

Preliminary results for the year ended 31 December 2019

IAIN CONN, GROUP CHIEF EXECUTIVE

“2019 operating profit and earnings were materially impacted by a challenging environment, most significantly the implementation of the UK default tariff cap and falling natural gas prices. Against this backdrop Centrica delivered growth in customer accounts, higher net promoter scores, significant cost efficiencies in excess of our target, and full year adjusted operating cash flow and net debt within its target ranges. As expected, performance during the second half was much improved compared to the first half, demonstrating momentum as we enter 2020.

Looking to 2020, we expect to deliver earnings momentum relative to 2019 from our core customer divisions, but Upstream earnings are likely to be impacted by the lower commodity price environment. However, with our continued focus on financial discipline we expect 2020 sources and uses of cash flow to remain broadly balanced. 2020 will be another busy year as we complete the re-positioning of the company towards the customer, focused on our strengths of energy supply and its optimisation, and on services and solutions centred around energy, with an emphasis on helping our customers transition to a lower carbon future.”

GROUP FINANCIAL SUMMARY

Year ended 31 December	2019	2018	Change
Adjusted revenue ¹	£26.8bn	£27.4bn	(2%)
Adjusted gross margin	£3,852m	£4,253m	(9%)
EBITDA	£2,119m	£2,447m	(13%)
Adjusted operating profit	£901m	£1,392m	(35%)
Adjusted effective tax rate	34%	41%	(7ppt)
Adjusted basic earnings per share (EPS)	7.3p	11.2p	(35%)
Full year dividend per share	5.0p	12.0p	(58%)
Adjusted operating cash flow	£1,830m	£2,245m	(18%)
Group net debt	£3,181m²	£2,656m	20%
Group return on average capital employed	9%	13%	(4ppt)
Statutory operating (loss) / profit	(£849m)	£987m	nm
Net exceptional items after taxation included in statutory loss	(£987m)	(£235m)	nm
Basic earnings per share	(17.8p)	3.3p	nm
Statutory net cash flow from operating activities	£1,250m	£1,934m	(35%)

See notes 2, 5 and 10 to the Financial Statements and pages 64 to 65 for an explanation of the use of adjusted performance measures.

1. The Group has amended the presentation of certain energy derivative contracts and re-presented prior period accordingly. See note 1 to the Financial Statements for further details.

2. Includes an impact of Centrica adopting IFRS 16 from 1 January 2019 of £394m. See notes 1(c) and 11(b) for further details.

HEADLINES

- Full year adjusted earnings and adjusted operating cash flow down vs 2018 reflecting impacts of UK default tariff cap, low wholesale gas prices and nuclear outages. Significantly improved in H2 2019 vs H1 2019.
- Adjusted operating cash flow (AOCF) and net debt both within 2019 target ranges.
- Full year dividend per share of 5.0p, in line with the rebasing announced in July at the Interim Results.
- Net exceptional charge before tax of £1,103m, including impairments of E&P and Nuclear assets predominantly due to a reduction in commodity price forecasts, and restructuring costs of £356m.
- Consumer customer account holdings up 722,000 or 3%. UK Home accounts up 78,000 with growth in services more than offsetting a reduction in energy supply. UK energy supply net losses of 286,000 significantly lower than in 2018, with H2 2019 account losses lower than H1 2019.
- £315m of cost efficiencies delivered in 2019, taking cumulative annual savings to £1.26bn compared to a 2015 baseline with 2020 nominal like-for-like costs expected to be well below 2015 levels per our five year target.
- Consumer and Business expected to benefit from adjusted earnings and AOCF momentum in 2020, but Upstream expected to be impacted by very low current wholesale commodity prices. 2020 AOCF expected to be in the range £1.6-£1.8bn based on 31 December 2019 commodity prices, assuming the existing portfolio.
- Cost efficiencies of £350m expected in 2020, with associated cash restructuring costs expected to be £300m.
- Continued focus on financial discipline. 2020 cash capital expenditure expected to be around £800m.
- Targeting broadly balanced sources and uses of cash flow in 2020 with closing net debt expected to be in the range £3.2-£3.6bn, including an expected additional £0.2bn of non-cash lease commitments and before the impact of planned divestments.

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Performance metrics

Centrica Group

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked) ¹	1.06	1.02	4%
Total customers (year end)	13,024	13,021	0%
Customer account holdings (year end)	26,208	25,831	1%
Total customer energy consumption (TWh)	508	496	2%
Direct Group headcount ²	26,932	30,520	(12%)

1. Group, Divisional and Business Unit total recordable injury frequency rate (per 200,000 hours worked) is on a 12 month rolling basis.

2. Direct Group headcount excludes contractors, agency and outsourced staff.

Centrica Consumer

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	1.47	1.35	9%
Brand NPS			
British Gas	12	9	3pt
Bord Gáis Energy	23	33	(10pt)
Direct Energy	29	32	(3pt)
Hive	39	38	1pt
Customers ('000)			
UK energy only	5,255	5,575	(6%)
UK services only	1,860	1,896	(2%)
UK energy and services	1,825	1,726	6%
Home Solutions only (active customers not taking energy or services)	290	204	42%
Total UK	9,230	9,401	(2%)
Ireland	500	499	0%
North America	2,782	2,618	6%
Total customers ('000)	12,512	12,518	(0%)
Customer account holdings ('000)			
UK energy supply	11,846	12,132	(2%)
UK services	7,876	7,512	5%
Home Solutions (active customers) ³	1,202	902	33%
Ireland ⁴	726	730	(1%)
North America energy supply	2,760	2,545	8%
North America services ⁵	608	799	(24%)
Total customer account holdings ('000)	25,018	24,620	2%
Account holdings per customer ⁶	2.00	1.95	3%
Gross margin per UK energy customer (£)	128	165	(22%)
Cost per UK energy customer (£) ⁷	109	103	6%
Revenue per UK services customer (£)	388	388	0%
Cost per UK services customer (£)	330	348	(5%)
Adjusted gross revenue (£m)	11,956	11,870	1%
Adjusted gross margin (£m)	2,315	2,606	(11%)
Adjusted operating profit (£m)	505	750	(33%)
Adjusted operating cash flow (£m)	913	1,019	(10%)

3. Active Home Solutions customers only. The equivalent figure for cumulative customers can be found in the Business Unit KPIs appendix on pg16.

4. Includes services account holdings. 2018 has been restated accordingly.

5. Redefined to exclude minor contract add-ons on home warranty contracts. 2018 has been restated accordingly and includes 182,000 accounts associated with the Clockwork divestment.

6. Excludes Clockwork customers and accounts in 2018.

7. 2018 includes a one-off bad debt credit of £8 per customer.

Centrica Business

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	0.40	0.61	(34%)
Brand NPS			
British Gas Business	1	(12)	13pt
Direct Energy Business	32	28	4pt
Centrica Business Solutions	29	29	0pt
Customers ('000)			
UK	342	320	7%
North America	170	183	(7%)
Total customers ('000)	512	503	2%
Customer accounts ('000)			
UK energy supply and services ⁸	709	700	1%
North America energy supply	475	505	(6%)
Centrica Business Solutions (sites)	6.1	5.6	9%
Total customer accounts ('000)	1,190	1,211	(2%)
Customer energy consumption			
UK electricity (TWh)	10.8	10.5	3%
UK gas (mmth)	484	433	12%
North America electricity (TWh)	80.7	84.3	(4%)
North America gas (mmth)	7,753	7,064	10%
Total customer energy consumption (TWh)	332	314	6%
Centrica Business Solutions revenue (£m)	285	209	36%
Centrica Business Solutions order book (£m)	663	559	19%
Adjusted gross revenue (£m)	13,759	14,492	(5%)
Adjusted gross margin (£m)	1,030	882	17%
Adjusted operating profit (£m)	217	75	189%
Adjusted operating cash flow (£m)	282	214	32%

8. Includes services account holdings. 2018 has been restated accordingly.

Upstream

Year ended 31 December	2019	2018	Change
E&P total recordable injury frequency rate (per 200,000 hours worked)	0.26	0.20	30%
E&P process safety incident rate – tier 1 & 2 (per 200,000 hours worked)	0.05	0.09	(44%)
E&P total gas production volumes (mmth)	2,339	2,592	(10%)
E&P total liquids production volumes (mmbobe)	14.2	16.2	(12%)
E&P total production volumes (mmbobe)	52.3	57.9	(10%)
E&P average achieved gas sales prices (p/therm)	42.9	49.3	(13%)
E&P average achieved liquid sales prices (£/boe)	44.1	41.2	7%
E&P Lifting and other cash production costs (£/boe)	15.2	14.3	6%
Nuclear power generated (GWh) ⁹	10,199	11,820	(14%)
Nuclear achieved power price (£/MWh) ⁹	49.2	45.1	9%
Upstream adjusted operating profit (£m)	179	567	(68%)
Upstream adjusted operating cash flow (£m)	635	1,012	(37%)
E&P free cash flow (£m) ¹⁰	141	483	(71%)

9. Centrica share of generation and achieved sales price.

10. See pages 64 to 65 for an explanation of the use of adjusted performance measures.

Group Overview

OVERVIEW

2019 performance

Centrica delivered customer account growth, higher net promoter scores in most businesses and significant cost efficiencies in excess of its target in 2019. However, the Company's portfolio was impacted by a challenging environment, with the implementation of the UK default tariff cap, low UK natural gas prices and extensions to outages at the non-operated Hunterston B and Dungeness B nuclear power stations.

Reflecting these factors, adjusted operating profit and adjusted earnings per share were both down 35% and adjusted operating cash flow was down 18% compared to 2018. We also recognised £1,103m of net pre-tax exceptional charges, largely relating to impairments of E&P and Nuclear assets due to the reduction in commodity price forecasts and restructuring costs associated with the Group's cost efficiency programme. Reflecting these exceptional charges and including the impact of a loss from certain re-measurements, the statutory loss attributable to shareholders for the period was £1,023m in 2019 compared to a profit of £183m in 2018.

Adjusted operating cash flow of £1,830m was within the Group's 2019 targeted range of £1.8-£2.0bn and closing net debt of £3,181m was within the Group's 2019 targeted range of £3.0-£3.5bn. We also delivered significantly higher adjusted earnings and adjusted operating cash flow in the second half of the year compared to the first half, as we indicated was expected in the Interim Results in July 2019. We delivered £315m of efficiency savings during the year, in excess of original £250m target. The proposed 2019 full year dividend per share is 5.0p, in line with the rebasing announced in July 2019.

Overall Consumer customer account holdings were up 722,000 in 2019. Importantly, UK Home accounts were up 78,000, with growth in services offsetting a 286,000 decline in energy supply. This decline was significantly reduced compared to a 742,000 decline in 2018 and was lower in the second half of 2019 than in the first half.

Strategic progress

We provided a strategic update alongside our Interim Results in July 2019. Since 2015 we have been repositioning Centrica towards the customer and we announced in July that we would be completing this shift by exiting oil and gas production, in addition to our previously announced intention to exit from Nuclear power generation. Centrica will become an international Energy Services and Solutions provider which will focus on its distinctive strengths of energy supply and its optimisation, and services and solutions centred around energy, with a major emphasis on helping our customers transition to a lower carbon future.

We are making progress towards delivering the business unit objectives we laid out in July, specifically the fundamental rebasing of UK Home, the refocusing of our Home Solutions activity towards the UK and Ireland, improving returns in North America Business and growing Centrica Business Solutions.

In addition, the simplified portfolio will enable further rebasing and focusing of Centrica, unlocking material additional efficiencies as we target becoming the lowest cost provider in all our markets by 2022, consistent with our chosen brand positioning and propositions. This will enable us to stabilise and grow customer numbers and gross margin. Including the £315m savings achieved in 2019, we have now delivered over £1.25bn of annualised cost efficiencies since 2016 and we are targeting to have delivered £2bn by 2022, including around £350m in 2020.

Outlook

In addition to pursuing the planned divestments of Spirit Energy and Nuclear, our focus in 2020 is on continuing to grow customer relationships, delivering further efficiencies, continuing to build on our customer-facing capabilities and maintaining financial discipline.

Our customer facing activities in Centrica Consumer and Centrica Business are expected to benefit from adjusted earnings and cash flow momentum in 2020, reflecting the improved performance in the second half of 2019. However, we expect the remaining legacy gas contract in Centrica Business to be loss-making in 2020. In addition, recent significant commodity price falls are expected to negatively impact achieved prices in both E&P and Nuclear in 2020, despite some benefit from forward hedging.

Taking these factors into account, at 31 December 2019 commodity prices and assuming the current portfolio, we expect 2020 adjusted operating cash flow to be in the range £1.6bn-£1.8bn. This is lower than adjusted operating cash flow in 2019. However, the adjusted earnings impact from the lower commodity price environment is likely to be much less material, which includes the impact of lower depreciation resulting from the year-end impairments. As a result, we would expect the positive earnings momentum from our core customer-facing businesses to be broadly offset by the negative earnings impact from the legacy gas contract and the Upstream portfolio.

With 2020 capital expenditure expected to be around £800m in 2020, in line with 2019 and reflecting our continued focus on capital discipline, we expect Group sources and uses of cash flow to be broadly balanced in 2020. Reflecting this, we are expecting 2020 Group net debt to be in the range £3.2bn-£3.6bn, including an additional £0.2bn of lease commitments, before any impact from the planned disposals of Spirit Energy and Nuclear.

2019 FINANCIAL PERFORMANCE

Adjusted operating profit and earnings

- Group adjusted gross margin fell by £401m or 9% to £3,852m and adjusted operating profit fell by £491m or 35% to £901m compared to 2018.
- Centrica Consumer adjusted gross margin was down £291m or 11% to £2,315m and adjusted operating profit was down £245m or 33% to £505m.
 - This includes a £300m negative revenue impact resulting from the implementation of the UK residential energy supply default tariff cap.
 - We delivered cost efficiencies of £229m in Consumer in 2019 and we also recognised a £34m credit relating to the renegotiation of one of our smart metering contracts. These positive impacts more than offset a negative effect from competitive pressures on underlying margins in energy supply and the non-recurrence of a bad debt provision release of £59m in UK Home in 2018.
- Centrica Business adjusted gross margin was up £148m or 17% to £1,030m and adjusted operating profit was up £142m or 189% to £217m.
 - These increases reflect a significant improvement in achieved power retail margins in North America, good European trading and optimisation performance and a benefit from the decision to defer delivery of gas from 2019 into 2020 from the one remaining large legacy gas contract. Centrica Business also delivered £40m of cost efficiencies in 2019.
- Upstream adjusted operating profit was down £388m or 68% to £179m.
 - Nuclear adjusted operating profit was down £27m or 59% to £19m largely reflecting lower output. This predominantly relates to extensions to outages at the Dungeness B and Hunterston B nuclear power stations, the impact of which was not fully offset by a higher achieved power price.
 - Exploration & Production adjusted operating profit was down £361m or 69% to £160m, including reduced achieved gas sales prices due to the lower wholesale commodity price environment and lower volumes from the Rough field reflecting the field's natural decline. We also saw higher depreciation and amortisation rates following asset write-backs at the end of 2018 and a production mix shift to higher DDA rate fields, and higher field specific write-offs.
- The net finance charge decreased by 7% to £255m, reflecting lower gross debt levels resulting from a bond repurchase programme completed in March 2018 and the maturity of a bond in September 2018.
- The Group adjusted effective tax rate reduced from 41% to 34%, predominantly due to the more highly taxed E&P business contributing a significantly lower proportion of adjusted operating profit.
- Adjusted earnings attributable to shareholders reduced by 34% to £419m and adjusted EPS fell by 35% to 7.3p.

Exceptional items and statutory profit

- Total statutory gross profit was down 21% to £3,206m. This includes the impact of an increased reported loss from certain re-measurements, largely reflecting the mark-to-market impact of falling gas prices on energy procured to meet the future needs of our customers.
- A net pre-tax exceptional charge of £1,103m was recognised in operating costs in 2019, with the largest elements being a £476m impairment of E&P assets and a £372m impairment of our nuclear investment, both predominantly reflecting the reduction in commodity price forecasts. We also recognised £356m of exceptional restructuring costs relating to the Group's cost efficiency programme.
- Reflecting lower adjusted operating profit, the loss from certain re-measurements and higher exceptional charges, the Group statutory operating loss was £849m in 2019 compared to a statutory profit of £987m in 2018.
- After net finance costs and tax, the statutory loss attributable to shareholders for the period was £1,023m in 2019 compared to a profit of £183m in 2018.
- The statutory basic EPS loss was 17.8p compared to statutory earnings per share of 3.3p in 2018.

Cash flow and net debt

- EBITDA fell by 13% to £2,119m and adjusted operating cash flow reduced by £415m or 18% to £1,830m, broadly in line with the reduction in adjusted operating profit.
- Group net debt was £3,181m at the end of 2019 compared to £2,656m at the end of 2018. This includes an impact of Centrica adopting IFRS 16 from 1 January 2019, which increased the Group's 2019 opening net debt by £394m.
- The IAS19 net pension liability increased slightly to £163m over the year. The triennial pensions review has now been finalised, with the company committing to make additional cash contributions. Deficit contributions were £235m in 2019, including £12m of pension strain payments, and we have agreed further deficit payments as part of the triennial review and these now total £175m per annum from 2020-2025 with a balancing payment of £93m in 2026.

GROUP COST EFFICIENCY PROGRESS

- The Group is targeting £1bn of efficiency savings across all its business units over the period 2019-22, with the total cost of restructuring across the period expected to be around £1.25bn. This will take total efficiency savings across the period 2015-22 to around £2bn.
- £315m of cost efficiency savings were delivered in 2019.
- A significant proportion of the 2019 savings came from the transformation of our customer and field operations activities in the UK. We delivered further digitalisation of customer journeys, including focus on self-serve and automation, and simplification of core business processes to allow us to better serve our customers.
- The Company also agreed pension reforms with its employees which came into effect in June and reduced the amount of regular company contributions from the second half of 2019.
- We delivered further savings from continued functional activity review and transformation, through further procurement and supply chain efficiencies, from the efficiency of core processes and change programmes, and a focus on overhead cost and management structures in all businesses.
- We also continue to review our property portfolio. In April, we announced the closure of two UK customer operations sites, while in the second half of the year we announced our intention to close a number of office locations in late-2019 or in 2020.

CENTRICA CONSUMER PERFORMANCE AND PROGRESS

- Centrica Consumer is focused on three areas, energy supply, in-home servicing and home solutions, with a geographic focus on the UK, Ireland and North America.

Growth in customer accounts

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

Improved customer experience and enhanced customer offers

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

Progress towards fundamentally rebasing UK Home

- In July 2019, we announced that we were developing plans to fundamentally rebase our UK Home business.

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

Refocusing Home Solutions

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

CENTRICA BUSINESS PERFORMANCE AND PROGRESS

- Centrica Business is focused on three areas, Energy Supply, Energy Optimisation and Business Services & Solutions, with the geographic focus predominantly on the UK, Ireland, Continental Europe and North America.

Customer number stability and volume growth

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

Improved customer experience

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

Improving returns in North America Business

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

Growing Business Solutions

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

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

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

UPSTREAM PERFORMANCE AND PROGRESS

Production and generation performance

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

E&P development and exploration progress

- In March 2019, the Oda field, Spirit Energy's first development as the operator on the Norwegian Continental Shelf, came on line five months earlier than originally planned and under budget.
- The development of the Nova field in Norway is proceeding as planned, with production due to begin in the third quarter of 2021. The field has an estimated 77mboe of 2P reserves and Spirit Energy owns 20%.
- In January 2020, we announced plans with our Statfjord partners to drill up to 100 new wells and extend production from the area by more than 10 years.
- Spirit Energy's 2P reserves were 14mboe higher at the end of 2019 than at the end of 2018, with 64mboe of positive revisions more than offsetting the impact of production and the Valemon and Sindre divestments in the year. This represents a 2P reserves replacement ratio of 140%. The Statfjord life extension resulted in 31mboe of the revision, with positive revisions also recognised at Kvitebjorn, Cygnus and South Morecambe.
- In 2019, three wells were drilled in the Greater Warwick Area, in which Spirit Energy owns a 50% interest. The Lincoln Crestal well confirmed the presence of light oil and produced at potentially commercial rates. The Warwick area yielded mixed results. Warwick Deep proved unsuccessful with water production and minor oil encountered. Warwick West was a discovery and confirmed the presence of light oil which was produced to surface during well testing. Further technical analysis is required to understand reservoir quality in this area.

REGULATORY DEVELOPMENTS

- On 13 November 2019, it was announced that Centrica had been successful in a judicial review which challenged the UK energy regulator Ofgem's treatment of wholesale energy costs in the initial period of the UK default tariff cap in the first quarter of 2019.
- Ofgem announced in January 2020 that they were consulting on the appropriate adjustment mechanism.
- This outcome underlines the importance of transparent and rigorous regulatory processes to ensure well-designed regulation that is in the interest of a well-functioning energy market, which in turn allows participants to operate with confidence and ultimately benefits all energy consumers.
- In December 2019, the New York Public Service Commission (NYPSC) issued an Order which will reform the New York retail energy market for residential and small commercial customers in 2020. The Order includes a price cap for fixed price products relative to the utility, a preference for green offers, a restriction on variable tariffs to be capped at the local utility rate, more significant licensing requirements and a requirement that the NYPSC approve any offer of value-added products. We have around 140,000 customers in New York. We will continue to engage with the NYPSC to ensure customers are treated fairly and can benefit from choice and competition.

DIVESTMENTS

- In February 2018, we announced our intention to divest our 20% interest in the UK operating nuclear fleet of power stations by the end of 2020. Operational issues at Hunterston B and Dungeness B have impacted the process, and while we are still pursuing the divestment, we may not be able to dispose of all of our share in a single transaction. As a result, we may still hold an interest in nuclear at the end of 2020.
- In July 2019, we announced our intention to divest our 69% shareholding in Spirit Energy. The process started in the second half of 2019 and we expect to receive initial bids around the end of the first quarter of 2020.
- We also announced three non-core divestments in 2019 as part of a £500m programme, with proceeds across 2019 and 2020 expected to total around £350m.
 - We completed the \$300m sale of the Clockwork home services portfolio and operations in April 2019.
 - We completed the sale of non-core E&P assets at Valemon and Sindre during the year.
 - We announced the sale of the King's Lynn CCGT in December 2019 for a headline price of £105m. The transaction completed on 12 February 2020.

OUTLOOK

Our focus in 2020 is on continuing to grow customer relationships, delivering further efficiencies, continuing to build on our customer-facing capabilities and maintaining financial discipline, in addition to delivering the planned divestments.

Adjusted earnings and adjusted operating cash flow were both weighted towards the second half of 2019 and this momentum is expected to benefit our customer facing activities in Centrica Consumer and Centrica Business in 2020, including the absence of the £70m one-off UK price cap impact, cost efficiency momentum, improved retail power margins in business energy supply in North America, further growth in UK services and revenue growth and reduced losses in Home Solutions and Business Solutions.

However, we expect the remaining legacy gas contract in Centrica Business to make an adjusted operating loss of up to £100m in 2020, having been slightly profitable in 2019, while the significant fall in UK wholesale gas and power prices will negatively impact achieved prices in both E&P and Nuclear, despite some benefit from forward hedging. As a result, at 31 December 2019 commodity prices and assuming the current portfolio, we expect adjusted operating cash flow to be in the range £1.6bn-£1.8bn in 2020. Given commodity falls since the start of the year, if current prices persist, we would expect to be around the bottom of this range.

This is lower than adjusted operating cash flow in 2019. However, the adjusted earnings impact from the lower commodity price environment is likely to be much less material, which includes the impact of lower depreciation resulting from the 2019 year-end impairments. As a result, we would expect the year-on-year earnings momentum from our core customer-facing businesses to be broadly offset by the negative earnings impact from the legacy gas contract and the Upstream portfolio.

Capital expenditure is expected to be around £800m in 2020, reflecting our continued focus on capital discipline. This includes a one-off payment of around £100m relating to the decision not to proceed with the Hejre E&P project in Denmark. As a result, we expect Group sources and uses of cash flow to be broadly balanced and we are expecting Group net debt to be in the range £3.2bn-£3.6bn in 2020, including around £200m of additional lease commitments under IFRS16 and before any impact from the planned disposals of Spirit Energy and Nuclear.

Financial performance remains subject to the usual variables of weather patterns, commodity prices, operational performance and regulatory change.

SUMMARY

We made further good progress in 2019 on reducing costs, building on our customer relationships, improving the customer experience and developing new propositions and technologies. However, the environment was challenging for Centrica's portfolio, which impacted the Company's 2019 financial performance.

The momentum gained in our customer-facing businesses during the second half of the year is expected to benefit Centrica in 2020. However, significant falls in wholesale commodity prices create a more challenging environment for the Upstream businesses. In response we remain focused on capital discipline and expect sources and uses of cash flow to remain broadly balanced in 2020.

Our intention to exit our positions in both E&P and Nuclear means we will complete our shift towards the customer. This will allow Centrica to focus on its strengths of energy supply and its optimisation, and services and solutions centred around energy, with an emphasis on helping our customers transition to a lower carbon future.

The world of energy is changing rapidly and the market positions and capabilities that Centrica has developed means the Company is well placed for the long-term, as we focus on being a leading Energy Services and Solutions provider.

Group Financial Review

GROUP REVENUE

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

OPERATING PROFIT

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

Year ended 31 December	Notes	2019			2018		
		Business performance £m	Exceptional items and certain re-measurements £m	Statutory result £m	Business performance £m	Exceptional items and certain re-measurements £m	Statutory result £m
Adjusted operating profit/(loss)							
Centrica Consumer		505			750		
Centrica Business		217			75		
Upstream		179			567		
Group operating profit/(loss)	5(c)	901	(1,750)	(849)	1,392	(405)	987
Net finance cost	7	(255)	–	(255)	(273)	(139)	(412)
Taxation	8	(218)	219	1	(461)	128	(333)
Profit/(loss) for the period		428	(1,531)	(1,103)	658	(416)	242
Profit attributable to non-controlling interests		(9)			(27)		
Adjusted earnings		419			631		

Adjusted operating profit

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

Exceptional items

- A net exceptional pre-tax charge of £1,103m was included within Group operating loss before taxation in 2019 (2018: £185m) including:
 - A £476m charge relating to the impairment of E&P assets, predominantly due to the reduction in near-term prices and long-term price forecasts and a conclusion that certain field reserves levels were not sufficient for development.
 - A £381m charge relating to the impairment of power assets, including £372m related to the nuclear investment largely as a result of a reduction in price forecasts and availability issues at the Hunterston B and Dungeness B power stations.
 - A £77m charge following the strategic decision to refocus Centrica Home Solutions activity on the UK and Ireland, largely related to asset impairments (including goodwill), inventory write-downs and onerous contract provisions.
 - £356m of restructuring charges arising from the continuation of phase 2 of the Group's cost efficiency programme, principally related to redundancy, change resource, consultancy, property rationalisation costs, and other transformational activity including member compensation payments from renegotiating UK defined benefit pension arrangements.
 - A £152m net credit relating to pension changes. This includes a £260m credit in relation to a rule amendment to the UK defined benefit pension scheme arrangements to offer members an option to level up their ongoing pension if they retire before the statutory pension age, partially offset by £108m of pension strain costs associated with redundancy.
 - A £35m net gain on disposals of the Clockwork assets, Valemon, Sindre, the King's Lynn power station (which is held for sale) and contingent consideration on the historic disposal of Trinidad and Tobago E&P assets.
- These charges in total generated a taxation credit of £116m (2018: £89m). As a result, total net exceptional charges after taxation were £987m (2018: £235m).
- Further details can be found in note 6(a).

Certain re-measurements

- The Group enters into a number of forward energy trades to protect and optimise the value of its underlying production, generation, storage and transportation assets (and similar capacity or off-take contracts), as well as to meet the future needs of our customers. A number of these arrangements are considered to be derivative financial instruments and are required to be fair valued under IFRS 9.
- The Group has shown the fair value adjustments on these commodity derivative trades separately as certain re-measurements, as they do not reflect the underlying performance of the business because they are economically related to our upstream assets, capacity/off-take contracts or downstream demand, which are typically not fair valued.
- The operating loss in the statutory results includes a net pre-tax loss of £647m (2018: £220m) relating to these re-measurements, with the decline in gas prices over the period being reflected in the fair valuing of historic and current energy procurement to meet the needs of our customers.
- These re-measurements generated a taxation credit of £103m (2018: £39m). As a result, the total net re-measurement loss after taxation was £544m (2018: £181m).
- The Group recognises the realised gains and losses on these contracts when the underlying transaction occurs. The business performance profits arising from the physical purchase and sale of commodities during the year, which reflect the prices in the underlying contracts, are not impacted by these re-measurements.
- Further details can be found in note 6(b).

GROUP FINANCE CHARGE AND TAXATION

Finance charge

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

Taxation

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

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

GROUP EARNINGS

Adjusted earnings

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

Group statutory loss

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

DIVIDEND

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

GROUP CASH FLOW, NET DEBT AND BALANCE SHEET

Operating cash flow

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

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

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

Net cash flow

- Net cash outflow from investing activities decreased to £503m (2018: £1,007m) primarily due to the Clockwork disposal proceeds, reduced capital expenditure and lower acquisition spend.

- Net cash outflow from financing activities fell to £1,077m (2018: £2,540m) largely reflecting lower repayment of borrowings due to the debt repurchase programme and a bond maturity in 2018, and a slight reduction in cash equity dividends paid reflecting the rebasing of the 2019 interim dividend paid in November 2019.

Net debt

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

Balance sheet

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

2019 ACQUISITIONS AND DISPOSALS

- On 1 July 2019 the Group acquired Smartwatt Energy Inc., a leading energy services and solutions company in North America, for consideration of \$37million (£29 million). There have been no other material acquisitions during the year.
- On 30 April 2019, the Group disposed of Clockwork Home Services for a gross consideration of \$300m which, after deal-specific adjustments related to working capital, resulted in a net consideration of \$279m (£215m).
- The Group also disposed of Norwegian exploration and production assets, Valemon and Sindre, during the year. Proceeds of £33 million were equal to the carrying value of the assets disposed of subsequent to the recognition of an impairment charge of £49 million. The impairment charge is included in net gain on disposal programmes within exceptional items.
- Further details on acquisitions, assets purchased and disposals are included in notes 5(e) and 15.

EVENTS AFTER BALANCE SHEET DATE

- On 23 December 2019, the Group agreed to sell its 382MW King's Lynn combined cycle gas turbine (CCGT) power station to RWE Generation for headline consideration of £105 million, adjusted for final working capital, based on a valuation date of 31 December 2019. The deal completed on 12 February 2020.
- Further details of events after the balance sheet date are described in note 17.

RISKS AND CAPITAL MANAGEMENT

- The nature of the Group's principal risks and uncertainties are largely unchanged from those set out in its 2018 Annual Report, with two changes to note. The Information Systems and Security risk has been separated in to two principal risks, enabling more focussed conversations on our digital transformation and ongoing security. A new principal risk, Regulated Insurance and Services, has also been identified.
- In addition, there continues to be a high degree of uncertainty surrounding the future relationship between the EU and UK including trade agreements and the supply of electricity and gas.
- Details of how the Group has managed financial risks such as liquidity and credit risk are set out in note 4. Details of the Group's capital management processes are provided under sources of finance in note 11(a).

ACCOUNTING POLICIES

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

Appendix: Business Unit KPIs

CENTRICA CONSUMER

UK Home

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	1.56	1.46	7%
Brand NPS ¹	12	9	3pt
Complaints (per 100,000 customers) ²			
Energy supply	5,182	5,097	2%
Services	2,388	2,827	(16%)
Customer account holdings ('000)			
Energy supply			
Standard variable tariff (SVT)	3,748	4,563	(18%)
Temporary	1,470	1,006	46%
Safeguard	474	530	(11%)
Prepayment	2,070	2,175	(5%)
Fixed term	4,084	3,858	6%
Total Energy supply	11,846	12,132	(2%)
Services	7,876	7,512	5%
Total customer account holdings ('000)	19,722	19,644	0%
Installs and on demand jobs ('000)	337	375	(10%)
Energy use per residential energy customer account			
Gas (therms)	421	433	(3%)
Electricity (kWh)	3,101	3,241	(4%)
Total energy use per residential energy customer account (kWh)	8,206	8,481	(3%)
Gross revenue (£m)			
Energy supply	6,808	6,916	(2%)
Services	1,452	1,476	(2%)
Total gross revenue (£m)	8,260	8,392	(2%)
Total adjusted gross margin (£m)	1,575	1,854	(15%)
Adjusted operating profit (£m)			
Energy supply	137	466	(71%)
Services	264	202	31%
Total adjusted operating profit (£m)	401	668	(40%)
Adjusted operating cash flow (£m)	714	805	(11%)

1. 2018 Brand NPS has been restated to show the British Gas only score.

2. Complaints per 100,000 customers as reported to Ofgem for UK energy supply and the FCA for UK Home services.

North America Home

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	1.05	0.50	110%
Brand NPS	29	32	(3pt)
Energy supply complaints (per 100,000 customers) ¹	65	83	(22%)
Customer account holdings ('000)			
Energy supply			
Texas	627	628	(0%)
US North East	1,231	1,010	22%
Canada	902	907	(1%)
Total energy supply	2,760	2,545	8%
Services ²	608	799	(24%)
Total customer account holdings ('000)	3,368	3,344	1%
Installs and on demand jobs ('000)	267	775	(66%)
Energy use per residential energy customer account			
Gas (therms)	1,370	1,373	(0%)
Electricity (kWh)	10,605	10,951	(3%)
Total energy use per residential energy customer account (kWh)	24,083	24,760	(3%)
Gross revenue (£m)			
Energy supply	2,308	2,079	11%
Services	446	454	(2%)
Total gross revenue (£m)	2,754	2,533	9%
Adjusted gross margin (£m)	575	604	(5%)
Adjusted gross margin (\$m)	736	807	(9%)
Adjusted operating profit (£m)			
Energy supply	145	135	7%
Services	(8)	(12)	33%
Total adjusted operating profit (£m)	137	123	11%
Adjusted operating profit (\$m)			
Energy supply	188	181	4%
Services	(11)	(16)	31%
Total adjusted operating profit (\$m)	177	165	7%
Adjusted operating cash flow (£m)	166	187	(11%)
Adjusted operating cash flow (\$m)	211	249	(15%)

1. Complaints per 100,000 customers as reported by various regulatory bodies.

2. Redefined to exclude minor contract add-ons on home warranty contracts. 2018 has been restated accordingly.

Ireland

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	0.86	1.37	(37%)
Brand NPS	23	33	(10pt)
Complaints (per 100,000 customers) ¹	4	6	(33%)
Customer account holdings ('000) ²	726	730	(1%)
Energy use per residential energy customer account (kWh)			
Gas (therms)	386	387	(0%)
Electricity (kWh)	4,537	4,597	(1%)
Total energy use per residential energy customer account (kWh)	7,703	7,850	(2%)
Gross revenue (£m)	897	907	(1%)
Adjusted gross margin (£m)	149	135	10%
Adjusted operating profit (£m)	52	44	18%
Adjusted operating profit (€m)	60	50	20%
Adjusted operating cash flow (£m)	76	74	3%
Adjusted operating cash flow (€m)	86	83	4%

1. Complaints per 100,000 customers as reported to the Commission for Regulation of Utilities, Water and Energy (CRU).

2. 2018 restated to include services account holdings.

Centrica Home Solutions

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	0.00	0.18	(100%)
Brand NPS	39	38	1pt
Cumulative customers ('000)	1,785	1,344	33%
New customers in period ('000)	441	444	(1%)
Products sold in period ('000)	1,267	1,194	6%
Cumulative subscriptions ('000)	259	194	34%
Gross revenue (£m)	74	67	10%
Adjusted gross margin (£m)	16	13	23%
Adjusted operating loss (£m)	(84)	(85)	1%
Adjusted operating cash flow (£m)	(43)	(47)	9%

CENTRICA BUSINESS

UK Business

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	0.30	0.41	(27%)
Brand NPS	1	(12)	13pt
Complaints (per 100,000 customers) ¹	3,825	4,149	(8%)
Customer account holdings ('000)			
Small and medium enterprises (SME)	561	543	3%
Industrial and commercial (I&C)	92	106	(13%)
Services	56	51	10%
Total customer account holdings ('000) ²	709	700	1%
Total customer energy consumption			
Gas (mmth)	484	433	12%
Electricity (GWh)	10,778	10,451	3%
Gross revenue (£m)	2,065	1,857	11%
Adjusted gross margin (£m)	227	234	(3%)
Adjusted operating profit (£m)	48	40	20%
Adjusted operating cash flow (£m)	128	62	106%

1. Complaints per 100,000 customers as reported to Ofgem.

2. Includes services account holdings. 2018 has been restated accordingly.

North America Business

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	0.00	0.00	nm
Brand NPS	32	28	4pt
Complaints (per 100,000 customers) ¹	27	28	(4%)
Customer account holdings ('000)	475	505	(6%)
Total customer energy consumption			
Gas (mmth)	7,753	7,064	10%
Electricity (GWh)	80,683	84,255	(4%)
Gross revenue (£m)	8,115	8,820	(8%)
Adjusted gross margin (£m)			
Gas retail and wholesale	200	246	(19%)
Power retail and wholesale	237	160	48%
Total adjusted gross margin (£m)	437	406	8%
Adjusted gross margin (\$m)			
Gas retail and wholesale	260	334	(22%)
Power retail and wholesale	297	209	42%
Total adjusted gross margin (\$m)	557	543	3%
Adjusted operating profit (£m)	96	81	19%
Adjusted operating profit (\$m)	121	109	11%
Adjusted operating cash flow (£m)	181	278	(35%)
Adjusted operating cash flow (\$m)	227	376	(40%)

1. Complaints per 100,000 customers as reported by various regulatory bodies.

Centrica Business Solutions

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	0.92	1.42	(35%)
Process safety incident rate – tier 1 & 2 (per 200,000 hours worked)	0.15	0.00	nm
Brand NPS	29	29	nm
Optimisation capacity under management (MW)	2,533	2,431	4%
Active customer sites	6,070	5,560	9%
Order book (£m)	663	559	19%
Gross revenue (£m)	285	209	36%
Adjusted gross margin (£m)	61	50	22%
Adjusted operating loss (£m)	(68)	(81)	16%
Adjusted operating cash flow (£m)	(54)	(61)	11%

Energy Marketing & Trading

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	0.00	0.00	nm
Adjusted operating profit (£m) ¹	141	35	303%
Adjusted operating cash flow (£m) ¹	27	(65)	nm

1. 2018 has been restated to include the Spalding tolling agreement.

UPSTREAM

Nuclear

Year ended 31 December	2019	2018	Change
Nuclear power generated (GWh)	10,199	11,820	(14%)
Nuclear achieved power price (£/MWh)	49.2	45.1	9%
Adjusted operating profit (£m)	19	46	(59%)
Adjusted operating cash flow (£m)	48	49	(2%)

Exploration & Production

Year ended 31 December	2019	2018	Change
Total recordable injury frequency rate (per 200,000 hours worked)	0.26	0.20	30%
Process safety incident rate – tier 1 & 2 (per 200,000 hours worked)	0.05	0.09	(44%)
Gas production volumes (mmth)			
Spirit Energy	1,942	1,904	2%
CSL	397	688	(42%)
Total gas production volumes (mmth)	2,339	2,592	(10%)
Liquids production volumes (mmboe)			
Spirit Energy	14.1	16.0	(12%)
CSL	0.1	0.1	0%
Total liquids production volumes (mmboe)	14.2	16.2	(12%)
Total production volumes (mmboe)			
Spirit Energy	45.8	46.8	(2%)
CSL	6.5	11.2	(42%)
Total production volumes (mmboe)	52.3	57.9	(10%)
Average achieved gas sales prices (p/therm)			
Spirit Energy	42.0	48.0	(13%)
CSL	47.4	52.7	(10%)
Average achieved liquid sales prices (£/boe)			
Spirit Energy	44.1	41.2	7%
CSL	40.6	42.4	(4%)
Lifting and other cash production costs (£/boe) ¹			
Spirit Energy	15.7	16.2	(3%)
CSL	11.7	6.5	80%
Gas and liquids realisations (£m) ²	1,610	1,977	(19%)
Adjusted operating profit (£m)			
Spirit Energy	90	337	(73%)
CSL	70	184	(62%)
Adjusted operating profit (£m)	160	521	(69%)
Adjusted operating profit after tax (£m)	60	149	(60%)
Adjusted operating cash flow (£m)	587	963	(39%)
Net investment (£m) ³			
Capital expenditure (including small acquisitions)	480	497	(3%)
Net disposals	(34)	(17)	(100%)
Net investment (£m)	446	480	(7%)
Free cash flow (£m) ³	141	483	(71%)

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

2. Realisations are total revenues from sales of gas and liquids including hedging and net of NTS costs. 2018 has been restated due to incorrectly excluded NTS cost.

3. See pages 64 to 65 for an explanation of the use of adjusted performance measures.

Statement of Directors' Responsibilities

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

- select suitable accounting policies and then apply them consistently;
- make judgements and accounting estimates that are reasonable and prudent;
- state whether IFRS as adopted by the European Union have been followed, subject to any material departures disclosed and explained in the Group Financial Statements; and
- prepare the Group Financial Statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

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

- the Group Financial Statements, which have been prepared in accordance with IFRS as adopted by the EU, give a true and fair view of the assets, liabilities, financial position and loss of the Group; and
- the Strategic Report contained in the Annual Report and Accounts, from which this narrative is extracted, includes a fair review of the development and performance of the business and the position of the Group, together with a description of the principal risks and uncertainties that it faces.

On behalf of the Board on 12 February 2020

Iain Conn
Group Chief Executive

Chris O'Shea
Group Chief Financial Officer

Group Income Statement

Year ended 31 December	Notes	2019			2018 (restated) (i)		
		Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m	Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m
Group revenue ⁽ⁱⁱ⁾	5	26,825	(4,151)	22,674	27,381	(4,077)	23,304
Cost of sales ⁽ⁱⁱ⁾		(22,973)	7,178	(15,795)	(23,128)	6,808	(16,320)
Re-measurement and settlement of energy contracts ⁽ⁱⁱ⁾	6	–	(3,673)	(3,673)	–	(2,931)	(2,931)
Gross profit/(loss)		3,852	(646)	3,206	4,253	(200)	4,053
Operating costs before exceptional items and credit losses on financial assets		(2,742)	–	(2,742)	(2,721)	–	(2,721)
Credit losses on financial assets		(197)	–	(197)	(143)	–	(143)
Exceptional items – (impairment)/write-back of retained exploration and production assets	6	–	(476)	(476)	–	90	90
Exceptional items – impairment of power assets and provision for onerous power contracts	6	–	(381)	(381)	–	(46)	(46)
Exceptional items – impairment of Centrica Home Solutions	6	–	(77)	(77)	–	–	–
Exceptional items – net gain/(loss) on disposal ⁽ⁱⁱ⁾	6	–	35	35	–	(16)	(16)
Exceptional items – net pension change credit/(cost)	6	–	152	152	–	(41)	(41)
Exceptional items – restructuring costs	6	–	(356)	(356)	–	(170)	(170)
Operating costs		(2,939)	(1,103)	(4,042)	(2,864)	(183)	(3,047)
Share of (losses)/profits of joint ventures and associates, net of interest and taxation	6,12	(12)	(1)	(13)	3	(22)	(19)
Group operating profit/(loss)	5	901	(1,750)	(849)	1,392	(405)	987
Net finance cost	6,7	(255)	–	(255)	(273)	(139)	(412)
Profit/(loss) before taxation		646	(1,750)	(1,104)	1,119	(544)	575
Taxation on profit/(loss)	6,8	(218)	219	1	(461)	128	(333)
Profit/(loss) for the year		428	(1,531)	(1,103)	658	(416)	242
Attributable to:							
Owners of the parent		419	(1,442)	(1,023)	631	(448)	183
Non-controlling interests		9	(89)	(80)	27	32	59
Earnings per ordinary share				Pence			Pence
Basic	10			(17.8)			3.3
Diluted	10			(17.8)			3.2
Interim dividend paid per ordinary share	9			1.50			3.60
Final dividend proposed per ordinary share	9			3.50			8.40

(i) The Group has amended the presentation of energy derivative contracts following an IFRIC agenda decision in March 2019 and a review of its trading businesses. Prior year results have been restated accordingly. See note 1 for further details.

(ii) Gains and losses on disposals include any impairments and write-backs associated with the assets and businesses disposed of or classified as held for sale.

The notes on pages 26 to 61 form part of these Financial Statements.

Group Statement of Comprehensive Income

Year ended 31 December	Notes	2019 £m	2018 £m
(Loss)/profit for the year		(1,103)	242
Other comprehensive (loss)/income			
Items that will be or have been reclassified to the Group Income Statement:			
Impact of cash flow hedging (net of taxation)		(4)	10
Exchange differences on translation of foreign operations		(126)	106
Exchange differences reclassified to Group Income Statement on disposal	15	(18)	–
Items that will not be reclassified to the Group Income Statement:			
Net actuarial (losses)/gains on defined benefit pension schemes (net of taxation)		(387)	657
Gains/(losses) on revaluation of equity instruments measured at fair value through other comprehensive income (net of taxation)		2	(1)
Share of other comprehensive income/(loss) of joint ventures and associates, net of taxation	12	29	(1)
Other comprehensive (loss)/income, net of taxation		(504)	771
Total comprehensive (loss)/income for the year		(1,607)	1,013
Attributable to:			
Owners of the parent		(1,511)	953
Non-controlling interests		(96)	60

The notes on pages 26 to 61 form part of these Financial Statements.

Group Statement of Changes in Equity

	Share capital £m	Share premium £m	Retained earnings £m	Other equity £m	Total £m	Non-controlling interests £m	Total equity £m
1 January 2018	348	2,121	1,184	(950)	2,703	729	3,432
Adjustment on adoption of IFRS 9	–	–	28	(28)	–	–	–
Profit for the year	–	–	183	–	183	59	242
Other comprehensive income	–	–	–	770	770	1	771
Employee share schemes	–	–	3	27	30	–	30
Scrip dividend	6	119	–	–	125	–	125
Dividends paid to equity holders (note 9)	–	–	(673)	–	(673)	–	(673)
Other	–	–	–	7	7	14	21
31 December 2018	354	2,240	725	(174)	3,145	803	3,948
Loss for the year	–	–	(1,023)	–	(1,023)	(80)	(1,103)
Other comprehensive loss	–	–	–	(488)	(488)	(16)	(504)
Employee share schemes and other share transactions	–	–	(10)	53	43	–	43
Scrip dividend (note 9)	6	90	–	–	96	–	96
Dividends paid to equity holders (note 9)	–	–	(561)	–	(561)	–	(561)
Distributions to non-controlling interests	–	–	–	–	–	(124)	(124)
31 December 2019	360	2,330	(869)	(609)	1,212	583	1,795

The notes on pages 26 to 61 form part of these Financial Statements.

Group Balance Sheet

	Notes	31 December 2019 £m	31 December 2018 £m
Non-current assets			
Property, plant and equipment		3,133	4,124
Interests in joint ventures and associates	12	1,306	1,661
Other intangible assets		1,455	1,720
Goodwill		2,578	2,736
Deferred tax assets		553	532
Trade and other receivables, and contract-related assets		154	119
Derivative financial instruments	13	493	537
Retirement benefit assets	14	56	223
Securities	11	131	239
		9,859	11,891
Current assets			
Trade and other receivables, and contract-related assets		4,839	5,543
Inventories		431	459
Derivative financial instruments	13	1,320	1,141
Current tax assets		115	187
Securities	11	124	68
Cash and cash equivalents	11	1,342	1,268
		8,171	8,666
Assets of disposal groups classified as held for sale	15	124	–
		8,295	8,666
Total assets		18,154	20,557
Current liabilities			
Derivative financial instruments	13	(1,854)	(1,136)
Trade and other payables, and contract-related liabilities		(5,533)	(6,207)
Current tax liabilities		(339)	(360)
Provisions for other liabilities and charges		(284)	(305)
Bank overdrafts, loans and other borrowings	11	(857)	(374)
		(8,867)	(8,382)
Liabilities of disposal groups classified as held for sale	15	(18)	–
		(8,885)	(8,382)
Non-current liabilities			
Deferred tax liabilities		(151)	(384)
Derivative financial instruments	13	(291)	(430)
Trade and other payables, and contract-related liabilities		(152)	(191)
Provisions for other liabilities and charges		(2,175)	(2,540)
Retirement benefit obligations	14	(219)	(302)
Bank loans and other borrowings	11	(4,486)	(4,380)
		(7,474)	(8,227)
Total liabilities		(16,359)	(16,609)
Net assets		1,795	3,948
Share capital		360	354
Share premium		2,330	2,240
Retained earnings		(869)	725
Other equity		(609)	(174)
Total shareholders' equity		1,212	3,145
Non-controlling interests		583	803
Total shareholders' equity and non-controlling interests		1,795	3,948

The Financial Statements on pages 21 to 61, of which the notes on pages 26 to 61 form part, were approved and authorised for issue by the Board of Directors on 12 February 2020 and were signed below on its behalf by:

Iain Conn
Group Chief Executive

Chris O'Shea
Group Chief Financial Officer

Group Cash Flow Statement

Year ended 31 December	Notes	2019 £m	2018 £m
Group operating (loss)/profit including share of results of joint ventures and associates		(849)	987
Add back share of losses of joint ventures and associates, net of interest and taxation	12	13	19
Group operating (loss)/profit before share of results of joint ventures and associates		(836)	1,006
Add back/(deduct):			
Depreciation, amortisation, write-downs, impairments and write-backs		2,299	1,019
Profit on disposals		(159)	(13)
Decrease in provisions		–	(29)
Cash contributions to defined benefit schemes in excess of service cost income statement charge		(493)	(34)
Employee share scheme costs		41	43
Unrealised losses arising from re-measurement of energy contracts		432	241
Exceptional charges reflected directly in operating profit		237	56
Operating cash flows before movements in working capital relating to business performance and payments relating to taxes and exceptional charges		1,521	2,289
Increase in inventories		(14)	(43)
Decrease/(increase) in trade and other receivables and contract-related assets relating to business performance		518	(834)
(Decrease)/increase in trade and other payables and contract-related liabilities relating to business performance		(385)	831
Operating cash flows before payments relating to taxes and exceptional charges		1,640	2,243
Taxes paid		(92)	(61)
Payments relating to exceptional charges in operating costs		(298)	(248)
Net cash flow from operating activities		1,250	1,934
Purchase of businesses, net of cash acquired		(30)	(85)
Sale of businesses		236	20
Purchase of property, plant and equipment and intangible assets	5	(781)	(926)
Sale of property, plant and equipment and intangible assets		8	26
Investments in joint ventures and associates		(1)	(3)
Dividends received from joint ventures and associates	12	1	22
Receipt of sub-lease capital payments	11	3	–
Interest received		11	15
Sale/(purchase) of securities	11	50	(76)
Net cash flow from investing activities		(503)	(1,007)
Payments for own shares		–	(11)
Proceeds from sale of forfeited share capital		2	–
Distribution to non-controlling interests		(124)	–
Financing interest paid	11	(243)	(305)
Repayment of borrowings and capital element of leases	11	(241)	(1,673)
Equity dividends paid		(471)	(551)
Net cash flow from financing activities		(1,077)	(2,540)
Net decrease in cash and cash equivalents		(330)	(1,613)
Cash and cash equivalents including overdrafts at 1 January		1,128	2,737
Effect of foreign exchange rate changes		(4)	4
Cash and cash equivalents including overdrafts at 31 December	11	794	1,128
Included in the following line of the Group Balance Sheet:			
Cash and cash equivalents		1,342	1,268
Overdrafts included within current bank overdrafts, loans and other borrowings		(548)	(140)

The notes on pages 26 to 61 form part of these Financial Statements.

Notes to the Financial Statements

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

This section details new accounting standards, amendments to standards and interpretations, whether these are effective in 2019 or later years, and if and how these are expected to impact the financial position and performance of the Group.

(a) General information

Centrica plc (the 'Company') is a public company limited by shares, domiciled and incorporated in the UK, and registered in England and Wales. The address of the registered office is Millstream, Maidenhead Road, Windsor, Berkshire, SL4 5GD. The Company, together with its subsidiaries comprise the 'Group'. The Company has its listing on the London Stock Exchange.

The Financial Statements for the year ended 31 December 2019 included in this announcement were authorised for issue in accordance with a resolution of the Board of Directors on 12 February 2020.

The preliminary results for the year ended 31 December 2019 have been extracted from audited accounts (with the exception of notes 18 to 23 which have not been audited) which have not yet been delivered to the Registrar of Companies. The Financial Statements set out in this announcement do not constitute statutory accounts for the year ended 31 December 2019 or 31 December 2018. The financial information for the year ended 31 December 2018 is derived from the statutory accounts from that year. The report of the auditors on the statutory accounts for the year ended 31 December 2019 was unqualified and did not contain a statement under Section 498 of the Companies Act 2006.

(b) Basis of preparation

The accounting policies applied in these Financial Statements for the year ended 31 December 2019 are consistent with those of the Annual Financial Statements for the year ended 31 December 2018, as described in those financial statements, with the exception of standards, amendments and interpretations effective in 2019 and other presentational changes.

(c) Standards, amendments and interpretations effective or adopted in 2019

From 1 January 2019, the following standards and amendments are effective in the Group's consolidated Financial Statements:

- IFRS 16: 'Leases';
- Amendments to IAS 19: 'Plan amendment, curtailment or settlement';
- Amendments to IFRS 9, IAS 39 and IFRS 7: 'Interest rate benchmark reform' (early adopted);
- Amendments to IFRS 9: 'Prepayment features with negative compensation';
- Amendments to IAS 28: 'Long-term interests in associates and joint ventures';
- Annual improvements to IFRS Standards 2015 – 2017 cycle; and
- IFRIC 23: 'Uncertainty over income tax treatments'.

The impact of adoption of IFRS 16 and the key changes to the accounting policies are disclosed below. Amendments to IAS 19 resulted in the re-measurement of pension scheme assets and liabilities subsequent to the plan amendments during the year, as reflected and detailed further in note 14.

Amendments to IFRS 9, IAS 39 and IFRS 7: 'Interest rate benchmark reform' was issued in September 2019 and endorsed by the EU on 16 January 2020. The amendments modify specific hedge accounting requirements to allow hedge accounting to continue for affected hedges during the period of uncertainty before the affected hedging instruments are amended as a result of the ongoing interest rate benchmark reforms. The amendment impacts only hedging instruments in fair value hedge relationships.

Other amendments effective during the year did not impact the consolidated Financial Statements.

IFRS 16

The Group adopted IFRS 16: 'Leases' from 1 January 2019. Adoption represents a significant change in accounting for lease arrangements in which the Group is a lessee as the standard mandates the on-balance sheet recognition of all lease liabilities and a corresponding right-of-use asset.

In accordance with the transition provisions of IFRS 16, for contracts entered into before 1 January 2019, the requirements of the standard have been applied only to contracts previously identified as leases in accordance with IAS 17: 'Leases' or IFRIC 4: 'Determining Whether an Arrangement Contains a Lease'. For contracts entered into or modified after that date, the definition of a lease in IFRS 16 has been applied.

On application of IFRS 16 comparative information has not been restated.

The Group utilised the recognition exemptions for both short-term leases applicable to machinery, property and exploration and production assets that have a lease term of 12 months or less and for leases of low value assets, including IT equipment. The lease payments associated with those leases are recognised as an expense on a straight-line basis over the lease term. The Group has also applied wherever applicable the following transition allowances:

- C10(a) application of a single discount rate to a portfolio of leases with reasonably similar characteristics;
- C10(b) reliance on previous assessment of whether leases are onerous in accordance with IAS 37: 'Provisions, Contingent Liabilities and Contingent Assets' immediately before the date of initial application as an alternative to performing an impairment review;
- C10(c) election not to apply the measurement requirements of the standard to leases where the term ends within 12 months of the date of initial application;
- C10(d) exclusion of initial direct costs from the measurement of the right-of-use asset at the date of initial application.

On transition, the Group measured lease liabilities for leases previously assessed as operating at the present value of the remaining lease payments and elected to measure the associated right-of-use assets at an amount equal to the lease liability, adjusted by the amount of any

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

prepaid or accrued lease payments. For arrangements previously assessed as finance leases, the asset and liability balances at 31 December 2018 were carried forward as the opening IFRS 16 balances and subsequently measured in accordance with the new standard.

Application resulted in the recognition of total lease liabilities and right-of-use assets on 1 January 2019 of £620 million and £463 million respectively. £402 million of the lease liability is incremental to the IAS 17 position. An £8 million sub-lease asset was also recognised on transition.

Right-of-use assets are presented in Property, plant and equipment on the Group Balance Sheet. Lease liabilities are included in Current and Non-current Borrowings.

The difference between the value of the lease liability and the right-of-use asset predominantly relates to the Spalding tolling contract. The legacy finance lease position reflected a lease liability of £99 million and a fully impaired asset. An incremental £65 million lease liability was recognised post transition on re-measurement of the contract to reflect lease payments as defined under IFRS 16 and the associated asset impaired to its recoverable amount of £31 million. The current year impairment charge is offset by the release of the onerous contract provision previously recognised in respect of this arrangement.

A reconciliation of the operating lease commitment at 31 December 2018 to the opening IFRS 16 lease liability is shown below, along with a summary of the key judgements applied by the Group in determining these opening positions:

	£m
Operating lease commitment at 31 December 2018	343
Finance lease liabilities at 31 December 2018	218
Net extension and termination options reasonably certain to be exercised	(2)
Recognition of lease arrangements within joint operations	24
Re-measurement of Spalding tolling contract	65
	648
Effect of discounting	(28)
IFRS 16 lease liability at 1 January 2019	620

The weighted average incremental borrowing rate used by the Group for IFRS 16 is 2%.

Extension and termination options

The existence and assessment of whether a renewal or termination option is 'reasonably certain' to be exercised is particularly relevant to the Group's significant property portfolio. The Group considers, amongst other factors, the type of property and its purpose, the location of the property, the strategic direction of the business the property is used by and how far into the future the option arises when determining whether exercise is reasonably certain, along with consideration of whether economic incentive to exercise the option exists.

Where exercise of an option is considered to be reasonably certain, the termination period or renewal period is excluded or included in the lease term, respectively, when calculating the lease liability.

Identifying the customer for arrangements involving assets used in joint operations

The Group holds interests in a number of joint operations within its exploration and production business. The Group has applied judgement in identifying the customer where a lease arrangement is to be used by a jointly controlled operation.

If the leased asset is dedicated to a specific joint operation and its usage is dictated by the joint operating agreement, the joint operation is deemed the customer. In such instances:

- When the Group signs a lease agreement on behalf of a joint operation and has primary responsibility for payments to the lessor, the Group recognises 100% of the lease liability and a right-of-use asset on its balance sheet. When the partner is obliged to reimburse the Group for its share of lease payments, a sub-lease receivable is recognised and an equal adjustment to the right-of-use asset is made.
- When the partner has the primary responsibility for payments to the lessor and the Group is obliged to reimburse its share of the lease payments, a lease liability due to the partner and equal right-of-use asset are recognised.

If the leased asset is not dedicated to a specific joint operation or its usage is not dictated by the joint operating agreement of a joint operation to which it is dedicated, the signatory to the lease agreement is deemed the customer. If this is the Group, the lease liability and right-of-use asset are recognised in full. If it is the partner, no lease liability or right-of-use asset is recognised.

The comparative information continues to be reported in accordance with IAS 17 and IFRIC 4.

Significant changes in the Group's accounting policy applicable from 1 January 2019

The Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the earlier of the end of the useful life of the right-of-use asset or the end of the lease term. The estimated useful lives of right-of-use assets are determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain re-measurements of the lease liability.

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

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Group's incremental borrowing rate.

Lease payments included in the measurement of the lease liability comprise: fixed payments (including in-substance fixed payments), variable lease payments that depend on an index or a rate (initially measured using the index or rate as at the commencement date), amounts expected to be payable under a residual value guarantee, the exercise price under a purchase option that the Group is reasonably certain to exercise, lease payments in an optional renewal period if the Group is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Group is reasonably certain not to terminate early. Variable lease payments that do not depend on an index or rate are recognised in profit or loss in the period in which the event or condition that triggers those payments occurs.

The lease liability is subsequently measured at amortised cost using the effective interest method. It is re-measured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or if the Group changes its assessment of whether it will exercise a purchase, lease-term extension or termination option.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use of asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Group recognises the lease payments associated with short-term leases (leases expiring within twelve months from commencement) and leases of low value assets (underlying asset value less than £5,000) on a straight-line basis over the lease term.

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

The Group has not applied the following standards and amendments in the consolidated Group Financial Statements as they are not yet effective, and have not yet been endorsed by the EU:

- IFRS 17: 'Insurance contracts', effective from 1 January 2021; and
- Amendments to IFRS 3: 'Business Combinations', effective 1 January 2020.

IFRS 17: 'Insurance contracts', issued in May 2017, will not be effective before 1 January 2021. The Group currently has fixed-fee service contracts that it accounts for as insurance contracts under IFRS 4: 'Insurance contracts'. Under IFRS 17, subject to certain conditions, there is an accounting policy choice to account for these contracts under IFRS 17 or IFRS 15, which is being evaluated as part of the implementation project. Work is ongoing to determine the full impact of application.

Management does not expect the future application of the IFRS 3 amendments, or other issued but not effective amendments to have a material impact on the consolidated Financial Statements.

(e) Restatements

In March 2019, the International Financial Reporting Interpretations Committee (IFRIC) issued an agenda decision on the Physical Settlement of Contracts to Buy or Sell a non-Financial Item. The committee concluded that, for physical commodity trades within the scope of IFRS 9: 'Financial Instruments', entities should not transfer previously recognised, unrealised marked-to-market movements to different income statement line items upon realisation. As the Group previously recognised fair value movements on the re-measurement of certain energy contracts net within cost of sales up to the point of realisation (when the underlying contract would be recognised, either in revenue or cost of sales), presentation of the Group's revenue and cost of sales in the results for the year column has been amended to comply with the requirements of the IFRIC agenda decision. Comparative results have been represented with no impact on gross profit.

The Group will continue to present the impact of realised positions (and any unrealised fair value movements on proprietary trades) in the scope of IFRS 9 in the business performance column as either revenue or cost of sales, as this better reflects the underlying economic performance of the Group's trading, however the effect of these positions will then be removed from revenue or cost of sales through a separate column (the exceptional items and certain re-measurements column) and reflected instead in a new 'Re-measurement and settlement of energy contracts' line item.

In addition to the above, the new line item in the exceptional items and certain re-measurements column of the Income Statement includes fair value movements on those unrealised commodity derivative trades that are prohibited from being treated as 'own use' (primarily due to net settlement terms) but are economically related to our upstream assets, capacity/off-take contracts or downstream demand, in line with the policy detailed at note 2.

The effect of this re-presentation for 2018 is a reduction in revenue and cost of sales of £4.1 billion and £6.8 billion respectively. There is no impact on gross profit.

The exercise to determine the above restatement required the Group to perform a detailed review of revenue and cost of sales across its wider business. During this review, the Group specifically considered the presentation of certain European commodity trades in the business performance column. These trades (both purchases and sales) have historically been presented gross as revenue or cost of sales, however, as the primary purpose of the book is speculative, and to ensure consistency with other similar activities undertaken by the Group, net presentation is deemed more appropriate and accordingly, trades are now presented net within revenue in the business performance column. The prior year comparative has been restated and whilst there is no impact on gross profit, business performance revenue and business performance cost of sales have been reduced by £2.3 billion.

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

The restatement arising from the IFRIC determination has been applied to the business performance revenue and business performance cost of sales results as adjusted for the presentation of European commodity trades noted above.

The Group has redefined its operating segments during the year to reflect the way in which the business is now organised. Operating segments are now defined as:

- Centrica Consumer
- Centrica Business; and
- Upstream

The revised operating segments incorporate similar products and services, as well as the major factors that influence the performance of these products and services, such as regulatory environments within Centrica Consumer, and access to commodity markets and trading counterparties within Centrica Business, across different geographical locations in which the Group operates. Further information on the operating segments of the Group is shown at note 5.

2. Centrica specific accounting measures

This section sets out the Group's specific accounting measures applied in the preparation of the consolidated Financial Statements. These measures enable the users of the accounts to understand the Group's underlying and statutory business performance separately.

(a) Use of adjusted performance measures

The Directors believe that reporting adjusted measures (margin, profit, earnings per share and operating cash flow) provides additional useful information on business performance and underlying trends. These measures are used for internal performance purposes, are not defined terms under IFRS and may not be comparable with similarly titled measures reported by other companies.

Management uses adjusted gross margin and adjusted operating profit to evaluate segment performance. They are defined as gross margin /operating profit before:

- exceptional items; and
- certain re-measurements.

Exceptional items and certain re-measurements are excluded because these items are considered by the Directors to distort the Group's underlying business performance. See section (b) of this note for further details.

Adjusted earnings is defined as earnings before:

- exceptional items net of taxation; and
- certain re-measurements net of taxation.

A reconciliation of adjusted earnings and adjusted earnings per share is provided in note 10.

Adjusted operating cash flow is used by management to assess the cash generating abilities of each segment. Adjusted operating cash flow is defined as net cash flow from operating activities before:

- payments relating to exceptional items;
 - deficit reduction payments made to the UK defined benefit pension schemes; and
 - movements in variation margin and cash collateral that are included in net debt;
- but including:
- dividends received from joint ventures and associates.

Deficit reduction payments and movements in variation margin and cash collateral are excluded because the Directors do not consider these to represent the operating cash flows generated by underlying business performance, as they are predominantly triggered by wider market factors and, in the case of variation margin and cash collateral, these represent timing differences. Dividends received from joint ventures and associates are considered by the Directors to represent operating cash flows generated by the Group's operations that are structured in this manner.

2. Centrica specific accounting measures

(b) Exceptional items and certain re-measurements

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

The Group is an integrated energy business. This means that it utilises its knowledge and experience across the gas and power (and related commodity) value chains to make profits across the core markets in which it operates. As part of this strategy, the Group enters into a number of forward energy trades to protect and optimise the value of its underlying production, generation, storage and transportation assets and contracts (and similar capacity or off-take arrangements), as well as to meet the future needs of its customers (downstream demand). These trades are designed to reduce the risk of holding such assets, contracts or downstream demand and are subject to strict risk limits and controls.

Primarily because some of these trades include terms that permit net settlement, they are prohibited from being designated as 'own use' and so IFRS 9 requires them to be individually fair valued.

Fair value movements on these commodity derivative trades do not reflect the underlying performance of the business because they are economically related to our upstream assets, capacity/off-take contracts or downstream demand, which are typically not fair valued. Therefore, these certain re-measurements are reported separately and are subsequently reflected in business performance when the underlying transaction or asset impacts profit or loss.

The effects of these certain re-measurements are presented within either revenue or cost of sales when recognised in business performance depending on the nature of the contract. They are managed separately from proprietary energy trading activities where trades are entered into speculatively for the purpose of making profits in their own right. These proprietary trades are included in revenue in the business performance column of the Group Income Statement.

The Group's result for the year presents both realised and unrealised fair value movements on all derivative energy contracts within the 'Re-measurement and settlement of energy contracts' line item.

Exceptional items are those items that, in the judgement of the Directors, need to be disclosed separately by virtue of their nature, size or incidence. Again, to ensure the business performance column reflects the underlying results of the Group, these exceptional items are also reported in the separate column in the Group Income Statement. Items that may be considered exceptional in nature include disposals of businesses or significant assets, business restructurings (including property rationalisation costs), significant onerous contract charges/releases, debt repurchase costs, certain pension past service credits/costs, asset impairments/write-backs, the tax effects of these items and the effect of changes in UK upstream tax rates.

The Group distinguishes between business performance asset impairments/write-backs and exceptional impairments/write-backs on the basis of the underlying driver of the impairment, as well as the magnitude of the impairment. Drivers that are deemed to be outside of the control of the Group (e.g. commodity price changes) give rise to exceptional impairments. Additionally, impairment charges that are of a one-off nature (e.g. reserve downgrades or one-time change in intended use of an asset) and significant enough value to distort the underlying results of the business are considered to be exceptional. Other impairments that would be expected in the normal course of business, such as unsuccessful exploration activity (dry holes), are reflected in business performance.

3. Critical accounting judgements and key sources of estimation uncertainty

This section sets out the key areas of judgement and estimation that have the most significant effect on the amounts recognised in the consolidated Financial Statements.

(a) Critical judgements in applying the Group's accounting policies

In addition to the judgements described above, management has made the following key judgements in applying the Group's accounting policies that have the most significant effect on the consolidated Group Financial Statements.

Spirit Energy consolidation

During 2017, the Group acquired Bayerngas Norge's exploration and production business and combined this with the Group's existing exploration and production business to form the Spirit Energy business (SE). The Group, through its board majority, can control decisions that represent Board Reserved Matters and the Directors consider that these rights provide control over the relevant activities that most significantly influence the variable returns of the SE business. The Group has concluded that it controls SE and consequently SE is fully consolidated with a non-controlling interest of 31%.

Metering contracts

In 2015, as part of the smart meter roll-out, the Group renewed meter rental arrangements with third parties, with a further extension of one contract in 2018. The Group assessed that these were not leases under IAS 17 and IFRIC 4 because at inception of the contract there were no specified assets, the Group did not have the right to physically or operationally control the smart meters and other parties took more than an insignificant amount of the output from the assets. This assessment was grandfathered on adoption of IFRS 16.

One of the meter rental arrangements was renegotiated during 2019 and a reassessment of the contract was performed in accordance with IFRS 16. On the basis that the asset has a predetermined use and the Group neither has the right to operate the asset, nor was involved in its design, the conclusion that these arrangements are not leases continues to be appropriate.

3. Critical accounting judgements and key sources of estimation uncertainty

LNG contracts

The Group is active in the liquified natural gas (LNG) market, both procuring long-term LNG supply arrangements, and transacting in shorter-term LNG cargoes. Contracts to buy and sell LNG are not considered to meet the definition of a derivative as there is currently no active market for LNG and contracts are not capable of being net settled. As a result, they are accounted for on an accruals basis.

(b) Key sources of estimation uncertainty

Estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, including current and expected economic conditions, and, in some cases, actuarial techniques. Although these estimates and associated assumptions are based on management's best knowledge of current events and circumstances, actual results may differ.

Revenue recognition – unread gas and electricity meters

Revenue for energy supply activities includes an assessment of energy supplied to customers between the date of the last meter reading and the year end (known as unread revenue). Unread gas and electricity comprises both billed and unbilled revenue. It is estimated through the billing systems, using historical consumption patterns, on a customer-by-customer basis, taking into account weather patterns, load forecasts and the differences between actual meter readings being returned and system estimates. Actual meter readings continue to be compared to system estimates between the balance sheet date and the finalisation of the accounts.

An assessment is also made of any factors that are likely to materially affect the ultimate economic benefits that will flow to the Group, including bill cancellation and re-bill rates. Estimated revenue is restricted to the amount the Group expects to be entitled to in exchange for energy supplied. The judgements applied, and the assumptions underpinning these judgements, are considered to be appropriate. However, a change in these assumptions would have an impact on the amount of revenue recognised. Unbilled revenue recognised on the Group Balance Sheet within Trade and other receivables at 31 December 2019 was £1,342 million (2018: £1,542 million).

Industry reconciliation process – cost of sales

Industry reconciliation procedures are required as differences arise between the estimated quantity of gas and electricity the Group deems to have supplied and billed customers, and the estimated quantity industry system operators deem the individual suppliers, including the Group, to have supplied to customers. The difference in deemed supply is referred to as imbalance. The reconciliation procedures can result in either a higher or a lower value of industry deemed supply than has been estimated as being supplied to customers by the Group, but in practice tends to result in a higher value of industry deemed supply. The Group reviews the difference to ascertain whether there is evidence that its estimate of amounts supplied to customers is inaccurate or whether the difference arises from other causes. The Group's share of the resulting imbalance is included within commodity costs charged to cost of sales. Management estimates the level of recovery of imbalance that will be achieved either through subsequent customer billing or through developing industry settlement procedures. The adjustments for imbalance at 31 December 2019 are not significant. Changes resulting from these management estimates can be material with adjustments of up to £30 million having been made in the last few years, although it could possibly be higher than these amounts in the future.

Decommissioning costs

The estimated cost of decommissioning at the end of the producing lives of gas and oil fields is reviewed periodically and is based on reserves, price levels and technology at the balance sheet date. Provision is made for the estimated cost of decommissioning at the balance sheet date. The payment dates of total expected future decommissioning costs are uncertain and dependent on the lives of the facilities, but are currently anticipated to be incurred until the 2040s.

The level of provision held is also sensitive to the discount rate used to discount the estimated decommissioning costs. The real discount rate used to discount the decommissioning liabilities at 31 December 2019 is unchanged at 1.2%. A 1% change in this discount rate would change the decommissioning liability by approximately £160 million.

Gas and liquids reserves

The volume of proven and probable (2P) gas and liquids reserves is an estimate that affects the unit of production method of depreciating producing gas and liquids property, plant and equipment (PP&E) as well as being a significant estimate affecting decommissioning and impairment calculations. The factors impacting gas and liquids estimates, the process for estimating reserve quantities and reserve recognition is described on page 62.

The impact of a change in estimated 2P reserves is dealt with prospectively by depreciating the remaining book value of producing assets over the expected future production. If 2P reserves estimates are revised downwards, earnings could be affected by higher depreciation expense or an immediate write-down (impairment) of the asset's book value.

Determination of fair values – energy derivatives

Fair values of energy derivatives are estimated by reference to published price quotations in active markets and in part by using valuation techniques.

Impairment of long-lived assets

The Group makes judgements in considering whether the carrying amounts of its long-lived assets (principally Upstream gas and oil assets, Nuclear investment (20% economic interest accounted for as an investment in associate) and goodwill) or cash generating units (CGUs) are recoverable and estimates their recoverable amounts.

3. Critical accounting judgements and key sources of estimation uncertainty

Upstream gas and oil assets

The recoverable amount of the Group's gas and oil assets is determined by discounting the post-tax cash flows expected to be generated by the assets over their lives taking into account those assumptions that market participants would consider when assessing fair value. The cash flows are derived from projected production profiles of each field, based predominantly on expected 2P reserves and take into account forward prices for gas and liquids over the relevant period. Where forward market prices are not available, prices are determined based on the median price of a collection of third-party comparator curves.

Further details of the assumptions used in determining the recoverable amounts, the impairments booked during the year and sensitivity to the assumptions are provided in note 6. Note that Spirit Energy was not considered to be an asset held for sale as at the reporting date as its disposal was not deemed to be highly probable within one year.

Nuclear investment

The recoverable amount of the Nuclear investment is based on the value of the existing UK nuclear fleet operated by EDF. The existing fleet value is calculated by discounting pre-tax cash flows derived from the stations based on forecast power generation and power prices, whilst taking account of outages and the possibility of life extensions. Further details of the methodology, assumptions, impairment booked during the year and related sensitivities are provided in note 6. Note that the Nuclear investment was not considered to be an asset held for sale as at the reporting date as its disposal was not deemed to be highly probable within one year.

Goodwill

Goodwill does not generate independent cash flows and accordingly is allocated at inception to specific CGUs or groups of CGUs for impairment testing purposes. The recoverable amounts of these CGUs are derived from estimates of future cash flows and hence the goodwill impairment tests are also subject to these key estimates. The results of these tests may then be verified by reference to external market valuation data.

Further details on the goodwill balances, assumptions used in determining the recoverable amounts and impairment booked during the year are provided in note 6. Sensitivity to the assumptions is also found in note 6 for goodwill for goodwill allocated to impaired CGUs in the year.

Credit provisions for trade and other receivables

The methodology for determining provisions for credit losses on trade and other receivables uses an expected credit loss model, which calculates the expected loss applicable to the receivable balance over its lifetime. Although the provisions recognised are considered appropriate, the use of different assumptions or changes in economic conditions could lead to movements in the provisions and therefore impact the Group Income Statement.

Pensions and other post-employment benefits

The cost of providing benefits under defined benefit schemes is determined separately for each of the Group's schemes under the projected unit credit actuarial valuation method. Actuarial gains and losses are recognised in full in the period in which they occur. The key assumptions used for the actuarial valuation are based on the Group's best estimate of the variables that will determine the ultimate cost of providing post-employment benefits. The Group is permitted to recognise a pension scheme asset because it has an unconditional right to a refund on any winding up of the schemes or if gradual settlement of liabilities over time is assumed. Further details, including sensitivities to these assumptions, are provided in note 14.

Brexit

The Group has considered the potential impact of a no-deal Brexit. Economists have suggested that failure to agree a satisfactory trade deal could lead to lower base interest rates and higher inflation, following a likely weakening of sterling against other currencies. This would have an impact on the Group's pension scheme discount rate assumptions (if high quality corporate bond yields follow base rates) and could change forward energy prices (particularly in sterling terms). The sensitivity of the Group's pension schemes to a change in key assumptions is disclosed in note 14.

The sensitivity of a change in forward energy prices and the impact this would have on impairment of the Group's assets is disclosed in note 6. Macroeconomic impacts on existing trade receivable recoverability are expected to be immaterial but could have a greater impact on future trade receivable recoverability.

4. Risk management

The Group's normal operating, investing and financing activities expose it to a variety of risks. Risk management is fundamental to the way the Group is governed and managed. The system of risk management and internal control is set out in the 2018 Annual Report and Accounts.

During 2019, the risks that were prioritised for leadership attention related to:

- risk of political or regulatory intervention, or change to the political or regulatory landscape;
- risk of failure to ensure compliance with legal, regulatory and ethical requirements;
- risk of failure to protect the health, safety, and security of customers, employees and third parties, and the risk of causing a negative impact on the environment;
- risk of failure to protect from cyber and other security threats, internal misuse of assets and inability to recover business continuity; and
- risk of failure to execute change programmes and business restructuring.

The Group's financial performance and price competitiveness is dependent upon its ability to manage exposure to wholesale commodity prices for gas, oil, carbon and power, interest rates for long-term borrowing, fluctuations in various foreign currencies, and environmental factors. Financial risk has been delegated by the executive Group Ethics, Risk Assurance, Control and Compliance Committee (GERACCC) to the Finance Risk, Assurance & Controls Committee (FRACC) where it is reviewed quarterly by the senior Finance stakeholders to review Group financial exposures and assess compliance with risk limits. The four main areas of financial risk are managed as follows:

- commodity price risk management is carried out in accordance with individual business unit policies and directives including appropriate escalation routes;
- treasury risk management, including management of currency risk, interest rate risk and liquidity risk is carried out by a central Group Treasury function in accordance with the Group's financing and treasury policy, as approved by the Board;
- wholesale credit risks associated with commodity trading and treasury positions are managed in accordance with the Group's credit risk policy; and
- downstream customer credit risk management is carried out in accordance with individual business unit credit policies.

Credit risk for financial assets

Credit risk is the risk of loss associated with a counterparty's inability or failure to discharge its obligations under a contract. The Group continually reviews its rating thresholds for relevant counterparty credit limits and updates these as necessary, based on a consistent set of principles. It continues to operate within its limits. In respect of trading activities for both the US and Europe there is an effort to maintain a balance between exchange-based trading and bilateral transactions. This allows for a reasonable balance between counterparty credit risk and potential liquidity requirements. In addition, the Group actively manages the trade-off between credit and liquidity risks by optimising the use of contracts with collateral obligations and physically settled contracts without collateral obligations.

Liquidity risk management and going concern

The Group has a number of treasury and risk policies to monitor and manage liquidity risk. Cash forecasts identifying the Group's liquidity requirements are produced regularly and are stress-tested for different scenarios, including, but not limited to, reasonably possible increases or decreases in commodity prices and the potential cash implications of a credit rating downgrade. The Group seeks to ensure that sufficient financial headroom exists for at least a 12-month period to safeguard the Group's ability to continue as a going concern. It is the Group's policy to maintain committed facilities and/or available surplus cash resources of at least £1,200 million, raise at least 75% of its gross debt (excluding non-recourse debt) in the capital market and to maintain an average term to maturity in the recourse long-term debt portfolio greater than five years.

At 31 December 2019, the Group had undrawn committed credit facilities of £3,072 million (2018: £3,879 million) and £1,167 million (2018: £1,079 million) of unrestricted cash and cash equivalents. 95% (2018: 93%) of the Group's gross debt has been raised in the long-term debt market and the average term to maturity of the long-term debt portfolio was 10.6 years (2018: 11.1 years).

The Group's liquidity is impacted by the cash posted or received under margin and collateral agreements. The terms and conditions of these agreements depend on the counterparty and the specific details of the transaction. Cash is generally returned to the Group or by the Group within two days of trade settlement. Refer to note 11 for the movement in cash posted or received as collateral.

The level of undrawn committed bank facilities and available cash resources has enabled the Directors to conclude that the Group has sufficient headroom to continue as a going concern.

5. Segmental analysis

The Group's reporting segments are those used internally by management to run the business and make decisions. The Group's segments are based on products and services as well as the major factors that influence the performance of these products and services across the geographical locations in which the Group operates.

(a) Segmental structure

During the year the Group's reportable operating segments have been amended due to a change in the way management review and make decisions about the business. Previously reported segments have now been amalgamated into the higher-level Centrica Consumer, Centrica Business or Upstream areas (as shown below). The exception to this was Central Power Generation, where the Nuclear investment was reallocated to Upstream, whilst the Spalding power station tolling contract remained within Centrica Business.

The types of products and services from which each reportable segment derived its income during the year are detailed below. Income sources are reflected in Group revenue unless otherwise stated:

Segment	Description
Centrica Consumer	<ul style="list-style-type: none"> (i) The supply of gas and electricity to residential customers in the UK, North America and to residential and commercial and industrial customers in the Republic of Ireland; (ii) the installation, repair and maintenance of domestic central heating and cooling systems and related appliances in the UK, North America and the Republic of Ireland, and the provision of fixed-fee maintenance/breakdown service and insurance contracts in the UK and North America; (iii) power generation in the Republic of Ireland; and (iv) the supply of new technologies and energy efficiency solutions in all geographies in which the Group operates.
Centrica Business	<ul style="list-style-type: none"> (i) The supply of gas and electricity and provision of energy-related services to business customers and trading counterparties in the UK and North America; (ii) the supply of energy efficiency solutions, flexible generation and new technologies to commercial and industrial customers in all geographies in which the Group operates. Flexible merchant generation is also provided to the UK system operator; (iii) the generation of power from the Spalding combined cycle gas turbine tolling contract and other thermal assets in the UK; and (iv) the procurement, trading and optimisation of energy in the UK and North America. This income stream is included in re-measurement and settlement of energy contracts.
Upstream	<ul style="list-style-type: none"> (i) The production and processing of gas and oil and the development of new fields, principally within Spirit Energy, to maintain reserves in the UK and Europe; and (ii) the generation of power from nuclear assets in the UK.

5. Segmental analysis

(b) Revenue

Gross segment revenue includes revenue generated from the sale of products and services to other reportable segments of the Group. Group revenue reflects only the sale of products and services to third parties. Sales between reportable segments are conducted on an arm's length basis.

Year ended 31 December	2019			2018 (restated) (i)		
	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m
Centrica Consumer	11,956	–	11,956	11,870	–	11,870
Centrica Business	13,759	(217)	13,542	14,492	(211)	14,281
Upstream	2,290	(963)	1,327	2,648	(1,418)	1,230
Group revenue included in business performance	28,005	(1,180)	26,825	29,010	(1,629)	27,381
Less: revenue arising on contracts in scope of IFRS 9 included in business performance			(4,151)			(4,077)
Group Revenue			22,674			23,304

(i) Segmental revenues have been restated to reflect the new operating structure of the Group. Group revenue has been restated to exclude revenue from contracts in the scope of IFRS 9. Group revenue and group revenue included in business performance have also been restated to include the net result of certain commodity purchases and sales trades that are deemed to be speculative in nature. See note 1 for further details.

The table below shows the Group revenue arising from contracts with customers, and therefore in the scope of IFRS 15, and revenue arising from contracts in the scope of other standards. The key economic factors impacting the nature, timing and uncertainty of revenue and cash flows are considered to be driven by the type and broad geographical location of the customer. The analysis of IFRS 15 revenue below reflects these factors.

Year ended 31 December	2019				
	Revenue from contracts with customers in scope of IFRS 15 £m	Revenue from fixed-fee service and insurance contracts in scope of IFRS 4, and leasing contracts in scope of IFRS 16 £m	Group Revenue £m	Revenue in business performance arising from contracts in scope of IFRS 9 £m	Group Revenue included in business performance £m
Energy supply – UK and Republic of Ireland	7,398				
Energy supply – North America	2,307				
Energy services	1,023				
Centrica Consumer	10,728	1,110	11,838	118	11,956
Energy supply – UK and Republic of Ireland	1,574				
Energy supply – North America	6,927				
Energy sales to trading and energy procurement counterparties	1,237				
Other	300				
Centrica Business	10,038	19	10,057	3,485	13,542
Oil and gas production	779				
Upstream	779	–	779	548	1,327
	21,545	1,129	22,674	4,151	26,825

5. Segmental analysis

Year ended 31 December	2018 (restated) (i)				
	Revenue from contracts with customers in scope of IFRS 15 £m	Revenue from fixed-fee service and insurance contracts in scope of IFRS 4, and leasing contracts in scope of IFRS 16 £m	Group Revenue £m	Revenue in business performance arising from contracts in scope of IFRS 9 £m	Group Revenue included in business performance £m
Energy supply – UK and Republic of Ireland	7,416				
Energy supply – North America	2,079				
Energy services	1,011				
Centrica Consumer	10,506	1,134	11,640	230	11,870
Energy supply – UK and Republic of Ireland	1,421				
Energy supply – North America	7,449				
Energy sales to trading and energy procurement counterparties	1,565				
Other	236				
Centrica Business	10,671	9	10,680	3,601	14,281
Oil and gas production	984				
Upstream	984	–	984	246	1,230
	22,161	1,143	23,304	4,077	27,381

(i) Segmental revenues have been restated to reflect the new operating structure of the Group. Group revenue has been restated to exclude revenue from contracts in the scope of IFRS 9. Group revenue and group revenue included in business performance have also been restated to include the net result of certain commodity purchases and sales trades that are deemed to be speculative in nature. See note 1 for further details.

The Group applies the practical expedient in paragraph 121 of IFRS 15 and therefore does not disclose information related to the transaction price allocated to remaining performance obligations on the basis that the Group recognises revenue from the satisfaction of the performance obligations within energy supply contracts in accordance with Paragraph B16.

Geographical analysis of revenue and non-current assets

The Group monitors and manages performance by reference to its operating segments and not solely on a geographical basis. However, provided below is an analysis of revenue and certain non-current assets by geography.

Year ended 31 December	Revenue (based on location of customer) (restated) (i)		Non-current assets (based on location of assets) (ii)	
	2019 £m	2018 £m	2019 £m	2018 £m
UK	10,437	10,494	4,860	5,814
Republic of Ireland	777	679	135	124
Norway	322	603	1,474	1,768
United States of America	8,613	8,918	1,524	1,774
Canada	1,272	1,170	379	360
Rest of the world	1,253	1,440	214	478
	22,674	23,304	8,586	10,318

(i) Prior year revenue has been restated to exclude revenue arising from contracts in the scope of IFRS 9 and to include the net result of certain commodity purchases and sales trades that are deemed to be speculative in nature. See note 1 for further details.

(ii) Non-current assets comprise goodwill, other intangible assets, PP&E, interests in joint ventures and associates and non-financial assets within trade and other receivables, and contract-related assets.

5. Segmental analysis

(c) Adjusted gross margin and adjusted operating profit

The measure of profit used by the Group is adjusted operating profit. Adjusted operating profit is operating profit before exceptional items and certain re-measurements. This includes business performance results of equity-accounted interests.

This note also details adjusted gross margin. Both measures are reconciled to their statutory equivalents.

Year ended 31 December	Adjusted Gross Margin		Adjusted Operating Profit (restated) (i)	
	2019 £m	2018 £m	2019 £m	2018 £m
Centrica Consumer	2,315	2,606	505	750
Centrica Business	1,030	882	217	75
Upstream	507	765	179	567
Adjusted gross margin/adjusted operating profit	3,852	4,253	901	1,392
Certain re-measurements	(646)	(200)	(646)	(200)
Share of re-measurement of certain associates' energy contracts (net of taxation)	–	–	(1)	(20)
Gross profit	3,206	4,053		
Exceptional items in operating profit			(1,103)	(183)
Share of associates' exceptional operating cost (net of taxation)			–	(2)
Total exceptional items and certain re-measurements included in operating profit			(1,750)	(405)
Operating (loss)/profit after exceptional items and certain re-measurements			(849)	987

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

(d) Included within adjusted operating profit

Presented below are certain items included within adjusted operating profit, including a summary of impairments of property, plant and equipment and write-downs relating to exploration and evaluation assets.

Year ended 31 December	Depreciation and impairments of property, plant and equipment		Amortisation, write-downs and impairments of intangibles	
	2019 £m	2018 (restated) (i) £m	2019 £m	2018 (restated) (i) £m
Centrica Consumer	(70)	(64)	(148)	(168)
Centrica Business	(69)	(21)	(76)	(73)
Upstream	(690)	(639)	(63)	(59)
Other (ii)	(51)	(12)	(39)	(22)
	(880)	(736)	(326)	(322)

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

(ii) The Other segment includes corporate functions, subsequently recharged.

5. Segmental analysis

(e) Capital expenditure

Capital expenditure represents additions, other than assets acquired as part of business combinations, to property, plant and equipment and intangible assets. Capital expenditure has been reconciled to the related cash outflow.

Year ended 31 December	Capital expenditure on property, plant and equipment		Capital expenditure on intangible assets other than goodwill	
	2019 £m	2018 (restated) (i) £m	2019 £m	2018 (restated) (i) £m
Centrica Consumer	35	45	512	469
Centrica Business	53	114	593	594
Upstream	328	367	218	118
Other	23	44	26	84
Capital expenditure	439	570	1,349	1,265
Capitalised borrowing costs	(11)	(14)	(2)	(4)
Inception of new leases and movements in payables and prepayments related to capital expenditure	(41)	18	(20)	(55)
Purchases of emissions allowances and renewable obligation certificates	–	–	(933)	(854)
Net cash outflow	387	574	394	352

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

(f) Adjusted operating cash flow

Adjusted operating cash flow is used by management to assess the cash generating abilities of each segment. Adjusted operating cash flow is net cash flow from operating activities before payments relating to exceptional items, deficit payments to the UK defined benefit pension schemes, movements in variation margin and cash collateral that are included in net debt, but including dividends from joint ventures and associates. This measure is reconciled to the net cash flow from operating activities.

Year ended 31 December	2019 £m	2018 (restated) (i) £m
Centrica Consumer	913	1,019
Centrica Business	282	214
Upstream	635	1,012
Adjusted operating cash flow	1,830	2,245
Dividends received from joint ventures and associates	(1)	(22)
UK pension deficit payments (note 14)	(235)	(98)
Payments relating to exceptional charges	(298)	(248)
Movements in margin and cash collateral included in net debt (note 11)	(46)	57
Net cash flow from operating activities	1,250	1,934

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

6. Exceptional items and certain re-measurements

Exceptional items are those items that, in the judgement of the Directors, need to be disclosed separately by virtue of their nature, size or incidence. Items which may be considered exceptional in nature include disposals of businesses or significant assets, business restructurings, significant onerous contract charges and releases, pension change costs or credits, significant debt repurchase costs and asset write-downs/impairments and write-backs.

(a) Exceptional items

Year ended 31 December	2019 £m	2018 £m
(Impairment)/write-back of retained exploration and production assets ⁽ⁱ⁾	(476)	90
Impairment of power assets and provision for onerous power contracts ⁽ⁱⁱ⁾	(381)	(46)
Impairment of Centrica Home Solutions (formerly Connected Home) ⁽ⁱⁱⁱ⁾	(77)	–
Restructuring costs ^(iv)	(356)	(170)
Net pension change credit/(costs) ^(v)	152	(43)
Net gain/(loss) on significant disposals (including impairment of assets sold or held for sale) ^(vi)	35	(16)
Exceptional items included within Group operating profit	(1,103)	(185)
Debt repurchase costs included within financing costs	–	(139)
Exceptional items included within Group profit before taxation	(1,103)	(324)
Net taxation on exceptional items (note 8)	116	89
Net exceptional items after taxation	(987)	(235)

- (i) In the Upstream segment, impairments of exploration and production assets have been booked relating to the value of certain UK, Norwegian and Danish gas and oil fields. Predominantly due to the impact of a reduction in near-term liquid prices and long-term price forecasts, together with the conclusion that certain field reserve levels were not sufficient for development, there has been a write-off of £508 million (post-tax £406 million). Also included is the reduction of decommissioning provisions (pre-tax £32 million, post-tax £20 million) related to assets previously impaired through exceptional items. Separately, in the taxation line, the net write-off of a deferred tax asset associated with exploration and production investment allowance, decommissioning carry back and PRT has also been recorded (post-tax £35 million) related to these exceptional items.
- (ii) In the Upstream segment, an impairment of the nuclear investment has been booked as a result of a reduction in price forecasts, and availability issues at Hunterston and Dungeness. The pre and post-tax impact was £372 million. Similarly, in the Centrica Business segment, an impairment of a battery storage asset has also been recorded as a result of forecast price reductions. This gave rise to a charge of £9 million (post-tax £7 million).
- (iii) In the Consumer segment, following the strategic decision to refocus Centrica Home Solutions activity to the UK and Ireland and an updated profitability forecast, the Group has reflected a charge of £77 million, including inventory write-downs of £22 million, asset impairments (including goodwill) of £48 million and onerous contract provisions and other costs of £7 million. The post-tax impact was £69 million.
- (iv) The continuation of phase 2 of the Group's cost efficiency programme has seen the Group recognise restructuring costs principally related to redundancy (excluding pension strains), change resource, consultancy, property rationalisation and other transformational activity, including member compensation payments from renegotiating the UK defined benefit pension arrangements to update contribution rates, salary caps and benefits, in the first half of 2019. The post-tax impact was £288 million.
- (v) A pension past service credit of £260 million (post-tax £216 million) has been recognised predominantly related to a rule amendment to the UK defined benefit pension scheme arrangements to offer members an option to level up their ongoing pension if they retire before the statutory retirement age. This has been offset by pension strain costs associated with redundancy of £108 million (post-tax £89 million). In 2018, £2 million of the pension past service cost related to the Nuclear associate schemes.
- (vi) The disposals of Clockwork and Valemon and Sindre, together with the King's Lynn power station transfer to held for sale, resulted in a net gain of £5 million (post-tax £13 million). Trinidad and Tobago exploration and production assets formerly owned by the Group have passed the final investment decision hurdle under their new owner. This has resulted in the receipt of previously unrecognised contingent consideration. The pre and post-tax impact was £30 million. See note 15 for further details.

6. Exceptional items and certain re-measurements

(b) Certain re-measurements

Certain re-measurements are the fair value movements on energy contracts entered into to meet the future needs of our customers or to sell the energy produced from our upstream assets. These contracts are economically related to our upstream assets, capacity/off-take contracts or downstream demand, which are typically not fair valued, and are therefore separately identified in the current period and reflected in business performance in future periods when the underlying transaction or asset impacts the Group Income Statement.

Year ended 31 December	2019 £m	2018 £m
Certain re-measurements recognised in relation to energy contracts:		
Net gains/(losses) arising on delivery of contracts	63	(127)
Net losses arising on market price movements and new contracts	(709)	(73)
Net re-measurements included within gross profit	(646)	(200)
Net losses arising on re-measurement of certain associates' contracts (net of taxation)	(1)	(20)
Net re-measurements included within Group operating profit	(647)	(220)
Taxation on certain re-measurements (note 8)	103	39
Net re-measurements after taxation	(544)	(181)

Year ended 31 December	2019 £m	2018 £m
Total re-measurement and settlement of derivative energy contracts	(3,673)	(2,931)
Less: IFRS 9 business performance revenue	(4,151)	(4,077)
Less: IFRS 9 business performance cost of sales	7,178	6,808
Unrealised certain re-measurements recognised in relation to energy contracts included in gross profit	(646)	(200)

(c) Impairment accounting policy, process and sensitivities

The information provided below relates to the assets and CGUs (or groups of CGUs) that have been subject to impairment during the year.

Exceptional impairments of assets measured on a FVLCD basis

Segment	Asset/CGU (or group of CGUs)	Basis for impairment	Recoverable amount £m	FV hierarchy	Impairment £m
Upstream	UK Shale Assets and Danish fields	Further field development deemed uneconomic	–	N/A	310
	UK and Norwegian fields	Significant deterioration in forecast NBP	157	L3	198
	Valemon, Sindre ⁽ⁱ⁾	Reclassification to disposal group held for sale	33	N/A	49
Centrica Business	King's Lynn power station	Reclassification to disposal group held for sale	101	L2	14
Other	Property	Change in usage of assets (including right-of-use assets)	31	L2/L3	34
Centrica Consumer	Software intangible asset	Sale of business (Clockwork) to which intangible asset relates	5	L3	59

(i) The recoverable amounts are stated prior to disposal.

Fair value less costs of disposal (FVLCD) is determined by discounting the post-tax cash flows expected to be generated by the assets or CGU, net of associated selling costs, taking into account those assumptions that market participants would use in estimating fair value. Post-tax cash flows used in the FVLCD calculation are based on the Group's Board-approved business plans and strategic shape assumptions, together with, where relevant, long-term production and cash flow forecasts.

Upstream oil and gas assets

For Upstream oil and gas assets post-tax cash flows are derived from projected production profiles of each field, taking into account forward prices for gas and liquids over the relevant period. Where forward market prices are not available (i.e. outside the active period for each commodity), prices are determined based on the median of third-party market comparator curves. The date of cessation of production depends on the interaction of a number of variables, such as the recoverable quantities of hydrocarbons, production costs, the contractual duration of the licence area and the selling price of the gas and liquids produced. As each field has specific reservoir characteristics and economic circumstances, the post-tax cash flows for each field are computed using individual economic models. Price assumptions are critical and use liquid market prices for 2020 to 2022, blended over a two-year period to long-term price forecasts. Long-term price assumptions derived from third-party market comparator median curves are deemed best aligned with pricing that a reasonable market participant would use, due to inclusion of certain data points, e.g. the impact of climate change.

The future post-tax cash flows are discounted using a post-tax nominal discount rate of 9.0% (2018: 9.5%).

6. Exceptional items and certain re-measurements

As forward commodity prices are a key assumption in the valuations, average prices and associated impairment sensitivities for the Group's upstream oil and gas assets for the relevant periods are shown below.

	Five-year liquid and blended-period price (i)		Ten-year long-term average price (i)		Change in post-tax headroom/(impairment) (ii)			
	2020 - 2024		2025 - 2034		+10%		-10%	
	2019	2018	2019	2018	2019 £m	2018 £m	2019 £m	2018 £m
NBP (p/th)	43	53	58	67	180	128	(197)	(97)
Brent (\$/bbl)	62	62	81	96				

(i) Prices are shown in real terms.

(ii) Sensitivity relates to Upstream exploration and production assets and CGUs only, there is no impact on goodwill.

Exceptional impairments of assets measured on a VIU basis

Segment	Asset/CGU (or group of CGUs)	Basis for impairment	Recoverable amount £m	Impairment (i) £m
Upstream	Nuclear	Reduction in baseload power prices and outages at Hunterston/Dungeness	1,289	372
Centrica Consumer	Centrica Home Solutions	Strategic refocusing of activity onto UK and Ireland and reduction in profitability	123	48
Centrica Business	Battery storage	Decline in forecast prices	20	9

(i) Impairment of Centrica Home Solutions CGU includes £31 million impairment of goodwill.

Nuclear

A VIU calculation has been used to determine the recoverable amount of the Group's investment in Nuclear. The post-tax cash flows incorporated in the valuation are derived from board approved forecasts, based on the expected generation profile of the fleet for its remaining life. Assumptions include forward commodity prices, capacity rates, transportation and fuel costs and balancing system charges. Price assumptions are based on liquid market prices for 2020 to 2022 and then blended over a two-year period to long-term price forecasts. Long-term price assumptions derived from third-party market comparator median curves are used due to alignment with pricing that a reasonable market participant would use, and the inclusion of certain data points (e.g. impact of climate change).

The VIU calculation assumes that the life of Sizewell is extended to 2055, reflecting a 20-year extension. In the absence of this extension, the Group's investment in Nuclear would be impaired by a further £311 million.

The asset is particularly sensitive to changes in commodity price and the table below details average prices for the relevant periods and associated sensitivities.

	Five-year liquid and blended-period price (i)		Ten-year long-term average price (i)		Change in pre/post-tax headroom/(impairment)			
	2020 - 2024		2025 - 2034		+10%		-10%	
	2019 £/MWh	2018 £/MWh	2019 £/MWh	2018 £/MWh	2019 £m	2018 £m	2019 £m	2018 £m
Baseload power	47	51	59	63	376	365	(376)	(365)

(i) Prices are shown in real terms.

The VIU calculation is also sensitive to changes in output assumptions. A 1% increase in unplanned outages across the nuclear fleet would increase impairment by £32 million.

The future pre-tax cash flows generated by the investment in the associate are discounted using a pre-tax nominal discount rate of 8.4% (2018: 9.2%).

Centrica Home Solutions

The VIU calculation for the Centrica Home Solutions CGU incorporates growth assumptions to generate positive cash inflows of £21 million in 2024, and includes a terminal value based on this final year. If the 2024 cash flow reduced by 10%, with a consequent fall in terminal value, a further impairment of £14 million would be required.

Other impairments

Other impairments totaling £99 million (2018: £54 million) have been recognised in the business performance column of the Group Income Statement within the Upstream segment. These relate to oil and gas field impairments incurred in the ordinary course of business, such as dry hole write-offs, and fields where no further development is planned.

The recoverable amounts of these assets have been calculated as £nil on the basis of FVLCD.

7. Net finance cost

Financing costs mainly comprise interest on bonds and bank debt, the results of hedging activities used to manage foreign exchange and interest rate movements on the Group's borrowings, and notional interest arising on discounting of decommissioning provisions and pensions. An element of financing cost is capitalised on qualifying projects.

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

Year ended 31 December	2019			2018		
	Financing costs £m	Investment income £m	Total £m	Financing costs £m	Investment income £m	Total £m
Cost of servicing net debt:						
Interest income	-	17	17	-	20	20
Interest cost on bonds, bank loans and overdrafts	(236)	-	(236)	(250)	-	(250)
Interest cost on lease liabilities (2018: finance leases)	(15)	-	(15)	(12)	-	(12)
	(251)	17	(234)	(262)	20	(242)
Net gains on revaluation	-	-	-	-	7	7
Notional interest arising from discounting	(34)	-	(34)	(56)	-	(56)
	(285)	17	(268)	(318)	27	(291)
Capitalised borrowing costs ⁽ⁱ⁾	13	-	13	18	-	18
Financing (cost)/income before exceptional items	(272)	17	(255)	(300)	27	(273)
Exceptional items (note 6)	-	-	-	(139)	-	(139)
(Cost)/income	(272)	17	(255)	(439)	27	(412)

(i) Borrowing costs have been capitalised using an average rate of 4.77% (2018: 4.75%).

8. Taxation

The taxation note details the different tax charges and rates, including current and deferred tax arising in the Group. The current tax charge is the tax payable on this year's taxable profits together with amendments in respect of tax provisions made in earlier years. This tax charge excludes the Group's share of taxation on the results of joint ventures and associates. Deferred tax represents the tax on differences between the accounting carrying values of assets and liabilities and their tax bases. These differences are temporary and are expected to unwind in the future.

Analysis of tax charge

Year ended 31 December	2019			2018		
	Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m	Business performance £m	Exceptional items and certain re-measurements £m	Results for the year £m
Current tax						
UK corporation tax	(37)	37	–	(44)	49	5
UK petroleum revenue tax	17	–	17	50	–	50
Non-UK tax	(147)	(32)	(179)	(278)	9	(269)
Adjustments in respect of prior years – UK ⁽ⁱ⁾	16	(34)	(18)	17	2	19
Adjustments in respect of prior years – non-UK ⁽ⁱⁱ⁾	(9)	–	(9)	(16)	1	(15)
Total current tax	(160)	(29)	(189)	(271)	61	(210)
Deferred tax						
Origination and reversal of temporary differences – UK	15	15	30	(70)	51	(19)
UK petroleum revenue tax	(5)	22	17	(1)	(14)	(15)
Origination and reversal of temporary differences – non-UK	(28)	163	135	(120)	32	(88)
Adjustments in respect of prior years – UK	(34)	34	–	(11)	(3)	(14)
Adjustments in respect of prior years – non-UK	(6)	14	8	12	1	13
Total deferred tax	(58)	248	190	(190)	67	(123)
Total taxation on profit/(loss) ⁽ⁱ⁾	(218)	219	1	(461)	128	(333)

(i) The net adjustments in respect of prior years include uncertain tax provision credits of £nil (2018: £13 million).

(ii) Total taxation on profit/(loss) excludes taxation on the Group's share of profits of joint ventures and associates.

UK tax rates

Most activities in the UK are subject to the standard rate for UK corporation tax of 19% (2018: 19%). Upstream gas and oil production activities are taxed at a rate of 30% (2018: 30%) plus a supplementary charge of 10% (2018: 10%) to give an overall rate of 40% (2018: 40%). Certain upstream assets in the UK under the petroleum revenue tax (PRT) regime have a current rate of 0% (2018: 0%).

The UK corporation tax rate is scheduled to reduce to 17% from 1 April 2020. At 31 December 2019, the relevant UK deferred tax assets and liabilities included in these consolidated Group Financial Statements were based on this substantively-enacted reduced rate having regard to their reversal profiles.

Non-UK tax rates

Norwegian upstream profits are taxed at the standard rate of 22% (2018: 23%) plus a special tax of 56% (2018: 55%) resulting in an aggregate tax rate of 78% (2018: 78%). Profits earned in the US are taxed at a Federal rate of 21% (2018: 21%) together with state taxes at various rates dependent on the state. Taxation for other jurisdictions is calculated at the rate prevailing in those respective jurisdictions, with rates ranging from 12.5% in the Republic of Ireland to 50% in the Netherlands. The tax charges were not material in such jurisdictions.

Prior year adjustments reflect changes made to estimates or to judgements when further information becomes available.

9. Dividends

Dividends represent the return of profits to shareholders and are paid twice a year; in June and November. Dividends are paid as an amount per ordinary share held. The Group retains part of the profits generated to meet future investment plans or to fund share repurchase programmes.

	2019			2018		
	£m	Pence per share	Date of payment	£m	Pence per share	Date of payment
Prior year final dividend ⁽ⁱ⁾	474	8.40	27 Jun 2019	470	8.40	28 Jun 2018
Interim dividend	87	1.50	21 Nov 2019	203	3.60	22 Nov 2018
	561			673		

(i) Included within the prior year final dividend are forfeited dividends of £5 million (2018: £1 million) older than 12 years that were written back in accordance with Group policy.

The Directors propose a final dividend of 3.50 pence per ordinary share (totalling £204 million) for the year ended 31 December 2019. The dividend will be submitted for formal approval at the Annual General Meeting to be held on 11 May 2020 and, subject to approval, will be paid on 22 June 2020 to those shareholders registered on 11 May 2020.

In prior years the Company offered a scrip dividend alternative to its shareholders. £96 million of the £474 million prior year final dividend was in the form of ordinary shares to shareholders opting in to the scrip dividend alternative. The market value per share at the date of payment was 94 pence per share resulting in the issue of 102 million new shares and £90 million of share premium. The scrip dividend alternative is no longer offered.

The Group has sufficient distributable reserves to pay dividends to its ultimate shareholders. Distributable reserves are calculated on an individual legal entity basis and so, despite the consolidated Group Balance Sheet containing negative retained earnings, the ultimate parent company, Centrica plc, currently has adequate levels of realised profits within its retained earnings to support dividend payments. At 31 December 2019, Centrica plc's company-only distributable reserves were c.£2.7 billion. On an annual basis, the distributable reserve levels of the Group's subsidiary undertakings are reviewed and dividends paid up to Centrica plc to replenish its reserves.

10. Earnings per ordinary share

Earnings per share (EPS) is the amount of profit or loss attributable to each share. Basic EPS is the amount of profit or loss for the year divided by the weighted average number of shares in issue during the year. Diluted EPS includes the impact of outstanding share options.

Basic earnings per ordinary share has been calculated by dividing the loss attributable to equity holders of the Company for the year of £1,023 million (2018: £183 million profit) by the weighted average number of ordinary shares in issue during the year of 5,758 million (2018: 5,623 million). The number of shares excludes 22 million ordinary shares (2018: 40 million), being the weighted average number of the Company's own shares held in the employee share trust and treasury shares purchased by the Group as part of the share repurchase programme.

The Directors believe that the presentation of adjusted basic earnings per ordinary share, being the basic earnings per ordinary share adjusted for certain re-measurements and exceptional items, assists with understanding the underlying performance of the Group, as explained in note 2.

Information presented for diluted and adjusted diluted earnings per ordinary share uses the weighted average number of shares as adjusted for 44 million (2018: 48 million) potentially dilutive ordinary shares as the denominator, unless it has the effect of increasing the profit or decreasing the loss attributable to each share.

10. Earnings per ordinary share

Basic to adjusted basic earnings per share reconciliation

Year ended 31 December	2019		2018	
	£m	Pence per ordinary share	£m	Pence per ordinary share
Earnings – basic	(1,023)	(17.8)	183	3.3
Net exceptional items after taxation (notes 2 and 6) ⁽ⁱ⁾	862	15.0	266	4.7
Certain re-measurement losses after taxation (notes 2 and 6) ⁽ⁱ⁾	580	10.1	182	3.2
Earnings – adjusted basic	419	7.3	631	11.2
Earnings – diluted	(1,023)	(17.8)	183	3.2
Earnings – adjusted diluted	419	7.2	631	11.1

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

11. Sources of finance

(a) Capital structure

The Group seeks to maintain an efficient capital structure with a balance of net debt and equity as shown in the table below:

31 December	2019 £m	2018 £m
Net debt	3,181	2,656
Shareholders' equity	1,212	3,145
Capital	4,393	5,801

Debt levels are restricted to limit the risk of financial distress and, in particular, to maintain a strong credit profile. The Group's credit standing is important for several reasons: to maintain a low cost of debt, limit collateral requirements in energy trading, hedging and decommissioning security arrangements, and to ensure the Group is an attractive counterparty to energy producers and long-term customers.

The Group monitors its current and projected capital position on a regular basis, considering a medium-term view of at least three years, and different stress case scenarios, including the impact of changes in the Group's credit ratings and significant movements in commodity prices. A number of financial ratios are monitored, including those used by the credit rating agencies.

The level of debt that can be raised by the Group is restricted by the Company's Articles of Association. Borrowings is limited to the higher of £10 billion and a gearing ratio of three times adjusted capital and reserves. The Group funds its long-term debt requirements through issuing bonds in the capital markets and taking bank debt. Short-term debt requirements are met primarily through commercial paper or short-term bank borrowings.

The Group maintains substantial committed facilities and uses these to provide liquidity for general corporate purposes, including short-term business requirements and back-up for commercial paper.

British Gas Insurance Limited (BGIL) is required under PRA regulations to hold a minimum capital amount and has complied with this requirement in 2019 (and 2018). BGIL's capital management policy and plan is subject to review and approval by the BGIL board. Reporting processes provide relevant and timely capital information to management and the board. A medium-term capital management plan forms part of BGIL's planning and forecasting process, embedded into approved timelines, management reviews and board approvals.

11. Sources of finance

(b) Net debt summary

Net debt predominantly includes capital market borrowings offset by cash, cash posted or received as collateral, securities and certain hedging financial instruments used to manage interest rate and foreign exchange movements on borrowings.

Presented in the derivatives and current and non-current borrowings, leases and interest accruals columns shown below are the assets and liabilities that give rise to financing cash flows.

	Current and non-current borrowings, leases and interest accruals £m	Derivatives £m	Gross debt £m	Other assets and liabilities				Net debt £m
				Cash and cash equivalents, net of bank overdrafts (i) (ii) £m	Collateral posted/ (received) £m	Current and non-current securities (iii) £m	Sub-lease assets £m	
1 January 2018	(6,171)	266	(5,905)	2,737	336	236	–	(2,596)
Net cash outflow from purchase of securities	–	–	–	(76)	–	76	–	–
Cash outflow from payment of capital element of finance leases	56	–	56	(56)	–	–	–	–
Cash outflow from repayment of borrowings	1,516	(38)	1,478	(1,617)	–	–	–	(139)
Remaining cash inflow and movement in cash posted/received under margin and collateral agreements	–	–	–	441	(57)	–	–	384
Revaluation	39	25	64	–	–	(6)	–	58
Financing interest paid	288	(20)	268	(305)	–	–	–	(37)
Increase in interest payable and amortisation of borrowings	(262)	–	(262)	–	–	–	–	(262)
New finance lease agreements	(36)	–	(36)	–	–	–	–	(36)
Exchange adjustments	(44)	–	(44)	4	11	1	–	(28)
31 December 2018	(4,614)	233	(4,381)	1,128	290	307	–	(2,656)
Incremental lease liability recognised on transition to IFRS 16 (iv)	(402)	–	(402)	–	–	–	–	(402)
Recognition of sub-lease asset on transition to IFRS 16 (iv)	–	–	–	–	–	–	8	8
1 January 2019 post-adoption of IFRS 16	(5,016)	233	(4,783)	1,128	290	307	8	(3,050)
Net cash inflow from sale and purchase of securities	–	–	–	50	–	(51)	–	(1)
Cash outflow from payment of capital element of leases	155	–	155	(155)	–	–	–	–
Cash outflow from repayment of borrowings	86	–	86	(86)	–	–	–	–
Remaining cash inflow and movement in cash posted/received under margin and collateral agreements	–	–	–	104	46	–	(3)	147
Revaluation	(57)	11	(46)	–	–	6	–	(40)
Financing interest paid	220	(10)	210	(243)	–	–	–	(33)
Increase in interest payable and amortisation of borrowings	(229)	–	(229)	–	–	–	–	(229)
New lease agreements and re-measurement of existing lease liabilities	(47)	–	(47)	–	–	–	–	(47)
Business disposals and asset purchases	3	–	3	–	–	(6)	–	(3)
Exchange adjustments	90	–	90	(4)	(10)	(1)	–	75
31 December 2019	(4,795)	234	(4,561)	794	326	255	5	(3,181)

(i) Cash and cash equivalents includes £175 million (2018: £189 million) of restricted cash. This includes cash totaling £48 million (2018: £100 million) within the Spirit Energy business that is not restricted by regulation but is managed by its own treasury department.

(ii) Cash and cash equivalents are net of £548 million bank overdrafts (2018: £140 million).

(iii) Securities balances include £124 million (2018: £126 million) of index-linked gilts which the Group uses for short-term liquidity management purposes. Securities balances also include £77 million (2018: £68 million) debt instruments and £54 million (2018: £45 million) equity instruments, all measured at fair value, as described in note 1. Securities include no deposits with maturities greater than three months (2018: £68 million).

(iv) Following the adoption of IFRS 16 on 1 January 2019, the Group has recognised incremental lease liabilities and sub-lease assets within net debt. See note 1 for further details.

11. Sources of finance

Collateral is posted or received to support energy trading and procurement activities. It is posted when contracts with marginable counterparties are out of the money and received when contracts are in the money. These positions reverse when contracts are settled and the collateral is returned. Collateral received or posted is included in the following lines of the Group Balance Sheet:

31 December	2019 £m	2018 £m
Collateral posted/(received) included within:		
Trade and other payables	(35)	(157)
Trade and other receivables	155	446
Net derivative liabilities	199	1
Inventories	7	–
Net collateral posted	326	290

(c) Borrowings, leases and interest accruals summary

31 December	Coupon rate %	Principal m	2019			2018		
			Current £m	Non-current £m	Total £m	Current £m	Non-current £m	Total £m
Bank overdrafts			(548)	–	(548)	(140)	–	(140)
Bank loans (> 5 year maturity)			–	(144)	(144)	–	(149)	(149)
Bonds (by maturity date):								
1 February 2019	3.213	€100	–	–	–	(90)	–	(90)
25 September 2020	Floating	US\$80	(60)	–	(60)	–	(63)	(63)
22 February 2022	3.680	HK\$450	–	(44)	(44)	–	(45)	(45)
10 March 2022 ⁽ⁱ⁾	6.375	£246	–	(254)	(254)	–	(255)	(255)
16 October 2023 ⁽ⁱⁱ⁾	4.000	US\$302	–	(234)	(234)	–	(237)	(237)
4 September 2026 ⁽ⁱⁱ⁾	6.400	£52	–	(57)	(57)	–	(56)	(56)
16 April 2027	5.900	US\$70	–	(52)	(52)	–	(55)	(55)
13 March 2029 ⁽ⁱⁱ⁾	4.375	£552	–	(574)	(574)	–	(553)	(553)
5 January 2032 ⁽ⁱⁱ⁾	Zero	€50	–	(59)	(59)	–	(60)	(60)
19 September 2033 ⁽ⁱⁱ⁾	7.000	£770	–	(790)	(790)	–	(769)	(769)
16 October 2043	5.375	US\$367	–	(272)	(272)	–	(283)	(283)
12 September 2044	4.250	£550	–	(538)	(538)	–	(537)	(537)
25 September 2045	5.250	US\$50	–	(37)	(37)	–	(38)	(38)
10 April 2075 ⁽ⁱⁱⁱ⁾	5.250	£450	–	(460)	(460)	–	(449)	(449)
10 April 2076 ^(iv)	3.000	€750	–	(634)	(634)	–	(672)	(672)
			(60)	(4,005)	(4,065)	(90)	(4,072)	(4,162)
Obligations under lease arrangements			(166)	(337)	(503)	(59)	(159)	(218)
Interest accruals			(83)	–	(83)	(85)	–	(85)
			(857)	(4,486)	(5,343)	(374)	(4,380)	(4,754)

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

(ii) €50 million of zero coupon notes have an accrual yield of 4.200%, which will result in a €114 million repayment on maturity.

(iii) The Group has the right to repay at par on 10 April 2025 and every interest payment date thereafter.

(iv) The Group has the right to repay at par on 10 April 2021 and every interest payment date thereafter.

12. Joint ventures and associates

Share of results of joint ventures and associates represents the results of businesses where we exercise joint control or significant influence and generally have an equity holding of up to 50%.

(a) Share of results of joint ventures and associates

The Group's share of results of joint ventures and associates for the year ended 31 December 2019 principally arises from its interest in Nuclear - Lake Acquisitions Limited, an associate, reported in the Upstream segment.

Year ended 31 December	2019			2018		
	Share of business performance £m	Share of exceptional items and certain re-measurements £m	Share of results for the year £m	Share of business performance £m	Share of exceptional items and certain re-measurements £m	Share of results for the year £m
Income	505	–	505	489	–	489
Expenses before exceptional items and certain re-measurements	(508)	–	(508)	(486)	–	(486)
Exceptional items and re-measurement of certain contracts	–	(1)	(1)	–	(23)	(23)
Operating (loss)/profit	(3)	(1)	(4)	3	(23)	(20)
Financing costs	(10)	–	(10)	(3)	–	(3)
Taxation on profit/(loss)	1	–	1	3	1	4
Share of post-taxation results of joint ventures and associates	(12)	(1)	(13)	3	(22)	(19)

(b) Interests in joint ventures and associates

	2019	2018
	Investments in joint ventures and associates £m	Investments in joint ventures and associates £m
1 January	1,661	1,699
Impairment	(372)	–
Share of loss for the year	(13)	(19)
Share of other comprehensive income/(loss)	29	(1)
Dividends	(1)	(22)
Other movements	2	4
31 December	1,306	1,661

12. Joint ventures and associates

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

31 December	2019			2018
	Associates Nuclear £m	Other £m	Total £m	Total £m
Share of non-current assets	4,414	11	4,425	3,811
Share of current assets	684	13	697	660
	5,098	24	5,122	4,471
Share of current liabilities	(135)	(3)	(138)	(139)
Share of non-current liabilities	(2,716)	(1)	(2,717)	(2,082)
	(2,851)	(4)	(2,855)	(2,221)
Cumulative impairment	(958)	(3)	(961)	(589)
Interests in joint ventures and associates	1,289	17	1,306	1,661
Net cash included in share of net assets	56	–	56	83

13. Derivative financial instruments

The Group uses derivative financial instruments to manage the risk arising from fluctuations in the value of certain assets or liabilities associated with treasury management, energy sales and procurement. These derivatives are held at fair value, and are predominantly unrealised positions, expected to unwind in future periods. The Group also uses derivatives for proprietary energy trading purposes.

Purpose	Accounting treatment
Proprietary energy trading and treasury management	Carried at fair value, with changes in fair value recognised in the Group's business performance results for the year. ⁽ⁱ⁾
Energy procurement/optimisation	Carried at fair value, with changes in fair value reflected in certain re-measurements.

(i) With the exception of certain energy derivatives related to cross-border transportation and capacity contracts.

In cases where a derivative qualifies for hedge accounting, derivatives are classified as fair value hedges or cash flow hedges.

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

31 December	2019		2018	
	Assets £m	Liabilities £m	Assets £m	Liabilities £m
Derivative financial instruments – held for trading under IFRS 9:				
Energy derivatives – for procurement/optimisation	553	(1,245)	567	(704)
Energy derivatives – for proprietary trading	917	(769)	837	(787)
Interest rate derivatives	3	(23)	–	(26)
Foreign exchange derivatives	104	(104)	30	(38)
Derivative financial instruments in hedge accounting relationships:				
Interest rate derivatives	105	(2)	59	(10)
Foreign exchange derivatives	131	(2)	185	(1)
Total derivative financial instruments	1,813	(2,145)	1,678	(1,566)
Included within:				
Derivative financial instruments – current	1,320	(1,854)	1,141	(1,136)
Derivative financial instruments – non-current	493	(291)	537	(430)

13. Derivative financial instruments

The contracts included within energy derivatives are subject to a wide range of detailed specific terms, but comprise the following general components, analysed on a net carrying value basis:

31 December	2019 £m	2018 £m
Short-term forward market purchases and sales of gas and electricity:		
UK and Europe	249	(236)
North America	(165)	65
Other derivative contracts	(628)	84
Net total	(544)	(87)

14. Post-retirement benefits

The Group manages a number of final salary and career average defined benefit pension schemes. It also has defined contribution schemes. The majority of these schemes are in the UK.

(a) Summary of main post-retirement benefit schemes

Name of scheme	Type of benefit	Status	Country	Number of active members as at 31 December 2019	Total membership as at 31 December 2019
Centrica Engineers Pension Scheme	Defined benefit final salary pension	Closed to new members in 2006	UK	2,699	8,503
Centrica Pension Plan	Defined benefit career average pension	Open to service engineers only	UK	3,223	5,579
Centrica Pension Scheme	Defined benefit final salary pension	Closed to new members in 2003	UK	2,219	8,506
	Defined benefit final salary pension	Closed to new members in 2003	UK	2	10,421
	Defined benefit career average pension	Closed to new members in 2008	UK	1,051	4,103
	Defined contribution pension	Open to new members	UK	12,873	19,204
Bord Gáis Energy Company Defined Benefit Pension Scheme	Defined benefit final salary pension	Closed to new members in 2014	Republic of Ireland	126	173
Bord Gáis Energy Company Defined Contribution Pension Plan	Defined contribution pension	Open to new members	Republic of Ireland	246	316
Direct Energy Marketing Limited Pension Plan	Defined benefit final salary pension	Closed to new members in 2004	Canada	6	361
Direct Energy Marketing Limited	Post-retirement benefits	Closed to new members in 2012	Canada	7	270

The Centrica Engineers Pension Scheme (CEPS), Centrica Pension Plan (CPP) and Centrica Pension Scheme (CPS) form the significant majority of the Group's defined benefit obligation and are referred to below as the 'Registered Pension Schemes'. The other schemes are individually, and in aggregate, immaterial.

Independent valuations

The Registered Pension Schemes are subject to independent valuations at least every three years, on the basis of which the qualified actuary certifies the rate of employer contributions, which together with the specified contributions payable by the employees and proceeds from the schemes' assets, are expected to be sufficient to fund the benefits payable under the schemes.

The latest full actuarial valuations were carried out at the following dates: the Registered Pension Schemes at 31 March 2018, the Bord Gáis Energy Company Defined Benefit Pension Scheme at 1 January 2017 and the Direct Energy Marketing Limited Pension Plan at 1 January 2018. These have been updated to 31 December 2019 for the purpose of meeting the requirements of IAS 19. Investments held in all schemes have been valued for this purpose at market value.

Governance

The Registered Pension Schemes are managed by trustee companies whose boards consist of both company-nominated and member-nominated Directors. Each scheme holds units in the Centrica Combined Common Investment Fund (CCCIF), which holds the majority of the combined assets of the Registered Pension Schemes. The board of the CCCIF is currently comprised of nine directors: three independent directors, three directors appointed by Centrica plc (including the Chairman) and one director appointed by each of the three Registered Pension Schemes.

Under the terms of the Pensions Act 2004, Centrica plc and each trustee board must agree the funding rate for its defined benefit pension scheme and a recovery plan to fund any deficit against the scheme-specific statutory funding objective. This approach was first adopted for the triennial valuations completed at 31 March 2006, and has been reflected in subsequent valuations, including the 31 March 2018 valuation.

14. Post-retirement benefits

(b) Risks

The Registered Pension Schemes expose the Group to the following risks:

Asset volatility

The pension liabilities are calculated using a discount rate set with reference to AA corporate bond yields. If the growth in plan assets is lower than this, this will create an actuarial loss within other equity. The CCCIF is responsible for managing the assets of each scheme in line with the risk tolerances (which were updated in 2019) that have been set by the trustees of the schemes, and invests in a diversified portfolio of assets. The schemes are relatively young in nature (the schemes opened in 1997 on the formation of Centrica plc on demerger from BG plc (formerly British Gas plc), and only took on past service liabilities in respect of active employees. The trustees have significantly reduced their risk tolerance in 2019, increasing inflation and interest rate hedges from one third to two thirds. This has resulted in a significant reduction of return-seeking assets within the portfolio, as well as a higher weighting to assets that better manage downside risk. This can be seen in the change of asset portfolio mix in section (f) of this note.

A decrease in the bond interest rate will increase the net present value of the pension liabilities. The relative immaturity of the schemes means that the duration of the liabilities is longer than average for typical UK pension schemes, resulting in a relatively higher exposure to interest rate risk. The trustees took action to materially reduce this risk in 2019.

Inflation

Pensions in deferment, pensions in payment and pensions accrued under the career average schemes increase in line with the Retail Prices Index (RPI) and the Consumer Prices Index (CPI). Therefore, scheme liabilities will increase if inflation is higher than assumed, although in some cases caps are in place to limit the impact of significant movements in inflation. Furthermore, a pension increase exchange (PIE) option implemented in 2015 is available to future retirees, which gives the choice to receive a higher initial pension in return for giving up certain future increases linked to RPI, again limiting the impact of significant movements in inflation.

Longevity

The majority of the schemes' obligations are to provide benefits for the life of scheme members and their surviving spouses; therefore increases in life expectancy will result in an increase in the pension liabilities. The relative immaturity of the schemes means that there is comparatively little observable mortality data to assess the rates of mortality experienced by the schemes, and means that the schemes' liabilities will be paid over a long period of time, making it particularly difficult to predict the life expectancy of the current membership. Furthermore, pension payments are subject to inflationary increases, resulting in a higher sensitivity to changes in life expectancy.

Salary

Pension liabilities are calculated by reference to the future salaries of active members, and hence salary rises in excess of assumed increases will increase scheme liabilities. During 2011, changes were introduced to the final salary sections of CEPS and CPP such that annual increases in pensionable pay are capped to 2%, resulting in a reduction in salary risk. During 2016, a salary cap on pensionable pay for the CPS career average and CPP schemes was implemented, and in 2019 a similar change took place for CEPS. All of the 2011, 2016 and 2019 changes result in a reduction in salary risk.

Foreign exchange

Certain assets held by the CCCIF are denominated in foreign currencies, and hence their values are subject to exchange rate risk.

The CCCIF has long-term hedging policies in place to manage interest rate, inflation and foreign exchange risks.

The table below analyses the total liabilities of the Registered Pension Schemes, calculated in accordance with accounting principles, by type of liability, as at 31 December 2019.

Total liabilities of the Registered Pension Schemes	2019
31 December	%
Actives – final salary – capped	18
Actives – final salary – uncapped and crystallised benefits	4
Actives – career average	6
Deferred pensioners	33
Pensioners	39
	100

14. Post-retirement benefits

(c) Accounting assumptions

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

Major assumptions used for the actuarial valuation	2019	2018
31 December	%	%
Rate of increase in employee earnings:		
Subject to 2% cap	1.6	1.7
Other not subject to cap	2.1	2.2
Rate of increase in pensions in payment	2.9	3.1
Rate of increase in deferred pensions:		
In line with CPI capped at 2.5%	1.9	2.0
In line with RPI	2.9	3.1
Discount rate	2.2	3.0

The assumptions relating to longevity underlying the pension liabilities at the balance sheet date have been based on a combination of standard actuarial mortality tables, scheme experience and other relevant data, and include an allowance for future improvements in mortality. The longevity assumptions for members in normal health are as follows:

Life expectancy at age 65 for a member	2019		2018	
	Male Years	Female Years	Male Years	Female Years
31 December				
Currently aged 65	22.6	24.1	22.9	24.5
Currently aged 45	23.9	25.6	24.3	26.0

The other demographic assumptions have been set having regard to the latest trends in scheme experience and other relevant data. The assumptions are reviewed and updated as necessary as part of the periodic actuarial valuations of the pension schemes.

For the Registered Pension Schemes, marginal adjustments to the assumptions used to calculate the pension liability, or significant swings in bond yields or stock markets, can have a large impact in absolute terms on the net assets of the Group. Reasonably possible changes as at 31 December to one of the actuarial assumptions would have affected the scheme liabilities as set out below:

Impact of changing material assumptions	2019		2018	
	Increase/ decrease in assumption	Indicative effect on scheme liabilities %	Increase/ decrease in assumption	Indicative effect on scheme liabilities %
31 December				
Rate of increase in employee earnings subject to 2% cap	0.25%	+/-0	0.25%	+/-0
Rate of increase in pensions in payment and deferred pensions	0.25%	+/-5	0.25%	+/-5
Discount rate	0.25%	-/+6	0.25%	-/+6
Inflation assumption	0.25%	+/-5	0.25%	+/-5
Longevity assumption	1 year	+/-3	1 year	+/-3

The indicative effects on scheme liabilities have been calculated by changing each assumption in isolation and assessing the impact on the liabilities. For the reasonably possible change in the inflation assumption, it has been assumed that a change to the inflation assumption would lead to corresponding changes in the assumed rates of increase in uncapped pensionable pay, pensions in payment and deferred pensions.

The remaining disclosures in this note cover all of the Group's defined benefit schemes.

(d) Amounts included in the Group Balance Sheet

31 December	2019	2018
	£m	£m
Fair value of plan assets	8,999	8,487
Present value of defined benefit obligation	(9,162)	(8,566)
Net liability recognised in the Group Balance Sheet	(163)	(79)
Pension liability presented in the Group Balance Sheet as:		
Retirement benefit assets	56	223
Retirement benefit liabilities	(219)	(302)

The Trust Deed and Rules for the Registered Pension Schemes provide the Group with a right to a refund of surplus assets assuming the full settlement of scheme liabilities. No asset ceiling restrictions have been applied in the consolidated Financial Statements.

14. Post-retirement benefits

(e) Movements in the year

	2019		2018	
	Pension liabilities £m	Pension assets £m	Pension liabilities £m	Pension assets £m
1 January	(8,566)	8,487	(9,337)	8,451
Items included in the Group Income Statement:				
Current service cost	(87)	–	(120)	–
Contributions by employer in respect of employee salary sacrifice arrangements ⁽ⁱ⁾	(29)	–	(29)	–
Total current service cost	(116)	–	(149)	–
Past service credit/(cost) ⁽ⁱⁱ⁾	260	–	(41)	–
Interest (expense)/income	(242)	241	(239)	218
Items included in the Group Statement of Comprehensive Income:				
Returns on plan assets, excluding interest income	–	204	–	(145)
Actuarial gain from changes to demographic assumptions	229	–	42	–
Actuarial (loss)/gain from changes in financial assumptions	(1,286)	–	912	–
Actuarial gain/(loss) from experience adjustments	388	–	(17)	–
Exchange adjustments	–	–	1	–
Items included in the Group Cash Flow Statement:				
Employer contributions	–	320	–	216
Contributions by employer in respect of employee salary sacrifice arrangements	–	29	–	29
Other movements:				
Benefits paid from schemes	285	(285)	277	(277)
Other	(3)	3	6	(5)
Transfers from provisions for other liabilities and charges	(111)	–	(21)	–
31 December	(9,162)	8,999	(8,566)	8,487

(i) A salary sacrifice arrangement was introduced on 1 April 2013 for pension scheme members. The contributions paid via the salary sacrifice arrangement have been treated as employer contributions and included within the current service cost, with a corresponding reduction in salary costs.

(ii) A £252 million past service credit was recognised in the year in relation to a rule amendment during December 2019 to the UK defined benefit pension scheme arrangements to offer members an option to level up their ongoing pension, if they retire before the statutory retirement age, and an £8 million past service credit was recognised in relation to changes made to future service benefits from June 2019. A £41 million past service cost was recognised in 2018 as a result of GMP equalisation.

In addition to current service cost on the Group's defined benefit pension schemes, the Group also charged £75 million (2018: £58 million) to operating profit in respect of defined contribution pension schemes, including a one-off defined contribution payment of £8 million, to facilitate scheme changes, part of restructuring costs in note 6. This included contributions of £20 million (2018: £17 million) paid via a salary sacrifice arrangement.

(f) Pension scheme assets

The market values of plan assets were:

31 December	2019			2018		
	Quoted £m	Unquoted £m	Total £m	Quoted £m	Unquoted £m	Total £m
Equities	188	346	534	1,991	351	2,342
Corporate bonds	2,646	–	2,646	1,118	–	1,118
High-yield debt	1,015	1,288	2,303	595	1,360	1,955
Liability matching assets	1,430	1,075	2,505	1,581	994	2,575
Property	–	316	316	–	395	395
Cash pending investment	695	–	695	102	–	102
	5,974	3,025	8,999	5,387	3,100	8,487

Unquoted assets are valued by the fund managers with reference to the expected cash flows associated with the assets. These valuations are reviewed annually as part of the CCCIF audit. Included within equities are £nil of ordinary shares of Centrica plc (2018: £1 million) via pooled funds that include a benchmark allocation to UK equities. Included within corporate bonds are £nil (2018: £nil) of bonds issued by Centrica plc held within pooled funds over which the CCCIF has no ability to direct investment decisions. Apart from the investment in the Scottish Limited Partnerships which form part of the asset-backed contribution arrangements described in section (g) of this note, no direct investments are made in securities issued by Centrica plc or any of its subsidiaries or property leased to or owned by Centrica plc or any of its subsidiaries.

14. Post-retirement benefits

Included within the Group Balance Sheet within non-current securities are £103 million (2018: £91 million) of investments, held in trust on behalf of the Group, as security in respect of the Centrica Unfunded Pension Scheme. Of the pension scheme liabilities above, £62 million (2018: £63 million) relate to this scheme.

(g) Pension scheme contributions

The Group estimates that it will pay £67 million of ordinary employer contributions during 2020 for its defined benefit schemes, at an average rate of 19% of pensionable pay, together with £32 million of contributions paid via a salary sacrifice arrangement. At 31 March 2018 (the date of the latest full agreed actuarial valuations) the weighted average duration of the liabilities of the Registered Pension Schemes was 22 years.

For the Registered Pension Schemes the latest actuarial valuation as at 31 March 2018 has been finalised with the Pension Trustees. The technical provisions deficit was £1,402 million. The Group has committed to additional annual cash contributions to fund this pension deficit. The overall deficit contributions, including the previously disclosed asset-backed contribution arrangements, totalled £223 million in 2019, and will amount to £175 million per annum from 2020 to 2025, with a balancing payment of £93 million in 2026. The Group has paid £12 million of pension strains in 2019. For redundancies between 1 July 2019 and 30 June 2021, a deferral arrangement is in place, up to a limit of £240 million. As a result, there has also been a matching increase, to £1,235 million, of the security package over certain of the Group's assets, enforceable in the unlikely event the Group is unable to meet its obligations.

On a pure roll-forward basis, from 31 March 2018, using the same methodology and consequent assumptions, the technical provisions deficit would be c.£1.6 billion at the reporting date. Note that the next triennial review is scheduled for 31 March 2021, and the valuation methodology and assumptions may differ from those previously used.

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

This section details acquisitions and disposals made by the Group.

(a) 2019 business combinations and asset acquisitions

On 1 July 2019 the Group acquired Smartwatt Energy Inc., a leading energy services and solutions company in North America, for consideration of \$37 million (£29 million).

Acquisition-related costs have been charged to 'operating costs before exceptional items and credit losses on financial assets' in the Group Income Statement for an aggregated amount of £1 million.

(b) 2018 business combinations – measurement period adjustments

There have been no material updates to the fair value of assets and liabilities recognised for businesses acquired in 2018.

(c) Disposals

On 30 April 2019 the Group disposed of Clockwork Home Services in North America. The business comprised a series of franchises, company-owned stores and brands, including One Hour Heating & Air Conditioning, Benjamin Franklin Plumbing and Mister Sparky, to Apax Partners and was part of the Centrica Consumer segment.

Gross consideration of \$300 million (£231 million) has predominantly been reduced by working capital and transaction costs, to generate net consideration of \$279 million (£215 million). The cash inflow from the disposal is presented net of tax paid in the Group Cash Flow Statement.

	Clockwork Home Services
	£m
Property, plant and equipment	7
Brand intangible asset	12
Other net assets	9
Attributable goodwill	76
Net assets disposed of	104
Consideration received	215
	111
Recycling of foreign currency translation reserves on disposal	18
Impairment of intangible asset	(59)
Other directly-attributable costs of disposal	(2)
Profit on disposal before taxation	68
Taxation	(27)
Profit on disposal after taxation	41

The Group also disposed of Norwegian exploration and production assets, Valemon and Sindre, part of the Upstream segment, during the year. Proceeds of £33 million were equal to the carrying value of the assets disposed of subsequent to the recognition of a pre-tax impairment charge of £49 million. The impairment charge is included in net gain on significant disposals within exceptional items.

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

None of the disposals are shown as discontinued operations on the face of the Group Income Statement as they do not represent a separate major line of business or geographical area of operation that is material to the Group's results.

The Group received £30 million of previously unrecognised contingent consideration in respect of the historic disposal of Trinidad and Tobago assets.

There were no other material disposals.

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

On 23 December 2019 the Group agreed to sell its 382MW King's Lynn combined cycle gas turbine (CCGT) power station to RWE Generation for headline consideration of £105 million, adjusted for final working capital, based on a valuation date of 31 December 2019. These interests are currently reported in the Centrica Business segment. An impairment charge of £14 million was recorded against the assets of the disposal group and is included in net gain on significant disposals within exceptional items. The transaction completed on 12 February 2020.

Also included in assets and liabilities of disposal groups held for sale is a net amount of £5 million related to an exploration and production field.

	Exploration and production field £m	King's Lynn power station £m	Total £m
Non-current assets	11	111	122
Current assets	–	2	2
Assets of disposal groups classified as held for sale	11	113	124
Current liabilities	(1)	(5)	(6)
Non-current liabilities	(5)	(7)	(12)
Liabilities of disposal groups classified as held for sale	(6)	(12)	(18)
Net assets of disposal groups classified as held for sale	5	101	106

Assets and associated liabilities that are expected to be recovered principally through a sale have been classified as held for sale and are presented separately on the face of the Group Balance Sheet.

16. Commitments and contingencies

(a) Commitments

Commitments are not held on the Group's Balance Sheet as these are executory arrangements, and relate to amounts that we are contractually required to pay in the future as long as the other party meets its contractual obligations.

The Group's commitments in relation to commodity purchase contracts disclosed below are stated net of amounts receivable under commodity sales contracts where there is a right of offset with the counterparty, and are based on the expected minimum quantities of gas and other commodities that the Group is contracted to buy at estimated future prices.

The Group's 20-year agreement with Cheniere to purchase 89bcf per annum of LNG volumes for export from the Sabine Pass liquefaction plant in the US commits the Group to capacity payments of £3.9 billion (included in 'LNG capacity' below) between 2019 and 2039. It also allows the Group to make up to £6.3 billion of commodity purchases based on market gas prices and foreign exchange rates as at the balance sheet date. The first commercial delivery was September 2019.

During 2019, the Group signed a 20-year agreement to purchase LNG volumes from Mozambique LNG1 Company. The commercial start date is 2025 and under this agreement the Group anticipates making £8.2 billion of commodity purchases, based on a mixture of market gas and oil prices.

31 December	2019 £m	2018 £m
Commitments in relation to the acquisition of property, plant and equipment:	299	392
Commitments in relation to the acquisition of intangible assets:		
Renewable obligation certificates	3,756	4,326
Other intangible assets	762	592
Other commitments:		
Commodity purchase contracts	46,411	48,055
LNG capacity	4,282	4,371
Transportation capacity	1,117	1,013
Other long-term commitments ⁽ⁱ⁾	747	669

(i) Other long-term commitments include amounts in respect of executory contracts, power station tolling fees and the smart meter roll-out programme.

The maturity analysis for commodity purchase contract commitments at 31 December is given below:

31 December	Commodity purchase contract commitments	
	2019 £billion	2018 £billion
<1 year	11.3	13.9
1–2 years	6.2	7.9
2–3 years	4.1	5.2
3–4 years	3.7	4.0
4–5 years	3.2	4.0
>5 years	17.9	13.1
	46.4	48.1

(b) Guarantees and indemnities

This section discloses any guarantees and indemnities that the Group has given, where we may have to provide security in the future against existing and future obligations that will remain for a specific period.

In connection with the Group's energy trading, transportation and upstream activities, certain Group companies have entered into contracts under which they may be required to prepay, provide credit support or provide other collateral in the event of a significant deterioration in creditworthiness. The extent of credit support is contingent upon the balance owing to the third party at the point of deterioration.

As at 31 December 2019, £651 million (2018: £612 million) of letters of credit and on-demand payment bonds have been issued in respect of decommissioning obligations included in the Group Balance Sheet.

(c) Contingent liabilities

The Group has no material contingent liabilities.

17. Events after the balance sheet date

The Group updates disclosures in light of new information being received, or a significant event occurring, in the period between 31 December 2019 and the date of this report.

Dividends

The Directors propose a final dividend of 3.50 pence per ordinary share (totalling £204 million) for the year ended 31 December 2019. The dividend will be submitted for formal approval at the Annual General Meeting to be held on 11 May 2020 and, subject to approval, will be paid on 22 June 2020 to those shareholders registered on 11 May 2020.

King's Lynn power station

On 23 December 2019, the Group agreed to sell its 382MW King's Lynn CCGT power station to RWE Generation for headline consideration of £105 million, adjusted for final working capital, based on a valuation date of 31 December 2019. The deal completed on 12 February 2020.

18. Seasonality of operations (unaudited)

Certain activities of the Group are affected by weather and temperature conditions. As a result of this, amounts reported for the six-month period ended 31 December 2019 may not be indicative of the amounts that would be reported for a full year due to seasonal fluctuations in customer demand for gas, electricity and services, the impact of weather on demand and commodity prices, market changes in commodity prices and retail tariffs.

Customer demand for gas in the UK, Republic of Ireland and North America is driven primarily by heating load and is generally higher in the winter than in the summer, and higher from January to June than from July to December. Customer demand for electricity in the UK and the Republic of Ireland generally follows a similar pattern to gas, but is more stable. Customer demand for electricity in North America is also more stable than gas but is driven by heating load in the winter and cooling load in the summer. Generally, demand for electricity in North America is higher in the winter and summer than it is in the spring and autumn, and higher from July to December than it is from January to June.

Customer demand for home services in the UK is generally higher in the winter than it is in the summer, and higher in the earlier part of the winter as that is typically when heating systems tend to break down most, so that customer demand from July to December is higher than from January to June. Customer demand for home services in North America follows a similar pattern, but is also higher in the summer as a result of servicing of cooling systems.

Gas production volumes in the UK are generally higher in the winter when gas prices are higher. Gas production volumes are generally higher from January to June than they are from July to December as outages are generally planned for the summer months when gas demand and prices are at their lowest.

Power generation volumes from the Group's remaining thermal power stations are dependent on spark spread prices, which is the difference between the price of electricity and the price of gas multiplied by a conversion rate and, as a result, are not as seasonal as gas production volumes in the UK, as wholesale prices for both gas and electricity are generally higher in the winter than they are in the summer. As the nuclear power stations in which the Group holds an interest are used to meet baseload power demand, volumes of power generated by these stations are not as seasonal as those generated by the Group's thermal power station assets.

The impact of seasonality on customer demand and wholesale prices has a direct effect on the Group's financial performance and cash flows.

19. Group Income Statement for the six months ended 31 December (unaudited)

	Notes	2019			2018 (restated) (i)		
		Business performance £m	Exceptional items and certain re-measurements £m	Results for the period £m	Business performance £m	Exceptional items and certain re-measurements £m	Results for the period £m
Six months ended 31 December							
Group revenue ^⓪	21	13,017	(1,911)	11,106	13,361	(2,156)	11,205
Cost of sales ^⓪		(11,092)	2,956	(8,136)	(11,364)	3,057	(8,307)
Re-measurement and settlement of energy contracts ^⓪		-	(1,192)	(1,192)	-	(1,101)	(1,101)
Gross profit/(loss)	22	1,925	(147)	1,778	1,997	(200)	1,797
Operating costs before exceptional items and credit losses on financial assets		(1,342)	-	(1,342)	(1,337)	-	(1,337)
Credit losses on financial assets		(93)	-	(93)	(45)	-	(45)
Exceptional items	22	-	(757)	(757)	-	(113)	(113)
Operating costs		(1,435)	(757)	(2,192)	(1,382)	(113)	(1,495)
Share of profits/(losses) of joint ventures and associates, net of interest and taxation	22	12	(1)	11	1	(20)	(19)
Group operating profit/(loss)	21	502	(905)	(403)	616	(333)	283
Net finance cost		(132)	-	(132)	(123)	-	(123)
Profit/(loss) before taxation		370	(905)	(535)	493	(333)	160
Taxation on profit/(loss)		(85)	38	(47)	(216)	60	(156)
Profit/(loss) for the period		285	(867)	(582)	277	(273)	4
Attributable to:							
Owners of the parent		285	(758)	(473)	273	(328)	(55)
Non-controlling interests		-	(109)	(109)	4	55	59
Earnings per ordinary share				Pence			Pence
Basic	23			(8.1)			(1.0)
Diluted	23			(8.1)			(1.0)

(i) The Group has amended the presentation of energy derivative contracts following an IFRIC agenda decision in March 2019 and a review of its trading businesses. Prior year results have been restated accordingly. See note 1 for further details.

20. Group Cash Flow Statement for the six months ended 31 December (unaudited)

Six months ended 31 December	2019 £m	2018 £m
Group operating (loss)/profit including share of results of joint ventures and associates	(403)	283
(Deduct)/add back share of (profit)/loss of joint ventures and associates, net of interest and taxation	(11)	19
Group operating (loss)/profit before share of results of joint ventures and associates	(414)	302
Add back/(deduct):		
Depreciation, amortisation, write-downs, impairments and write-backs	1,524	469
Profit on disposals	(25)	(11)
Decrease in provisions	(152)	(43)
Cash contributions to defined benefit schemes (in excess of)/less than service cost income statement charge	(340)	30
Employee share scheme costs	20	24
Unrealised losses arising from re-measurement of energy contracts	290	244
Exceptional charges reflected directly in operating profit	104	31
Operating cash flows before movements in working capital relating to business performance and payments relating to taxes and exceptional charges	1,007	1,046
Increase in inventories	(132)	(105)
Increase in trade and other receivables and contract-related assets relating to business performance	(289)	(988)
Increase in trade and other payables and contract-related liabilities relating to business performance	623	1,303
Operating cash flows before payments relating to taxes and exceptional charges	1,209	1,256
Taxes paid	(13)	(67)
Payments relating to exceptional charges in operating costs	(123)	(131)
Net cash flow from operating activities	1,073	1,058
Purchase of businesses, net of cash acquired	(27)	(27)
Sale of businesses	28	13
Purchase of property, plant and equipment and intangible assets	(429)	(491)
Sale of property, plant and equipment and intangible assets	–	3
Investments in joint ventures and associates	(1)	(3)
Dividends received from joint ventures and associates	1	–
Receipt of sub-lease capital payments	3	–
Interest received	6	8
Sale/(purchase) of securities	16	(19)
Net cash flow from investing activities	(403)	(516)
Net cash outflow from repayment of short-term borrowings	(180)	–
Financing interest paid	(159)	(145)
Repayment of long-term borrowings and capital element of leases	(80)	(433)
Equity dividends paid	(88)	(124)
Net cash flow from financing activities	(507)	(702)
Net decrease in cash and cash equivalents	163	(160)
Cash and cash equivalents including overdrafts at 1 July	639	1,303
Effect of foreign exchange rate changes	(8)	(15)
Cash and cash equivalents including overdrafts at 31 December	794	1,128
Included in the following line of the Group Balance Sheet:		
Cash and cash equivalents	1,342	1,268
Overdrafts included within current bank overdrafts, loans and other borrowings	(548)	(140)

21. Segmental analysis for the six months ended 31 December (unaudited)
(a) Revenue

Six months ended 31 December	2019			2018 (restated) (i)		
	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m	Gross segment revenue £m	Less inter-segment revenue £m	Group revenue £m
Centrica Consumer	5,771	–	5,771	5,608	–	5,608
Centrica Business	6,641	(39)	6,602	7,270	(44)	7,226
Upstream	1,001	(357)	644	1,174	(647)	527
Group revenue included in business performance	13,413	(396)	13,017	14,052	(691)	13,361
Less: revenue arising on contracts in scope of IFRS 9 included in business performance			(1,911)			(2,156)
Group Revenue			11,106			11,205

(i) Segmental revenues have been restated to reflect the new operating structure of the Group. Group revenue has been restated to exclude revenue from contracts in the scope of IFRS 9. Group revenue and group revenue included in business performance have also been restated to include the net result of certain commodity purchases and sales trades that are deemed to be speculative in nature. See note 1 for further details.

(b) Adjusted gross margin and adjusted operating profit

Six months ended 31 December	Adjusted Gross Margin		Adjusted Operating Profit (restated) (i)	
	2019 £m	2018 £m	2019 £m	2018 £m
Centrica Consumer	1,125	1,207	265	320
Centrica Business	625	391	206	2
Upstream	175	399	31	294
Adjusted gross margin/adjusted operating profit	1,925	1,997	502	616
Certain re-measurements	(147)	(200)	(147)	(200)
Share of re-measurement of certain associates' energy contracts (net of taxation)	–	–	(1)	(18)
Gross profit	1,778	1,797		
Exceptional items in operating cost			(757)	(113)
Share of associates' exceptional operating cost (net of taxation)			–	(2)
Total exceptional items and certain re-measurements included in operating profit			(905)	(333)
Operating (loss)/profit after exceptional items and certain re-measurements			(403)	283

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

22. Exceptional items and certain re-measurements for the six months ended 31 December (unaudited)

(a) Total exceptional items and certain re-measurements

Six months ended 31 December	2019 £m	2018 £m
Exceptional items	(757)	(115)
Certain re-measurement losses	(148)	(218)
Exceptional items and certain re-measurements before taxation	(905)	(333)

(b) Exceptional items

Six months ended 31 December	2019 £m	2018 £m
(Impairment)/write-back of retained exploration and production assets	(427)	90
Impairment of UK power generation assets and provision for onerous power contracts	(381)	(46)
Impairment of Centrica Home Solutions (formerly Connected Home)	(38)	–
Net pension change credit/(cost) ⁽ⁱ⁾	216	(43)
Restructuring costs	(99)	(100)
Net loss on significant disposals (including impairment of assets sold or held for sale)	(28)	(16)
Exceptional items included within Group operating profit	(757)	(115)
Net taxation on exceptional items	30	49
Net exceptional items after taxation	(727)	(66)

(i) In 2018 £2 million of the pension past service cost related to the Nuclear associate schemes.

(c) Certain re-measurements

Six months ended 31 December	2019 £m	2018 £m
Certain re-measurements recognised in relation to energy contracts:		
Net (losses)/gains arising on delivery of contracts	(39)	51
Net losses arising on market price movements and new contracts	(108)	(251)
Net re-measurements included within gross profit	(147)	(200)
Net losses arising on re-measurement of certain associates' contracts (net of taxation)	(1)	(18)
Net re-measurements included within Group operating profit	(148)	(218)
Taxation on certain re-measurements	8	11
Net re-measurements after taxation	(140)	(207)

23. Earnings per ordinary share for the six months ended 31 December (unaudited)

Six months ended 31 December	2019		2018	
	£m	Pence per ordinary share	£m	Pence per ordinary share
Earnings – basic	(473)	(8.1)	(55)	(1.0)
Net exceptional items after taxation (note 22) ⁽ⁱ⁾	602	10.3	97	1.7
Certain re-measurement losses/(gains) after taxation (note 22) ⁽ⁱ⁾	156	2.7	231	4.1
Earnings – adjusted basic	285	4.9	273	4.8
Earnings – diluted	(473)	(8.1)	(55)	(1.0)
Earnings – adjusted diluted	285	4.8	273	4.7

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

Gas and Liquids Reserves (Unaudited)

The Group's estimates of reserves of gas and liquids are reviewed as part of the full year reporting process and updated accordingly.

A number of factors affect the volumes of gas and liquids reserves, including the available reservoir data, commodity prices and future costs. Due to the inherent uncertainties and the limited nature of reservoir data, estimates of reserves are subject to change as additional information becomes available.

The Group discloses 2P gas and liquids reserves, representing the central estimate of future hydrocarbon recovery. Reserves for Centrica operated fields are estimated by in-house technical teams composed of geoscientists and reservoir engineers. Reserves for non-operated fields are estimated by the operator, but are subject to internal review and challenge.

As part of the internal control process related to reserves estimation, an assessment of the reserves, including the application of the reserves definitions, is undertaken by an independent technical auditor. An annual reserves assessment has been carried out by Gaffney, Cline & Associates for the Group's global reserves. Reserves are estimated in accordance with a formal policy and procedure standard.

The Group has estimated 2P gas and liquids reserves in Europe.

The principal fields in Spirit Energy are Kvitebjørn, Statfjord, Ivar Aasen, Cygnus, Maria, South and North Morecambe, Rhyl and Chiswick. The principal non-Spirit Energy field is Rough. The European reserves estimates are consistent with the guidelines and definitions of the Society of Petroleum Engineers, the Society of Petroleum Evaluation Engineers and the World Petroleum Council's Petroleum Resources Management System using accepted principles.

Estimated net 2P reserves of gas (billion cubic feet)	Spirit Energy (i)	Rough	Total
1 January 2019	698	103	801
Revisions of previous estimates (ii)	128	–	128
Disposals of reserves in place (iii)	(14)	–	(14)
Production (iv)	(129)	(40)	(169)
31 December 2019	683	63	746

Estimated net 2P reserves of liquids (million barrels)	Spirit Energy (i)	Rough	Total
1 January 2019	69	–	69
Revisions of previous estimates (ii)	23	–	23
Disposals of reserves in place (iii)	–	–	–
Production (iv)	(10)	–	(10)
31 December 2019	82	–	82

Estimated net 2P reserves (million barrels of oil equivalent)	Spirit Energy (i)	Rough	Total
31 December 2019 (v)	196	10	206

(i) The movements represent Centrica's 69% interest in Spirit Energy.

(ii) Revision of previous estimates include those associated with North and South Morecambe, North Sea fields and Norwegian fields.

(iii) Reflects the disposal of interests in the Valemon and Sindre assets.

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

(v) Includes the total of estimated gas and liquids reserves at 31 December 2019 in million barrels of oil equivalent.

Liquids reserves include oil, condensate and natural gas liquids.

Ofgem Consolidated Segmental Statement

The Ofgem Consolidated Segmental Statement (CSS) segments our Supply and Generation activities and provides a measure of profitability, weighted average cost of fuel and volumes, in order to increase energy market transparency for consumers and other stakeholders.

The following is an extract from the audited CSS and is prepared in accordance with Standard Condition 19A of the Electricity and Gas Supply Licences and Standard Condition 16B of the Electricity Generation Licences. This extract should be read in conjunction with the full CSS which includes the Statement, the audit opinion and the basis of preparation. This is available at www.centrica.com/2019-prelims.

Ofgem consolidated segmental statement

Year ended 31 December 2019

	Unit	Electricity Generation		Aggregate Generation Business	Electricity Supply		Gas Supply		Aggregate Supply Business
		Nuclear	Thermal		Domestic	Non-Domestic	Domestic	Non-Domestic	
Total revenue	£m	534.8	262.5	797.3	3,166.3	1,574.1	3,642.0	467.2	8,849.6
Sales of electricity & gas	£m	496.5	232.1	728.6	3,088.2	1,574.1	3,569.0	467.2	8,698.5
Other revenue	£m	38.3	30.4	68.7	78.1	–	73.0	–	151.1
Total operating costs	£m	(358.3)	(244.3)	(602.6)	(3,157.7)	(1,547.5)	(3,415.6)	(424.3)	(8,545.1)
Direct fuel costs	£m	(90.7)	(144.9)	(235.6)	(1,093.3)	(601.3)	(1,678.6)	(248.1)	(3,621.3)
Direct costs	£m	(214.4)	(91.4)	(305.8)	(1,516.0)	(804.0)	(1,045.6)	(112.7)	(3,478.3)
Network costs	£m	(45.1)	(0.2)	(45.3)	(731.0)	(354.7)	(938.6)	(92.4)	(2,116.7)
Environmental and social obligation costs	£m	–	(58.5)	(58.5)	(722.4)	(423.0)	(41.9)	–	(1,187.3)
Other direct costs	£m	(169.3)	(32.7)	(202.0)	(62.6)	(26.3)	(65.1)	(20.3)	(174.3)
Indirect costs	£m	(53.2)	(8.0)	(61.2)	(548.4)	(142.2)	(691.4)	(63.5)	(1,445.5)
WACOF/E/G	£/MWh, P/th	(8.9)	(48.4)	N/A	(65.9)	(55.7)	(60.3)	(51.2)	N/A
EBITDA	£m	176.5	18.2	194.7	8.6	26.6	226.4	42.9	304.5
DA	£m	(149.4)	(50.0)	(199.4)	(44.2)	(10.8)	(54.3)	(4.4)	(113.7)
EBIT	£m	27.1	(31.8)	(4.7)	(35.6)	15.8	172.1	38.5	190.8
Volume	TWh, MThms	10.2	4.2	N/A	16.6	10.8	2,783.2	484.3	N/A
Average customer numbers/sites	'000s	N/A	N/A	N/A	5,359.0	463.3	6,586.0	189.0	N/A

Supply EBIT	margin	(1.1)%	1.0%	4.7%	8.2%	2.2%
Supply PAT	£m	(28.7)	12.7	139.1	31.2	154.3
Supply PAT	margin	(0.9)%	0.8%	3.8%	6.7%	1.7%

2018 Summarised CSS

Year ended 31 December 2018

	Unit	Electricity Generation		Aggregate Generation Business	Electricity Supply		Gas Supply		Aggregate Supply Business
		Nuclear	Thermal		Domestic	Non-Domestic	Domestic	Non-Domestic	
Total revenue	£m	540.8	236.7	777.5	3,054.9	1,393.4	3,860.3	431.2	8,739.8
EBIT	£m	45.7	(28.3)	17.4	48.4	10.7	417.8	28.8	505.7

Supply EBIT	margin	1.6%	0.8%	10.8%	6.7%	5.8%
Supply PAT	£m	39.4	8.6	337.6	23.9	409.5
Supply PAT	margin	1.3%	0.6%	8.7%	5.5%	4.7%

Additional Information – Explanatory Notes

(Unaudited)

Definitions and reconciliation of adjusted performance measures

Centrica's 2019 Preliminary Results include a number of non-GAAP measures. These measures are chosen as they provide additional useful information on business performance and underlying trends. They are also used to measure the Group's performance against its strategic financial framework. They are not however, defined terms under IFRS and may not be comparable with similarly titled measures reported by other companies. Where possible they have been reconciled to the statutory equivalents from the primary statements (Group Income Statement ('I/S'), Group Balance Sheet ('B/S'), Group Cash Flow Statement ('C/F')) or the notes to the Financial Statements.

Adjusted gross margin, adjusted operating profit, adjusted earnings and adjusted operating cash flow have been defined and reconciled separately in notes 2, 5 and 10 to the Financial Statements where further explanation of the measures is given. Additional performance measures are used within this announcement to help explain the performance of the Group and these are defined and reconciled below.

EBITDA

EBITDA is a business performance measure of operating profit, after adjusting for depreciation and amortisation. It provides a performance measure in its own right, and provides a bridge between the Income Statement and the Group's key cash metrics.

Year ended 31 December		2019 £m	2018 £m	Change
Group operating (loss)/profit	I/S	(849)	987	
Exceptional items included within Group operating profit and certain re-measurements before taxation	I/S	1,750	405	
Share of losses/(profits) of joint ventures and associates, net of interest and taxation	I/S	12	(3)	
Depreciation and impairments of property, plant and equipment	5	880	736	
Amortisation, write-downs and impairments of intangibles	5	326	322	
EBITDA		2,119	2,447	(13%)

The table below shows how EBITDA reconciles to AOCF.

Year ended 31 December		2019 £m	2018 £m	
EBITDA		2,119	2,447	
Profit on disposals ⁽ⁱ⁾		(2)	(12)	
Decrease in provisions ⁽ⁱ⁾		(191)	(154)	
Cash contributions to defined benefit pension schemes, net of service cost income statement charge ⁽ⁱ⁾		(233)	(75)	
UK pension deficit payments	5	235	98	
Employee share scheme costs	C/F	41	43	
Re-measurement of energy contracts ⁽ⁱ⁾		(213)	41	
Net movement in working capital ⁽ⁱ⁾		119	(47)	
Taxes paid	C/F	(92)	(61)	
Dividends received from joint ventures and associates	C/F	1	22	
Margin cash movements	5, 11	46	(57)	
Adjusted operating cash flow		1,830	2,245	

(i) These line items relate to business performance only and therefore differ from amounts quoted in the IFRS Financial Statements.

E&P free cash flow

Free cash flow is used as an additional cash flow metric for the E&P business due to its asset intensive nature. This metric provides a measure of the cash generating performance of the E&P business, taking account of its investment activity.

Year ended 31 December		2019 £m	2018 £m	Change
Upstream adjusted operating cash flow	5	635	1,012	
Less: non-E&P adjusted operating cash flow		(48)	(49)	
E&P adjusted operating cash flow		587	963	
Capital expenditure (including small acquisitions)		(480)	(497)	
Net disposals		34	17	
Free cash flow		141	483	(71%)

E&P free cash flow is E&P's adjusted operating cash flow, as defined in note 2, less the business's capital expenditure and net disposals as defined above.

Return on average capital employed (ROACE)

Post-tax ROACE is one of the key performance metrics in the financial framework of the Group and represents the return the Group makes from capital employed in its wholly owned assets and its investments in joint ventures and associates.

Definitions and reconciliation of adjusted performance measures

Year ended 31 December		2019 £m	2018 £m
Adjusted operating profit	5	901	1,392
Taxation on profit – business performance	I/S	(218)	(461)
Exclude taxation on interest – business performance		(61)	(65)
Return attributable to non-controlling interests		(18)	(29)
Return		604	837
Net assets	B/S	1,795	3,948
Adjusted for:			
Non-controlling interests	B/S	(583)	(803)
Net retirement benefit obligations	14	163	79
Net cash and cash equivalents, bank overdrafts, loans and other borrowings, securities and collateral posted/(received)	11	3,415	2,889
Derivative financial instruments	13	332	(112)
Deferred tax (assets)/liabilities associated with retirement benefit obligations and derivative financial instruments		(8)	130
Effect of averaging and other adjustments		1,350	215
Average capital employed		6,464	6,346
ROACE		9%	13%

Average capital employed takes the Group's net assets excluding net debt and deducts the net retirement benefit obligation and other derivative financial instruments (together with their associated deferred tax balances) because these represent unrealised positions and therefore do not reflect true capital employed. They are also subject to market driven volatility which could materially distort the ROACE calculation.

Disclosures

Disclaimers

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

This announcement contains certain forward-looking statements with respect to the financial condition, results, operations and businesses of Centrica plc. These statements and forecasts involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. There are a number of factors that could cause actual results or developments to differ materially from those expressed or implied by these forward-looking statements and forecasts.

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

For further information

Centrica will hold its 2019 Preliminary Results presentation for analysts and institutional investors at 9.30am (UK) on Thursday 13 February 2020. There will be a live audio webcast of the presentation and slides. Please register to view the webcast at <https://webcasts.centrica.com/centrica104>

The webcast will be archived and a full transcript of the presentation and the question and answer session will be available on the Centrica website at <https://www.centrica.com/investors/results-centre/2019-preliminary-results/> on Monday 17 February 2020.

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Financial calendar

Ex-dividend date for 2019 final dividend	07 May 2020
Record date for 2019 final dividend	11 May 2020
Trading Update	11 May 2020
Annual General Meeting	11 May 2020
2019 final dividend payment date	22 Jun 2020
2020 Interim Results announcement	24 July 2020

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