developing business models that we can replicate gives us the ability to cease opportunities in existing and new geographies. We created Connected Home as a global business unit to ensure international expansion was a priority. Our focus on data means we can use it to personalise our offer and improve services. For example we added a hot water boost capability to the Hive thermostat and app after analysing customer behaviour and feedback.

I will now step through each pillar in turn to describe the market dynamics, the business model and propositions we are adopting to succeed.

In Energy Supply, we believe industry gross margin pulls in our current market will be relatively flat as Iain described. Price will therefore continue to dominate consumer choice. However the market will continue to generate significant cash flows and returns and we believe will remain intensely competitive. For us energy supply will remain core to the broader home offer and a key access point to building relationships with householders. As you know we are a scale player, generating attractive margins and returns and we are heading in the right direction on service. Although as I have said, there is a lot more we can do. Recognising that energy supply will remain competitive, we must innovate. Personalisation is one dimension of this. With British Gas Rewards a key example. In the breakout group later, Sarwjit Sambhi will give you much more detail on the Rewards programme and how we are using data to drive our decisions.

Bundling as I have already explained, will be key to driving greater value, higher customer intimacy and reduce churn.

Value management is an increasingly important approach. We are focused on the value of an individual customer rather than the overall volume. Frictionless customer service and cost efficiency will be particularly important for success in energy supply. In terms of cost we have as I said, already made progress, but I believe we will need to drive significant further cost reductions to maintain an attractive net margin and be price competitive. Increased digitalisation is key. We will put more control in the hands of consumers and as an outcome reduce our cost to serve. As we create a more standardised and scalable energy platform in our current geographies, we are well placed to invest further should any attractive opportunities arise.

I just want to give you some insight into how we think about customer value. Here is an illustration of how our customer base is distributed by value across consumer in energy supply. Across this distribution, customers demonstrate different behaviours, moving up the value curve is linked with higher consumption, a lower likelihood to churn, a lower cost to acquire and a higher propensity to hold multiple products. We are starting to manage customers differently across this distribution in all markets. This view lets us take appropriate actions for each customer segment in an attempt to move them up the value curve.

I would now like to turn to our second pillar, Services, which includes protection plans and service agreements, on demand repair, maintenance and installation. We believe the services market globally will grow at around 4% per annum with the on demand segment growing slightly faster. The market is highly fragmented, particularly in the US with competition largely between local independents. And we believe technology will reduce some aspects of in-home service. And much of the surrounding processes can be digitalised. We have a large, as you know existing business with over £2 billion in revenues. Around 8 million customer accounts and attractive net margins. We also have a field force of around 16,000 engineers and technicians who visit 12 million homes each year and act as ambassadors for our brands. The net promoter scores as you can see, are a great advert for our business.

I believe that our expertise in the area of field management is a distinct competitive advantage. We have deep experience in the core capabilities required to manage field forces of this scale, such as safety, planning, despatch, training and logistics management. Growth will come from offer innovation. Personalisation and modularisation will enable customers to configure products for their needs. We already offer this with the Direct Energy protection plans which let customers configure the product at the appliance level. As with energy, bundling is an opportunity. Mike Midgett, our North America Home Chief Sales and Marketing Officer is with us today and will talk about this more in the Offer Innovation breakout.

Improving the sophistication of our pricing is key, I will explain more about this in a moment. We are also prioritising cost reduction in services through digitalisation and technology adoption. As an example, we are currently trialling video technology with 200 UK engineers who can refer back to a centre of excellence for support on complex fixes, avoiding repeat visits to the home, providing a better service for customers and a significant cost reduction. We plan to roll this out in 2018 in the UK.

I would now like to talk to you about Local Heroes, which we launched nationally on 9 June, a few days ago really. It was developed over the past 12 months, during which we launched an improved version of the proposition and the platform every single week. We estimate that there are over 40 million on demand repair and maintenance and improvement jobs per year in the UK. Our platform matches customers who need work completed in their home with local trades people who have the right skills and availability. Think of the Uber model for gas, electrical and plumbing work in the home. It is an attractive proposition for the customers and we also provide the reassurance of a 12 month British Gas guarantee. Although it is early days, Local Heroes is being well received. The net promoter score over that year of development has been +80 and 60% of the customers we have served are new to brand. These customers of course become prospects for our protection plans and other propositions in our portfolio. Matthew Bateman will talk you through Local Heroes in much more detail later in one of the breakout sessions. And one final point on this innovation. We have designed and built it so that we can launch it into new geographies, it is not just a UK solution.

Now let me talk briefly about our increasing pricing sophistication in the Services pillar. Historically our pricing of protection products was relatively undifferentiated using limited risk factors. Pricing updates were infrequent and we did not make use of demand elasticity. We are moving towards a much more sophisticated pricing capability. In the UK we have introduced new risk factors such as boiler groups and postcodes as well as behavioural ones to better understand risk and price accordingly. This lets us reduce the cross subsidy that existed between lower and higher risk customers which of course results in fairer pricing for all.

Before describing the next three pillars, I just want to introduce our overarching approach. We think about these next three as global opportunities led by Connected Home. We believe in taking a solutions approach, but technology is embedded to support multiple needs across these pillars. So we will talk a lot about the customer solution and not just the underlying technology. We will increasingly focus on recurring revenue models as this reduces the headline customer price and drives greater customer value. I will come back to this.

We passionately believe that quality installation is critical to the customer experience and of course this is an area of expertise for us. Leveraging the scale of our existing business is our first priority, however we will look to develop distribution partnerships in order to scale rapidly and we are talking to partners in telecoms, banking, insurance and energy in over 10 countries right now.

Given our number one position in the UK and the scale we have already achieved, there is an awful lot of interest in partnering with us. These three pillars also share several attractive characteristics. We believe they address clear customer needs and all are expected to grow rapidly. Current margins are attractive and although we expect competition, we do not foresee rapid margin erosion. Although there are many market participants with an install base at the end of May of 650,000 hubs, we believe we are a top ten connected home player globally.

We fully launched in the North America market eight weeks ago and have sold over 20,000 hubs. We are currently advertising in seven North American cities and we are also having some exciting partnership discussions.

One of the questions I am often asked in this space is, why us? Why Centrica? Why will we win? Well we have a number of capabilities that position us well. We have our own technology platform, Honeycomb which is scalable and reliable and currently handles between 2 and 7,000 customer requests per minute. That is nearly 6 million requests a day. It is really important that your systems are reliable in this space. We have a number of proprietary devices so we can design in the functionality that customers want. We support third party integration such as voice integration with Amazon Alexa. And as I have already said, we know the value of good installation and customer support.

In Connected Home, we are ambitious. Whilst there are obvious uncertainties and it is a relatively new market, we believe the business can grow a material revenue stream of around £500 million by 2019 and could break-even as early as 2019. I hope you all share my sense of excitement about Connected Home when you see and hear more about Hive from Nina later during one of the breakouts.

I would now just like to provide you with a little more detail on subscription cash flows and margins. To explain how this works, let's take a look at an example customer view from one of our subscription plans. For one-off device sale, we obviously receive all of the revenues up front, that is the dark grey line. In the subscription model, we bear the upfront cost of the devices and then receive payments on a monthly basis, the blue line. On average we expect a customer on a subscription plan to be cash break-even at 18 months and exceed the cumulative cash flow of a one-off device sale at two years. We expect subscription customers to have a longer tenure and our margin expectations are higher. We can also target the upsale of additional products which are not included in this illustration.

Stepping back from the individual customer view, it is important to recognise that the more subscriptions we sign up, the deeper the cash flow 'J curve' will be.

So now let's move on to those three right pillars underpinned by Connected Home. The Peace of Mind pillar is about providing reassurance to householders that everything in their home is working. This pillar incorporates home insurance, a large and relatively mature market, home security and monitoring, a large and growing market. And remote diagnostics, a small but rapidly growing market.

Disruptive technology is enabling businesses to provide solutions that better meet customer needs at significantly lower cost. Given the variety of markets covered and the opportunity from disruption we expect to face competition from a number of sectors including insurance, security and technology. The propositions within Peace of Mind are highly synergistic with our existing protection plan and home insurance position in the UK, where we have 73,000 customers. In home insurance, just to be clear, our focus is on disrupting this market rather than the large scale acquisition of a standard home insurance book.

In remote diagnostics and home security and monitoring, we have an exciting pipeline of propositions under development. Yesterday we announced the launch of three new core devices. Leak, Camera and the Active Hub. In the third quarter we will launch propositions that meet customer needs using Leak and Camera. A Leak alert plan for detecting and fixing leaks in the home and a home check solution which lets you keep an eye on things in your home when you are away via the camera. These launch actually in the next few weeks.

In the fourth quarter we will launch a proposition incorporating the Hive Active Hub. It has an intelligent audio sensor that can monitor for sounds, such as a smoke alarm or a door bell. The device listens to what is going on in your home and reports it back to you. Now Nina is going to demonstrate all of these new products to you in the breakout session later.

So now let me move onto the fourth pillar, Home Energy Management. We define home energy management as a market comprising insight, efficiency optimisation and solutions for the home. It includes technology such as energy insight platforms, smart thermostats, home batteries, electrical vehicle charging and demand side response. It is a nascent but rapidly growing market which we believe is closely synergistic with energy supply and home automation. Many different players are starting to compete here, ranging from utilities to technology businesses. We believe that customers are keen to engage on energy saving and we aim to support them. Today our capabilities and propositions are most advanced in providing insight to customers. We are leading the rollout as you know, of smart meters in the UK, having installed 4 million now in UK homes which is about 60% of the UK residential total. Smart meters enable us to report back to customers via our interactive insight platforms. Direct Your Energy in North America and My Energy in the UK. These are available to around 5 million customers and I will talk more about this in a moment.

Our Hive thermostat is helping customers improve their energy efficiency. We have now sold more than 550,000 thermostats and this remains a core part of growing our Home Energy Management pillar. In the future we have the opportunity to extend the offer into the broader solutions set I mentioned earlier, but right now we are very focused on insight and thermostats and that broader set of solutions we will only think about if the customer demand is there.

Let me give you an example of what we are doing in energy insight. Direct Your Energy is our North American proposition. It provides the customer with an engaging way of reviewing their energy usage, helping them to be more energy efficient and save money. The functionality is personalised, providing appliance level usage information, forecasting link to the weather outlook and the ability to compare your usage against customers with a similar sized home.

It is also a channel for cross sales as we can use data analytics to identify customer appliances that are showing unexpected energy usage and send them an alert via the platform suggesting a visit from the technician.

I would now like to turn, if I may, to the fifth and final pillar, Home Automation. This includes solutions that automate the home or give customers control of devices such as smart light bulbs, plugs, locks and sensors. The market is experiencing high growth as the number of connected devices in the home increases. It is a market in its own right, but it is also a gateway for connected technology into the home and that is a really important thing to remember. There is a varied competitor set in the market including Wink, SmartThings, Nest and Vivint, to name a few.

We are developing and launching solutions that combine devices and services to help the householder easily set up their home environment. As you can see form the exhibit, we are building scale in this area, having already sold around one million products cumulatively. These devices support propositions such as Welcome Home, our first Hive subscription plan. The plan includes a mix of products, services and software that helps control temperature, lighting and appliances from wherever you are. So a customer can set up their home just as they like it. And this will be part of the demonstration later. It is affordable and simple, starting at £5.99 per month in the UK and $9.99 per month in the US.

Before I summarise, I would just like to return to geographic expansion using our successful entry into the Irish market as an example. Since we entered Ireland in July 2014, as you can see the business has demonstrated strong performance. EBIT grew by 37% last year to €56 million. Customer accounts grew 4% last year and the net promoter score has improved. This is a great return on our investment. So how have we achieved this? We identified as part of the due diligence process that the business had strong capabilities and we were working with likeminded people. Bord Gáis Energy has benefited from Centrica's scale. As an example, at marginal cost the IT platforms and digital customer experience have been enhanced. This speeds up the move to self service and of course can help us reduce costs.

The business has also worked very closely with the UK services team to improve performance. We have launched Hive in the local market and we are now exploring the potential for Local Heroes. This is a great example of many of the things we are looking to do across the Consumer division. And it provides us with valuable learning as we potentially grow into new geographies. Dave Kirwan as I said earlier, the Managing Director of our Irish business is here with us today and you will be able to meet him during the various breaks we have planned.

So let me now summarise by being clear about what you can expect from the Consumer division over the next few years. We will continue to focus on improving the quality of service and drive to much higher levels of customer self service. This will enable us to pursue further significant cost reduction. Energy supply and services will remain at the core of what we do. However as we have previously stated, we are targeting one million Hive hubs installed by the end of 2017. And as I said earlier, we believe Connected Home could break-even from as early as 2019. And although there are lots of uncertainties given the newness of the market, by 2019 we believe revenues from the Connected Home business could be material at around £500 million. And if our growth trajectory was accurate and I really do realise that is a very, very big if. But if it were accurate, we could then expect revenues to get to around £1 billion by 2022 from Connected Home.

So we are a globally focussed Consumer business, the capabilities and models we are building will help us grow internationally with Connected Home in the vanguard. We have achieved a lot in the last two years. You can see from this presentation that there is a lot of activity and momentum, but we are crystal clear on our priorities and I am extremely excited about the opportunities ahead.

I would now like to hand over to Mark Hanafin to talk about the Centrica Business division. Thank you very much.

Mark Hanafin
Chief Executive, Centrica Business

Thank you Mark, lots of very exciting things happening in Centrica Consumer. Good morning. I would like to talk to you about Centrica Business. I will start by introducing the Management Team. Gab Barbaro is the Managing Director of our UK Business. John Schultz is the President of our North American Business, Cassim Mangerah and Jonathan Westby our Co-Managing Directors of our Energy Marketing & Trading business and Jorge Pikunic is the Managing Director of Distributed Energy & Power. They are all here today, and you will meet them and members of their teams, and they are living proof that we have a very interesting blend of Centrica talent and highly capable individuals from non-energy backgrounds.

I will start with the trends we see affecting our markets today. But first an observation from 100 years ago. At the beginning of the 20th century the horse was the preferred technology for motive power. Peak horse was reached in 1920 and by 1928 horse power had all but disappeared. In just eight years there was a profound step change.

Technology and its take-up does not always follow at a steady path. It seems a tipping point needs to be reached to cause real change.

So 100 years later are we facing a tipping point in energy markets? I believe that we are. And it is driven by some clear trends. Firstly, energy efficiency improvements are making a real difference to our customers and vibrant competition from a diverse range of competitors is keeping margins under pressure. We are seeing gas becoming a global commodity, the shipping of LNG all around the world has linked markets together as never before. We are also seeing the megatrends that are influencing all areas of life having a direct impact on the energy sector, such as the Internet of Things, data science and advances in areas like battery technology. These all enable our customers to interact with energy in a way they have never done before. They can identify energy saving opportunities, gain operational insights and be alerted to potential problems with their equipment before they occur.

And finally we are seeing a revolution in a way electricity systems work. Generation is moving from large centralised power stations to smaller distributed facilities. Often this distributed generation is intermittent in nature and as a result options to flex demand and storage solutions are increasing in important.

We are also seeing a consistent set of customer priorities across the UK and the US. Our customers are cost conscious, they want their bills to be as low as possible and they want to increase their efficiency wherever they can. Energy is essential to their operations, so they need to know that their supply is resilient. And they will not suffer any unplanned supply interruption. Energy processes are complex so they want an expert partner to help them understand their energy use, guide them through the complexity and suggest improvements that are relevant to them. And they are increasingly looking for help to comply with regulations on energy efficiency and emissions.

Businesses want to deal with a trusted and credible partner who can deliver on their promises and can leverage their financial strength to help get projects off the ground.

And finally, businesses do not want to be distracted from their main activity. They want their energy needs to be catered for with simple interfaces and a smooth customer journey so that they can focus on the things that really matter to them.

And this leads us to our strategic framework which we have developed to focus on meeting these changing business customer needs and to help our customers create value from the trends we are seeing in the business energy markets.

You will now be familiar with the five pillars and in particular the first two, Energy Supply and Wholesale Energy. These are our two core pillars today. Although we have recently been building the capability to participate in the other three; Energy Insight, Energy Optimisation and Energy Solutions. We think these five pillars are the right elements, they cover the full spectrum of energy products, propositions and services for business customers.

We have also deliberately excluded some areas from our focus because we did not have advantaged solutions to offer, such as installation and maintenance of building management systems, fabric maintenance and building construction. Our target customers are businesses who want to gain insight into their energy use or operations and those with an interest in distributed energy resources.

Some of our customers need the service of only one pillar, others are already buying products from several and there are many opportunities to cross sell products. For example, our energy insights product allows us to change the dynamic of the conversation with the customer, enabling cross sell from our optimisation and solutions pillars.

I will shortly cover the strategic framework contents in more detail as I describe our business approach in each of the five areas.

Centrica Business has been created to focus on the business customer and encompasses all of these pillars, bringing all of our business facing units together is already creating value. For example our UK Business is assessing how the North American energy portfolio product could be used in the UK. And our software development skills in Panoramic Power are being deployed to develop new applications such as demand response tools. We will be demonstrating these and other examples of exciting new products and applications in the breakout sessions, it is going to be great.

Our ultimate vision is to create a single portal, accessing a cloud based integrated solutions platform which addresses all five pillars of our customer proposition. The integrated platform will consist of a whole range of applications including proprietary products from Centrica and third party applications. These apps will link to a customer's energy assets to interrogate data but will also be able to control operations. All will be able to be configured for the customer to suit their needs and they will be able to interact with the output using mobile or desktop devices. The applications will be supported by a set of common services developed and configured by Centrica.

This will allow customers to access our full suite of products and services. It will also allow customers to see how the addition of new Centrica products and services impact their business using their own data on this platform in 'what if' scenarios.

Having set the scene, let's explore each of our pillars in turn, starting with Energy Supply. The Business energy supply markets in the UK and North America are large, but market growth is expected to be relatively flat as a result of energy efficiency and competitive pressure. However, we have growth opportunities by increasing market share in the UK and expanding in North America through targeting customers in those deregulated states where we currently only have a small footprint.

Before I go on to talk about our energy supply business model I want to tell you a little bit more about our North American energy supply business. An area which you may be less familiar with than the UK. Many states and Canadian provinces allow retail choice for businesses, some for both power and gas and some for gas only. The legacy distribution company remains the default supplier but switching rates away from this default are high, on average 70% for I&C customers. Retail suppliers are free to offer a variety of energy products, technologies and services to customers, whereas the default supplier is limited to a price regulated variable product. Many areas are served with multiple gas pipeline interconnections. The volatility of price spreads across pipelines creates significant optionality. We have a large portfolio of pipeline capacity where we own the rights to move gas between multiple locations. This allows us to create value from optimising these positions as we meet our customers' gas supply needs.

In both gas and power we combine a diverse range of supply positions and control of asset positions with deep customer supply relationships to create value. We are the second largest supplier by market share in North America serving 240,000 businesses across 600,000 sites. We have a very strong position in the US North-East and see opportunity to apply our model to grow organically in new regions and potentially through bolt-on acquisitions.

Now let's return to the Energy Supply pillar which covers both North America and the UK. With a combined annual turnover of nearly £10 billion, our UK and North American business remains fundamental to the success of Centrica Business. In addition to earning a margin from supplying energy, additional revenue is generated in North America from optimising our pipeline and contractual asset positions. Our strategy is to grow these businesses by building new propositions such as a fully digital experience for our business customers and pursuing active retention strategies. We tailor our approach so that it is relevant for different segments and this includes differentiating the appropriate service level for customers of different value.

Brokers are a key part of this market in both North America and the UK and we are building and strengthening our relationships with the key players. We are leveraging our business model to expand into North American states and provinces where our footprint is small.

And finally, close collaboration with our trading business will open up new ways in which we can serve our business customers with innovative products that meet their changing needs.

Our Wholesale Energy pillar focuses on trading and providing a route to market for our business counter-parties. Our activities here range over three areas; our internal portfolio, serving external customers and trading on our own account. Internally we are a trading partner and face to the market for our own portfolio, our supply of businesses and generating assets. We provide a route to the commodity markets for external customers through power purchase agreements and plant optimisation. We optimise gas pipeline capacity and also provide gas supplies to municipalities and utilities.

And finally, we are a trading organisation on our own account, trading the full range of energy commodities and risk management products.

We aim to grow our wholesale business in three key areas. Firstly providing route to market services for independent generators and business customers, as the ownership of generation becomes more diverse and distributed, the demand increases for a trading partner that enables simple access to liquid markets. Building on the Neas Platform we will expand in Europe helping our customers manage risk by using our skills in pricing and forecasting to provide hedging and optimisation strategies. We already have about 10GW of customer assets under management in this area and we generate an income by charging management fees, sharing the optimisation margin with our customers and trading around the flows.

Secondly, we aim to expand our LNG business by adding to our portfolio of gas contracts. Our business is built on contracts, some of which go back decades. The strategy of building a web of contracts is sound even though some may be out of the money in some years. Our capability in this area and the build out of a diverse web of positions will allow us to extract value from the optionality inherent in these products.

Thirdly we see opportunities to expand our commodity trading business internationally, EM&T, with its asset light model has a position in the middle of the energy value chain which allows it to be well informed and to capitalise on emerging trends. Here we make money from structured transactions and proprietary positions based on our market insights.

One of the areas you will hear more about later today is our North American energy portfolio product. This portal allows our business customers to procure energy in a proactive way moving away from the traditional fixed price contracts. Ultra-Poly Corporation is a great example of a customer that has seen significant benefits from making the switch to our proactive energy portfolio product. Ultra-Poly are also a customer of our optimisation products, making significant savings by enrolling in programmes to reduce their demand when asked.

I will now turn to our three newer pillars. You may remember that in 2015 we shared our distributed energy strategy with you for the first time and outlined the capabilities needed. Since then we have developed our business and enhanced our capabilities with a number of targeted acquisitions. Panoramic, Neas and ENER-G, all of which are performing well. The gaps we had have been addressed and stronger capabilities have been built in all areas. As we grow in new markets, additional execution capacity may be needed to be acquired to allow us to be able to deploy our customer propositions in these new markets.

The capabilities already built have given us a strong platform for growth. In 2016 these last three pillars generated revenue of £161 million and we are targeting to deliver around £1 billion of revenue per annum by 2022.

Let me now talk you through the activities we are going to take forward to deliver this scale of growth, starting with our third pillar, Energy Insight. This pillar is about giving our customers insight into their energy resources, enabling them to use them more efficiently and maximise their value. The Internet of Things and Big Data unlocking new markets in energy. Couple this with machine learning capabilities and data can deliver real value helping to improve operations and the profits of our customers.

The business energy management system market is increasing at an 18% growth rate and it is expected to reach £10 billion by 2025. Within this we will focus on the advanced analytics portion of the market and see potential for international growth through sales partners and we already have a presence in 30 countries using this strategy. Our proprietary sensors created by Panoramic Power can be quickly and easily fitted to collect device level data. This data is turned into actionable insights but can be delivered through alerts and reports to mobile and desktop devices.

We provide insights not only into energy use, but also operations and maintenance. For example the data can highlight process anomalies that can be used to take maintenance actions that are preventative rather than reactive, solving problems before they happen. We have a real advantage here, our sensors are wireless, making them very easy to install and we have developed the machine learning capabilities to allow us to automate customer reports and alerts.

Energy insights enhance our customer relationships. By having access to device level energy use data we are able to accurately advise customers on actions that can be taken to minimise cost, maximise value from their energy resources. And this includes the provision of new energy infrastructure.

Our commercial model for our sensors is based on a subscription model and we are seeing strong growth in deployment of the sensors. Gross margins on sales are healthy and over time this part of our offer will be profitable in its own right.

Energy insights are a key tool for building trust and cross selling products from our other pillars.

One of the areas you will see more of later today is our proprietary panoramic product. By enabling our customers to gain deep understanding of their energy use we can unlock energy efficiency opportunities, help them improve productivity and give them powerful diagnostic insights.

As an example, Cemex, one of the world's largest building materials suppliers, lacked real time visibility of energy use. We installed more than 60 sensors around one of their sites in less than five hours. These things are really easy to fit, and all without interrupting production. The data from the sensors quickly highlighted an inefficient conveyor motor and taking action to correct this increased productivity by 20%. They were also able to identify assets that were running when the plant was off enabling energy efficiency actions to be taken. This is one of many examples of customers of ours who have realised dramatic results by gaining a deeper understanding of their energy use.

And now for our fourth pillar, Energy Optimisation. Intermittent renewables are playing an increasing role in electricity supply – integrating them into the electricity system has consequences in terms of an increased requirement for capacity and flexibility provision. These services can be provided by traditional generation, but there is an increasing opportunity for energy resources on customer premises and demand response to play their part.

So this flexibility opportunity is valuable for both merchant generation and behind the meter energy resources. And this is not just happening here, but in markets all around the world. We estimate that the opportunity for customer assets and demand side response will be in the market of around £6 billion by 2025. The competitor set in this pillar consists mainly of focused specialists. You have to know your way around the complexity of these markets to be able to unlock the value here. Something we are well placed to do.

In Energy Optimisation our focus is on remotely optimising a customer's energy resources to get maximum value from new ancillary and energy markets as well as reducing costs. Revenue streams accessed include the balancing, capacity and frequency markets and transmissions cost management. And we expect that in the future these markets will develop further to recognise the value that flexibility needs to bring to the system. Here we are using the expertise developed running our own and hundreds of third party assets to match a customer's energy resources to the best available revenue opportunities from the markets.

This is an evolving market. Our strategy is to develop products that change as the markets change and to capture value from these flexibility markets. We aim to use innovative commercial models that make it easier for the customer to participate and we will use our trading capabilities in order to capture value for them and we will provide flexibility services to the system using both customer assets and our own assets. The commercial model is based on revenues and savings being split with the customer.

One of the areas you will see more of later today is our Neas Optimisation Platform. Centrica has around 10GW of assets under management across Scandinavia, Germany and the UK. In the case we describe here, our client was building a portfolio of gas peaking plants. They wanted to be active in the short term power market and to provide services to the Grid. Our Neas Direct platform now acts as the client's portfolio management and route to market system. Their assets are despatched whenever market prices are attractive using our trading platform and their portfolio is optimised too using the platform's capability to forecast and to trade in today ahead and intra-day markets.

And now to the fifth pillar, Energy Solutions. Here we provide a design, construction, project management and O&M service for customers who want to install new energy resources or maintain those they already have. This is a large market, growing to about £80 billion by 2025. Demand for distributed energy resources are increasing in both developed and emerging markets. This is a complex area. It is important to get the design right, the sales process can be long. And safe installation requires expert project management. This complexity creates challenges but also barriers to entry. But we have the right expertise to deliver. There is a wide competitor set in this area from utilities, equipment manufacturers, facilities managers and specialists. Their challenge is in pulling a whole project together so that it becomes a solution for the customer rather than just an install.

Our proposition is to provide a 'one stop shop' for a variety of energy infrastructure products such as CHP, solar, batteries or backup generators. We provide advice, design, construction, project management and O&M for our customers energy needs. Our products can be sold on a standalone basis or combined to maximise returns, increase site resilience and reduce CO2. And as we grow this business, we are generating greater expertise in dealing with vertical sectors such as healthcare, food and beverage, retail and leisure.

Customer purchasing options include turnkey products, shared income and long-term operations and maintenance. We have good commercial and technical capabilities and through our optimisation and trading services we can link technology to revenue streams that create value for our customers.

Our strategy is to provide an end to end infrastructure solution for the customer from design right the way through to installation and maintenance. Our customers tell us that they value this breadth of expertise and it is difficult to find. We offer financing models and are moving towards selling a service such as resilience rather than isolated products.

Our solutions products are not proprietary, we are not wedded to any particular technology which allows us to be customer led not product led. The business model is to create value through both initial installation margins and subsequent O&M services. All of these products will be incorporated into our integrated solutions platform where the customer can manage all of their energy resources in one place through our unique single customer portal.

One of the areas you will hear more of later today is our CHP product. We set out a couple of case studies here. For Cathedral Village, a Philadelphia based retirement community, ENER-G completed a renovation project to upgrade its energy infrastructure at its 40 acre campus. A 265kw CHP lighting upgrade and HVAC replacements are expected to reduce the facilities carbon footprint by about 350 metric tonnes per year. The energy service agreement allows the facility to realise the benefit of the upgrades without the capital burden typically associated with such endeavours.

In Italy, ENER-G has installed a CHP system at Coca-Cola's Marcianese production facility and the system is reducing the carbon footprint by 15% and saving 40% on energy costs. You will hear more about Ener-G in the breakout sessions later.

We believe we have the right strategy and a solid base of capabilities to win in this market. Some existing, and some developing. For example our battery storage project at Roosecote. Our customer base and experience at providing energy solutions in the UK with a large distributed workforce gives us an advantage. Innovative propositions are being rolled out that are based around customer needs and continually improving their experience when dealing with us. And we are a credible long-term partner with the ability to provide financing solutions if our customers require them. Our global footprint is already extensive with a presence in 30 countries and operations in 9. And we are intent on building from this base.

So what can you expect from Centrica Business in the next few years? In energy supply we will grow our profitability focusing on new propositions and providing great customer service. In Wholesale Energy we will expand the footprint of our growing route to market services, LNG and trading businesses. And in our new Distributed Energy business we will be working hard to make our propositions effective so that we can deliver growth in revenue to around a billion pounds in the next five years and grow our customer numbers to around 20,000. We are making good progress and with this momentum we expect to break-even in our new Distributed Energy business as early as 2019.

So in conclusion, the market trends are clear and there is a large global opportunity. Centrica Business is well positioned strategically and we have some unique capabilities and are rapidly building others. The growth potential is significant and we are intent on capturing it.

Thank you, and I will now hand over to Jeff.

Jeff Bell
Group Chief Financial Officer

Thank you Mark and good morning everyone. You have heard a lot this morning about the Group and additional detail around our plans for the Consumer and Business divisions. I would now like to put what you have heard into a Group financial perspective.

As a reminder, here is the financial framework we set out in 2015. You will notice that I have resisted the siren call of the recent Group trend of my colleagues to have vertical pillar frameworks. So we will, as is typical in finance, stick with the tried and trusted horizontal 6 pillar or 6 horizontal line framework. It provides a clear set of financial parameters that the Group operates under. Linking cash flow generation, reinvestment in the business and cost efficiency with the desired outputs of a progressive dividend, a strong investment grade credit rating and returns in excess of the Group's cost of capital.

This framework has been tested against a wide range of outcomes and as we indicated in February at our 2016 Preliminary Results, we expect to achieve all elements of the framework by the end of this year, assuming the existing portfolio of businesses and the current environment.

I would like to now move into more detail starting with our sources and uses of cash flow. We have been and remain focused on improving the financial resilience of the Group. As you can see from the chart, our sources and uses of cash flow have been more than balanced over the past two years, having been out of balance in 2014. In total net debt has come down by £1.7 billion since the start of 2015. This predominantly reflects the actions we have taken to reduce capital expenditure, improve working capital and lower costs. And the net impact of the 2016 equity placing.

In 2017, with our target of over £2 billion of adjusted operating cash flow, and disposal proceeds from the Lincs Wind farm, the Canadian E&P assets and the Langage and Humber CCGTs which we announced this morning, we expect net debt to be in the range of £2.5 to £3 billion by the end of 2017. We would also have delivered just over £900 million of disposals since July 2015, towards the top end of the £500 million to a £1 billion pound target range of disposals we set out at that time and mentioned earlier. This level of net debt we see as a sustainable baseline with the existing set of businesses and should deliver financial metrics consistent with the strong investment grade credit ratings we have targeted as part of the financial framework.

Beyond 2017 sources and uses of cash flow are broadly balanced and the balance sheet should no longer require significant additional net cash flow providing the potential option to invest further behind the growth elements of our strategy.

With respect to investment, we said in 2015 that investment would be limited to £1 billion in both 2016 and 2017 as we rebuilt our balance sheet strength. This limit was comprised of £400-600 million in Exploration & Production, enough to maintain our assets and bring sufficient reserves into production to sustain the 40-50 million barrels of oil equivalent per annum range we are targeting for the business. And £200-300 million of organic capital expenditure across the rest of the Group, enough to maintain and improve our downstream IT systems and keep our power and storage assets safe and efficient. The remaining £200-300 per annum of the £1 billion limit was earmarked for investment and growth, either organic capital expenditure or small acquisitions of £100 million or less to build capability and capacity across all the pillars of the Consumer and Business strategic frameworks.

2016 capital investment was actually below £900 million, albeit before the material acquisitions of ENER-G Cogen and Neas. As I mentioned on the previous slide, there is flexibility to increase investment beyond this £1 billion level providing investment remains within our financial framework parameter of no more than 70% of adjusted operating cash flow, represented by the green bar on the slide you see. However we will assess our capacity to undertake additional investment in the context of the parameters of the financial framework and our assessment of the potential upsides and downsides to our operating cash flow delivery. Any additional potential investment increase would be targeted at the growth activities Mark and Mark have outlined.

Specifically on growth investment, we said in 2015 we would reallocate £1.5 billion from our E&P and Central Power Generation businesses to our customer-facing businesses of Energy Supply, Services, Connected Home, Distributed Energy & Power and Energy Marketing & Trading over the five year period between 2015 and 2020. Our estimated split of those areas in which we would invest can be seen on the chart on the left.

The change in capital allocation is well underway. E&P expenditure has reduced from around £800 million in 2015 to within our targeted £400-600 million range. As you heard from Iain, in 2016 we spent £450 million in the growth businesses with an acceleration of investment including the two targeted material acquisitions of Neas and ENER-G Cogen. Both are very good examples of acquisitions that have a strong strategic fit, added significant capability and are delivering robust financial returns, with Neas in particular performing extremely well financially.

From 2017 onwards we expect growth investment to be around £250-300 million per year out to 2020. The actual figure year by year will depend on factors such as new market entry, or new product launches in areas like Connected Home and Distributed Energy & Power. And also any small acquisition opportunities. We already indicated in February there would be £100 million of incremental revenue investment in 2017. In activities such as launching Hive in North America and the move towards subscription services. This investment is ahead of revenue growth and as you heard in the Consumer and Business presentations, is one of the drivers of the ‘J curve’ that will impact profit and cash flow in businesses like Connected Home and Distributed Energy & Power in the near term. However unit gross margins and profitability on sales has been good.

Finally let me turn to cash flow growth. On the left of the chart we detail 2015 adjusted operating cash flow as published in the Strategic Review in July 2015. And then the rebased 2015 number as published in the Preliminary Results in February. The reduction predominantly reflects lower commodity prices than the ‘70/50/50’ price set environment we assumed at the time of the Strategic Review. We said that by 2020 we expected Energy Supply and E&P cash flows to be broadly similar with their level in 2015. In Energy Supply, both residential and business, we said this flat cash flow profile would be delivered despite continuing consumption decline and competitive pressures in the UK with cost efficiencies across all geographies and growth in North America and Ireland. And as you heard from Mark and Mark, we do see potential opportunity for growth.

This remains a valid assumption, although there is uncertainty of course surrounding the political environment in the UK. But as we have outlined previously, energy supply in Consumer and Business remains an investable area should opportunities with attractive financial returns and complementary business models, present themselves.

E&P will continue to be a significant contributor to operating cash flow even given its smaller scale with new high quality production coming on stream and lower costs, resulting in a higher return on capital. And we remain committed to exploring all avenues of making the business more financially sustainable. We continue to believe that most of the growth will come from Services, Connected Home, Distributed Energy & Power and Energy Marketing & Trading.

Essentially the right hand four pillars from each of the Consumer and Business strategic frameworks and represented by the green area at the top of the bars. These pillars have strong underlying market growth rates, significantly higher unit gross margins and are areas in which we have competitive advantage and/or we are building real capability and capacity.

While revenue investment to build scale and a desire where possible to create enduring revenue streams through subscription models may impact near term earnings growth. We forecast areas like Connected Home and Distributed Energy & Power will be material businesses in 2020. We are targeting both, as you have heard, to be £1 billion pound revenue businesses within five years and to be operating profit break-even by as early as 2019, with a strong profit and cash flow generating trajectory.

And new customer propositions like Local Heroes in Consumer Services and route to market services and expanding trading opportunity in Business’s Wholesale Energy, provide incremental gross margin potential for both pillars.

Underpinning the Group’s operating cash flow profile particularly in the near term will be continued efficiency improvements on which we have made a good start as evidence in 2016 and further working capital initiatives. As a result we remain confident in our ability to deliver a 3-5% annual underlying adjusted operating cash flow growth target for 2020. Effectively £300-600 million of incremental cash flow versus the 2015 baseline.

We made a good start in 2016, where underlying adjusted operating cash flow growth was 14%. Although we would expect this to normalise into the 3-5% range over time.

And finally as outlined in our financial framework and as we indicated in February at our Preliminary Results announcement, in the prevailing environment we would expect to restore our progressive dividend linked to the growth and underlying adjusted operating cash flow once a sustainable level of net debt in the range of £2.5-3.0 billion, which we continue to expect to achieve by the end of 2017.

That summarises where the Group expects to be financially and I would like to now hand back to Iain.

Iain Conn
Group Chief Executive

Well thanks Jeff and just to point out to all of you that the slides that we showed today have not yet been updated for the divestment of the two power stations that we announced this morning. So the bar on Jeff's sources and uses of cash that shows the divestment proceeds obviously for 2017 is going to go up. Just wanted to clarity that. That gives you some sense that we did not actually expect that this transaction was necessarily going to happen in the small hours of this morning. So thank you Jeff.

Earlier I laid out what we wanted you to take out of today and hopefully in the first part of the morning, what you have heard from us will have given you additional insight into our strategy and the potential we have to grow. And you will see more evidence of our capabilities and technology in the breakout sessions that follow.

So let me summarise before we move to questions. Centrica has a clear purpose and strategy as laid out in 2015. It plays to our strengths and we have been delivering against all aspects of this strategy over the last two years. The portfolio has been fundamentally repositioned with a relative shift away from E&P and Central Power Generation towards our customer-facing businesses. We are much stronger given the progress made on cost efficiency and reducing net debt. Centrica is capable of delivering customer led growth and has clear and targeted strategic frameworks within the Consumer and Business divisions built upon skills and capabilities we have addressing both our existing businesses and some important new areas.

The new business areas we are pursuing are demonstrating growth with attractive unit margins. Our capabilities are materially enhanced. The environment is challenging today and the competition intense. However we believe we can manage the risks and through all of these actions we remain confident in delivering the medium term underlying growth and returns which underpin our shareholder proposition. And as I said earlier, we have a clear financial framework and dividend policy to guide us. We have made considerable progress in implementing our strategy and you will have the opportunity to see further real demonstration of our capabilities later in the breakout sessions.

So with that I would like to invite Mark, Mark and Jeff to join me on stage to answer your questions. We have set aside 30 minutes for this part of the day. I think marginally less but we have also set aside some time at the end of the day after the breakout sessions to give you the opportunity to ask any outstanding questions and to continue our discussion. So thank you very much.

Questions and Answers

Iain Conn

As usual the way we are going to do this is if you would like to ask a question put your hand up and obviously we will get a roving microphone to you. And please identify yourself before asking your question, and we will see how we go and we will spread it around the room.

Q1. Gus Hochschild, BEIS

Gus Hochschild, two questions if I may please. The first rather prosaic in terms of what you estimate the decommission costs of Rough. The next question is rather more left field. During the recent brouhaha around Qatar for want of a better expression, did you see any evidence of disruption to any of the energy supply?

Answer: Iain Conn

Well briefly, well on the second part first, on Qatar, we did not see any evidence of disruption. I think it is very important to recognise that the energy market is global and very fungible but we did not see any disruption and I think that worries about that are probably a little bit oversold.

And then on the decommissioning of Rough, Jeff do you want to answer that?

Answer: Jeff Bell

Yes, so within our accounts the asset itself had around £400 million of asset in value, but around £300 million NPV or discounted decommissioning liability. As we announced yesterday though, with the likely acceleration of that, that would probably go up in the sense at least on a time value of money basis. We will obviously be doing more work on the decommissioning liability and refreshing that with that announcement.

Gus Hochschild

Thank you.

Q2. Lawson Steele, Berenberg

Hi, Lawson Steele from Berenberg. A lot of these solutions save customers energy and I wonder what sort of impact you envisage this will have on your traditional retail business? Are these new solutions opportunities just a way to offset the demand pressures there?

Answer: Iain Conn

Can I start with a general comment and draw attention to a couple of things we said and then ask Mark and Mark to elaborate for each of the Consumer and Business sectors. First of all we are seeing people use less energy per unit GDP in the established world and it is coming from a lot of different factors and we are seeing things like smart metering and/or Hive are allowing people to save 3-5% on their bills.

But it will probably asymptote to some place where it will be difficult to keep reducing, but obviously technology has a role to play.

But the important point I want to make about both divisions is that this strategy allows us to pursue gross margin that is not associated with energy, to pursue customers to whom we don't sell energy. And we are selling Hive to EDF, and our other competitors, customers in the UK and also we are selling it online and we are going to be able to sell a number of these propositions in Business and Consumer to customers in new markets where we don't sell energy. So although yes there is a mechanism for partly offsetting in the energy supply pillar, think about the strategy as allowing us to scale.

And Mark and Mark detailed observations?

Answer: Mark Hodges
Yeah, maybe not completely detailed, but I think the trend is inexorable so the technology is there, the consumers can save money. So it seems to me to make complete sense for us to help them do that whether it be through the in site platforms, the provision of the technology.

I think the trade-off for us and the benefit for us is then in the quality of the relationship that we have. If we don't do that for the consumer somebody else will. If we are providing that service, then if everything else that I described in terms of the quality of the service that goes around it, being price competitive that would go round the packages in place, you give reasons for that consumer to stay with you for longer and you give reasons for that consumer to think about you for other aspects of your strategy as Iain described. So the other pillars.

So for me it makes complete sense not to try and buck the trend but try and actually be part of it.

Further question
I get that but if I could just follow-up, I get that you have to be part of it and that there is a future and therefore you are well placed to take part in that. But nevertheless there is a negative impact on your existing retail business. So to what extent to kind of repeat the question, do you see this as a different growth beyond that versus just having to actually tread water?

Answer: Mark Hodges
Well my view is we aspire to have additional growth beyond that so it will help us I think, things like I mentioned tenure will help reducing churn, retaining the customer relationships longer will help us retain the gross margin for longer. I don't see that as treading water, I see that as actually helping us offset the impacts and grow.

Answer: Mark Hanafin
Just quickly on the Business side, I really don't see this as a defensive move as we showed Business supply revenues are probably flattish anyway. I see it much more as responding to the changing needs of the customer. So if you are a business customer, your thought of I think in the future less as a load, you have a requirement for energy and in the future you are going to think much more about having energy resources. So you have got maybe a CHP unit, backup generation, battery storage, LED lighting that can be turned up and down. So rather than just an if you like, demand position, you can actually participate in all of these other markets. So it is actually the way the market is going into the where the customer needs are going and where we are fitting that.

Further answer: Iain Conn

And just again one more general comment which I think is quite important to remember. If we were just developing propositions for the geographies that we are in, in the products that we are in, and those markets in energy supply are generally shrinking to your point. You don't need to be a particularly highly paid analyst to realise that that is going to be quite difficult to grow. But actually if you do develop propositions that are applicable to customer groups and customer value in other geographies and in other verticals, suddenly you can apply it both to your base where you have your strength and we must remember we start from a core in energy supply and services with a very significant predominance in the UK and North America, you can then start to see how you can grow.

And the second thing I want to underscore there is the acquisitions we made over the last couple of years which you will see lots of evidence of in the breakouts. They were really crucial to the skills we needed to be able to do that.

Q3. Mark Freshney, Credit Suisse

Thank you, its Mark Freshney from Credit Suisse, I have two questions. Firstly on your expectations now versus two years ago on profitability. I believe two years ago you spoke about DE&P and Connected Homes reaching £200-250 million EBIT at the end of a five year programme. Now you are talking about them being breakeven in 2019, and I think on the chart you presented Jeff you show those businesses, the latest view being very similar to that of the Strategic Review. So how do we square that circle? And I guess my point here is, is it taking you a lot longer to grow these businesses than you expected?

And my second question is on the net debt. You are very focused on getting net debt to £2.5-3.0 billion, but the other big financial liability which is the pension deficit just keeps going up. Your latest actuarial valuation is not due until April 2018 but you know it is coming and you know it is likely to increase, so how does that tie in to the balance sheet?

Answer: Iain Conn

So Mark, thank you, if we were in danger of leaving Planet Earth, for bringing us back to it in multiple ways! But let me start with the first part and then I am going to ask Jeff to cover the net debt, pension deficit points and the chart that you showed Jeff.

First of all, what we did say in 2015 was that one of these businesses would be material to the Group by 2020, and that was our estimate at the time, Distributed Energy & Power, and one would be becoming material to the Group by 2020 which would be Connected Home. A number of things have moved around as we have got into execution clearly. But those expectations that we set are still the case. As Mark Hodges said, the uncertainty envelope around the growth on Connected Home is quite significant. But both indicated that we ought to be able to see a £1 billion in revenue by 2022 from each of these businesses. And just to put that in context. If you take the numbers that were on the slides that they showed and you add them up, what that means is in Connected Homes, three pillars, we estimate a global revenue of £350 billion by 2025, admittedly a slightly different date. So a £1 billion for us would imply something over 0.3% market share globally by 2022. And the same for Business, for DE&P where we indicated a market scale I think of £96 billion revenue by 2025 and a £1 billion therefore by 2022 would indicate something in the region of a 1%, slightly more, market share. We think both of those global shares ought to be potentially, should be achievable.

To the heart of your question, unit gross margins of course and we have indicated for the first time that the unit gross margins that we are seeing are very healthy in some cases admittedly for very proprietary insight products, 40-60% on the very lower revenue scale business, but many of them are actually in the 20-40% range. So there is a lot of uncertainty around this. I think our original expectations are still correct that we think one of these will becoming material and one will be material. We haven't made in to all of this on the slides, beyond the numbers Jeff showed. What we might do in terms of any acquisitions we might make beyond small ones, and of course inorganic growth is also part of the equation. So sorry for the long answer, but I thought it was quite important to set that in context for everybody.

Net debt and pensions, Jeff?

Answer: Jeff Bell
Yes so I make a couple of observations to that point. The first is versus the end of 2016 from an accounting perspective, the input parameters around the IAS19 pension deficit discount rates inflation rates are sort of broadly similar to where they were. So we are not expecting a big change in that when we publish the half year results and therefore that continues to be our view like many in the market, best estimate of where we will be at least in the near future.

When it comes to the actual valuation in the triennial deficit valuation, which is due at the end of March next year, we still have to have the discussion with the Pension Trustees. Obviously just using the input of discount rates and inflation rates, those will create some upward pressure on the deficit level on that basis versus March 31 2015, however we have been seeing good asset performance since then so clearly we will have to see where the asset values are by the time we get there. And I think as I have said previously, certainly said in February, the sources of the usage of cash flow that we have has the ability to accommodate if required higher pension deficit payments along similar structures and lines that we negotiated last time, if that is what it came to. And obviously we would stand completely behind our pension liabilities, but we don't see that being a fundamental game changer in terms of the sources and uses of cash going forward.

Answer: Iain Conn
And Mark I forgot to say one other thing, which is drawing attention to what Mark Hodges said. Clearly if we deliver the £250 million of efficiencies this year on top of last year's £384 million and you add in a little bit of what we did in the second half of 2015, we are basically looking at having delivered the efficiency programme three years early and a piece of the equation Mark alluded to is clearly we are going to have to decide what further opportunity there is for us to transform the cost base of the business over time and we will update you as I indicated in February about that and that is also a source of growth in the near term.

Q4. Jenny Ping, Citi
Hi thanks it is Jenny Ping from Citi. Three questions please. Firstly clearly expansion whether it is M&A or organic is back on the agenda across some of the new businesses. Can you talk us through a bit about the geographies that you have looked at? Are we looking at the existing US/UK areas or are we looking at a more diverse geography expansion? Obviously you have been also linked to the potential bid for home services in the papers recently, whether some of the larger acquisitions that you talk about, that you say needs support of balance sheet, whether you can elaborate a bit more on that?

And then just in terms of the confidence you seem to have on the back of any price cap intervention, you say that your net debt will still, sorry your credit ratios will still be robust. What sort of conversations have you had with the credit agencies on that?

And every lastly on the Peace of Mind propositions, have you taken into account of recent fall in disposable household income and whether that is all factored into your projections?

Answer: Iain Conn
Thank you Jenny. Huge number of areas to cover there. One observation to make. We are going to going to run out of time on the Q&A in this section. In which case keep them, you may have some of them answered during the breakouts, but then we will come back and continue the conversation at the end of the day. If I deal with the first two and then ask Jeff, and keep our answers as brief as we can, credit and Mark Hodges on Peace of Mind.

Geographic expansion, we have already expanded geographically through our acquisitions. So Denmark, Sweden, Italy, Germany, Hungary, Israel and the Nordics are all part of where we are serving customers now and have capability on the ground. So the first thing to say is we will leverage those positions obviously to keep growing in those markets. And then secondly we are now serving customers across the world. It is a tiny example, but one of our combined heat and power units is now installed in Hokkaido in Japan and we monitor it and serve the customer and support them from Manchester. So this is going to become, don’t think of it as just country boundaries, this is going to become broadly about customer segments which is why the whole strategy is scalable, fungible and targeting individual customer segments.

On the point about home service, we never comment about market rumours and about rumours about M&A. What I can say to you about the balance sheet expansion I referenced, clearly we have got a couple of sources of that if we ever did something large. And just to be clear we are not sort of running around with a long list of large things to do. But clearly, firstly we have got £2 billion of cash on the balance sheet contributing to the lowering of net debt, because we can’t restructure the gross debt quickly. If the right thing came along, obviously we could look at that as a source of expansion on the balance sheet, it would have to have the right characteristics and Jeff will talk about the credit metrics. And secondly of course we could approach our shareholders. But we don’t have any current plans to do that right now. I just want to reassure you of that. But it is important for you to understand that acquisitions clearly with this strategy should be and I hope you would want them to be, things that we would consider. And I think we have started to prove how we can acquire things that fit the strategy and execute well on them. So credit?

Answer: Jeff Bell
Sure, I think the first thing I would say is we have regular and ongoing conversations with the rating agencies. And as recently announced just last week, a reaffirmation of our BBB+ rating with negative outlook. And UK political environment as one of the factors they are considering. But I think as we have said previously, the way the business is set up and the way our overall good cash flows are set up, in anything other than the most extreme circumstances, we continue to believe we will have financial metrics consistent with those credit ratings metrics. So and then our representatives of both of the ratings agencies are here today so you have a chance to ask them directly. I will let them talk to that.

Iain Conn
Thanks Jeff, and Mark, Peace of Mind

Answer: Mark Hodges
So a very quick answer is yes, factored in but do think of Peace of Mind as global, Connected Home led, it is not just UK, US. I talked about the kind of sectors we were talking to from a partnering perspective. That applies to this pillar. I mentioned that those conversations were taking place across 10 geographies. A lot of those are in the EU block so it is, yes we have factored it in, but as a pillar it is very much, we are thinking globally.

Q5. Fraser McLaren, Merrill Lynch
Fraser McLaren from Merrill's, good morning. I just have one question and that is on Connected Homes. Just to check that the £1 billion revenue target by 2022 and the break-even in 2019 are both part of the same base case scenario and how deep you expect the 'J curve' to be in that?

Answer: Mark Hodges
So they are part of the same base case scenario. In terms of how deep the 'J-Curve', as Jeff said, we talked about the revenue investment we were making this year in launching in North America. I don't think we are going to disclose beyond that today unless Jeff tells me we can. But definitely the two are compatible. But obviously as Iain reminded you and I referenced, these are very uncertain aspirations. They are very realistic when you think about the market share that Iain mentioned, they are very realistic if you think about the broader trends that I outlined. But yes from a 'J Curve' perspective, I think that is something we will have to come back to with you on a regular basis. The most important thing I wanted you to take was that with the subscription model which is where we are focusing more of our effort, whilst there will be a 'J Curve', the quality of the business we would create is much higher, that sustainable earnings pattern, the ability to continue to trade people up in terms of the quality of the devices that we are providing and the solutions we are giving them, I think we will develop a much, much more valuable business for the Group.

Answer: Iain Conn
And just take that piece of context briefly, we are going to have to get into a different conversation with you all about the difference between the profitability of the business we have built so far and the revenue investment we are putting in to grow it because obviously that is what creates the 'J curve'. We need to bring to life for you the quality of the business and how well it is doing and how fast it is growing and what the gross margins are, and how much are we then putting back in in order to grow it for the future. Lakis I think you had a question?

Q6. Lakis Athanasiou, Agency Partners
Lakis Athanasiou, Agency Partners. Two questions from me. One just a point of clarity on slide 79 where you showed the investment profile. And linked to slide 80. On slide 79 you show investment in growth areas of the order of £300-350 million odd. And you break that down on the following slide. And the breakdown is roughly split between revenue investment and capex. That says to me, that what you are telling us then, just wanted confirmation, is you are expecting £100-150 million revenue investment in that investment profile.

And the second part of that, the capex element of it, what kind of things are you guys thinking of?

And my second question is you mentioned £500 million for 2019 as break-even. If you took that at 30% margin you get to £150 million overhead. If I applied that to a £1 billion three years later at 30% and took the same overhead you get to a profit of £150 million. Is that the right sort of way to look at it? That was for Connected Homes.

Answer: Iain Conn
Jeff why don't you start with the slides you showed and then Mark Hodges can talk about Connected Home and profitability and probably not disclose too much new.

Answer: Jeff Bell
That's fine. Let me work from slide 80 to slide 79. You are right Lakis, if you look at the £250-350 million on the right hand side of that, we have roughly estimated half capital expenditure, half revenue investment. If you then go back to slide 79, clearly some of that capital expenditure investment the half of the £250-350 million is contained within the growth areas of both the purple colour and the dark green colour. The point I was trying to make on slide 79 was simply that as we move to 2018 and beyond that there is a potential opportunity depending on the way we are operating cash flows within our financial framework to not be limited to the £1 billion pounds we are indicating on the financial framework for 2016/17. But where the cash flow generation was there, we have set an upper limit of 70% of operating cash flows. So the green was simply to indicate that over those coming years there could be potential for more investment to accelerate the gross strategy. Clearly if it was in those growth areas then that could eventually be higher than the £250-350 million, but we have to assess that at Group level first.

Further question
On slide 79 I was thinking of the purple area which is expected, which you show a split between revenue and capex. And you seem to be indicating quite firmly there that you expect £100-150 million odd revenue expenditure as part of investment over the next four years, I can't read it any other way.

Answer: Jeff Bell
In some years it will be more capital expenditure, less revenue investment and some it will be less than more. So part of the reason that the lines on 79 are a bit fuzzy is just to represent the fact that it won't necessarily specifically be a mechanistic number.

Further question
And the capex what sort of things would that be on?

Answer: Jeff Bell
Capex in terms of growth areas it will be everything from what we have seen previously which will be investment in actual technology and capability that we will be capitalising. It could be small acquisitions as we have done of less than £100 million that give us capability of capacity, is that fair Mark?

Answer: Mark Hanafin
Yes on my side of the business, you know as part of the projected investments that we set out, we announced the strategy, we talked about £500 million of capex in building the business capability and we have spent £180 million of that with Industry, Energy and Power with ENER-G and Panoramic and so in our shed we have about £300 million of bolt on type businesses to build execution capability so that we can go to market in North America in particular and some of the other new markets as well.

Further question
Which is either capex or acquisition?

Answer: Mark Hanafin
That is particularly in terms of planning acquisition.

Further answer: Iain Conn
Lakis the confusion here I think and thanks for pointing it out is slide 80 is largely about everything other than energy supply. Slide 79 contains capex associated with energy supply including beyond maintenance capital and that is the difference I think between the number you are estimating form 79 and inferred number on 80. Mark would you just briefly talk about?

Answer: Mark Hodges
Yeah and it won't be any new disclosure, but on the basis. It is all about the trajectory of growth between 2019 and 2022 would really determine the operating profit that we would be able to declare in 2022. So depending on the steepness of the growth curve, that has an impact on how much revenue expenditure we are putting back into the business. That would have an impact therefore on the operating profit.

Further question
But it sounds like there is quite a lot of operating leverage to come in between the £500 million and the £1 billion is the £500 million is to break-even?

Answer: Mark Hodges
It depends on what growth trajectory we are actually achieving at that point in time. Given the global nature of the market, given the device set that you will see, given the adoption of technology in the home. Obviously what we are focusing on is rapid growth and it will just depend on what the shape of the curve is from 2019 to 2022.

Further answer: Iain Conn
What we will be doing is clearly bringing updates to you. Now we have laid this framework out we will be bringing updates to you to show you how we are doing periodically.

Now I am going to frustrate a few people here, but I am just going to take one question. You have been very patient at the back. I know there are two questions at the front. You will have pole position at whatever time it is, 4 o'clock in order for us to answer those and I am sure there are others, you will have lots of questions after the breakouts.

Q7. Sam Arie, UBS
Thank you it is Sam Arie from UBS and I have two questions. One is if you like on the old world and one on the new. In the old world, so by my calculation with your Langage Humber transaction this morning you are over £900 million of divestments complete, so top end of the range you gave previously of a £500 million to £1 billion of divestments and assume the divestment plan is therefore mostly delivered. But you do still have a nuclear stake in the back pocket. And Iain referencing your comments a minute ago about how you would finance any M&A in the future, is it fair to assume you would look to a new divestment programme and sell the nuclear stake before you went to shareholders for financing?

And then my question in general how you think about the nuclear stake now would be interesting to hear.

And the second question on the new world is Mark the explanation you gave on the subscription model, I think page 38 in the presentation is really helpful. But for me I just want to have clear that this is an illustrative subscription model. Can you tell us a bit more about actually what is happening with subscriptions? Are customers taking Hive now 100% on subscriptions? Is the take-up rate on subscription just as good as it was on equipment sale basis and a bit more flavour, is the subscription model working commercially on the ground? Thank you.

Answer: Iain Conn
Thanks Sam. So on nuclear I was very clear as we said previously that we are considering this as a financial investment. The main reason is simply because it does not have any strategic optionality. It is not building any new nuclear, at least we are not in new nuclear, our joint venture is not building new nuclear. And although there might be some optionality around technology such as small scale modular nuclear, it is to really something that we think that is within the time frame we look at is going to have strategic value to us. So all of that said, clearly treating it as a financial investment implies that if we got the right offer we would consider whether or not we would want to hold onto it. It is however very complex, we are a minority shareholder, locked into a joint venture where our partner has significant influence over it and it is also rather politically sensitive. So I wouldn't encourage any of you to start writing, sell nuclear big bucks into any of your models. I think it is better to recognise that it has decent returns, it generates cash flow, we are quite happy with the investment. But I would say the divestment programme after the end of this year is largely done and what we will be looking to do is how do we expand the portfolio with organic growth and potentially acquisitions over time. So that is why I am signalling that by the end of 2017 phase 1 of the transformation of Centrica will be done.

So on subscription models and I think that is the last thing that we can cover?

Answer: Mark Hodges
Yes I will try to do it reasonably quickly. I mean we have been offering subscriptions for a while, if you think about Boiler IQ which we have described in the past, we have sold 35,000 or installed 35,000 units and that is a subscription model. We have launched in the US exclusively as a subscription model. I think that is important because we are not having to change people's mindsets as we are here in the UK where we have obviously been doing one-off sales and I talked about the 20,000 Hives. In the UK we launched subscriptions a few weeks ago, it is relatively early days, you will hear more about it during the breakout. But the new propositions I describe, the Leak, the Camera, the Sense, they will all be part of a subscription model. So the way we are hoping in the UK to change the conversation is having these new devices embedded within those subscriptions.

The other thing just to point out is why we are going down this route. One, there is the economics, but two, one of the big barriers to entry around mass adoption moving from earlier adopters to mass adoption is the price point as I mentioned and starting at, whether it is £5.99 or $9.99 gets people on this connected pathway and I think there is a real important aspect of breaking down a big barrier for many more customers.

Iain Conn
Thank you Mark. Now we are going to move to a coffee break.

End