Our Principal Risks and Uncertainties

We manage risks to support our Group strategy

Risk management

In the following pages we set out an overview of Centrica's risk management framework. Our Principal Risks remain linked to our Group Priorities and the Group's risk appetite is expressed in relation to our four categories of risk: Strategic, Operational, Financial and Compliance.

Risk management and internal control

Centrica's Group Enterprise Risk and Internal Controls Framework remains a core element of the Group's Governance Model which is set out below.

The most significant Principal Risks to the Group are set out on pages 40 to 43, in order of magnitude to the Group.

The annual risk management process is summarised in the diagram below.

Risk appetite

The Board is ultimately responsible for aligning the risk appetite of the Group with our long-term strategic objectives, taking into account the emerging and Principal Risks. The Board has determined the risk appetites for the categories of Strategic, Operational, Financial and Compliance, and the key risks within Centrica's Risk Universe have been mapped into these categories.

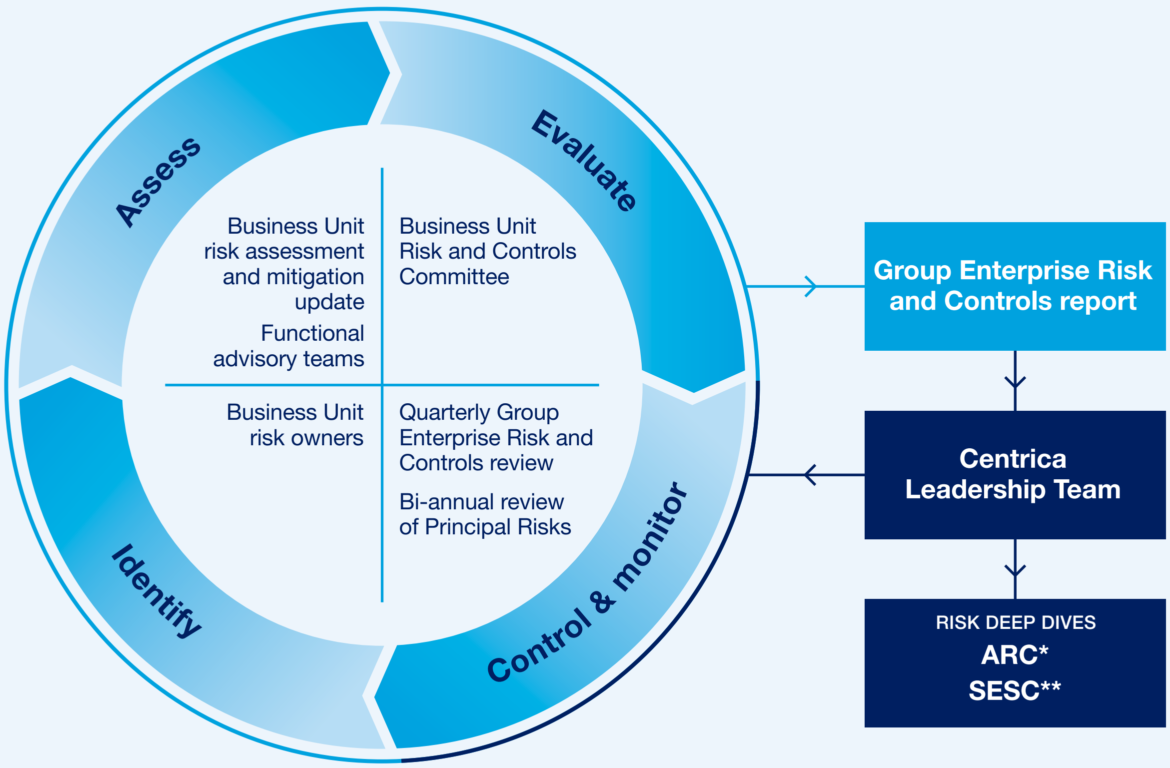
Due to the industry and the nature of some of the markets in which the Group operates, we have high to moderate risk appetites for our strategic and operational risks. However, we have a minimal risk appetite for operational safety risks and we continue to strive for an incident free workplace. For financial risks we adopt a conservative approach to manage our liquidity position and balance sheet strength. However, due to the higher risks inherent in managing the commodity and weather variables within our energy supply businesses, we accept a higher appetite for certain elements of financial markets risk. We are committed to operating our businesses in compliance with relevant laws and regulations.

Risks are assessed at a Business Unit (BU) level to determine impact and likelihood. During the BU and Group level risk reviews the adequacy of mitigating actions is considered to determine the net residual risk scores and compare them to the Group risk appetite.

Risk framework

Day-to-day ownership of risk sits with business management under the regular scrutiny of the Centrica Leadership Team (CLT) to whom the Board has delegated principal responsibility for risk oversight. The Group Principal Risks are those which could potentially impact delivery of our strategic objectives over the medium to long term, where medium term is up to three years, as determined through our strategic planning process.

Centrica Group's Annual Risk Management Process



*Audit and Risk Committee (ARC)
**Safety, Environment and Sustainability Committee (SESC)

Quarterly Business Unit risk reviews

- Each BU is responsible for identifying and assessing its significant risks with support from functional subject matter experts. Current and emerging risks and issues are formally reviewed quarterly by the BU leadership teams.
- The finalised risk reporting and assessment of each BU's control environment is then formally discussed at a Group Risk and Controls Review for each BU. The meetings were chaired by the Group CFO until November, and then by the Director of Risk and Internal Audit.
- At these quarterly reviews, recent assurance reports and findings from internal audits and other assurance reviews are discussed. Actions from previous audits and assurance reviews are tracked to ensure close out in line with agreed timescales.

Executive and Board Committee reviews

- Bi-annually the Group Principal Risks are presented to the CLT for review and challenge.
- These include the aggregate risk assessments from the BU 'bottom-up' process and any Group level risk assessments.
- The Group Principal Risk profile, as updated by the CLT, is presented to the ARC for review.
- Internal Audit presents quarterly to the ARC on any material findings as a result of independent assurance work.
- Risk deep dives are undertaken by the ARC and SESC to review high priority risks, ad-hoc topics and emerging matters.

In our assessment of viability, we consider the potential impact of 'severe but plausible' risks and note linkages to the Group Principal Risks as described on pages 40 to 43. The annual Viability Assessment has been presented to and approved by the ARC.

Board

- The Board reviews risk as part of its strategy review process and during the year conducted a robust assessment of the Company's principal and emerging risks.
- At the year-end the Board reviewed and approved the Principal Risk and Uncertainties disclosure.
- On an annual basis we evaluate our System of Risk Management and Control, which is supported by an annual certification of controls and adherence to Group policies by senior management.

Changes in risk climate and emerging matters

BUs and Functions review their risks and report key changes as part of their Business Performance and Risk Reviews. Major emerging risks and issues are escalated immediately.

During 2021 a number of Group level areas of risk were closely monitored, and actions taken to mitigate their impact on the Group.

Energy market

Current global wholesale energy prices are putting pressure on the energy market, with gas and electricity prices reaching record levels. Some smaller suppliers have ceased trading, leaving them unable to fulfil their commitments to supply gas and electricity to their customers. Centrica has stepped in as the Supplier of Last Resort (SoLR) for some of these energy suppliers, taking on around 700,000 residential and 6,600 business customers by the start of 2022.

It is anticipated there will be increased customer contact due to increased prices along with an increased risk of customer bad debt.

Price levels and volatility have severely increased the commodity and weather risks, alongside potential unstable customer churn through Winter 21/22 and the increase in the price cap in April 22. The Group is addressing this by implementing agile hedging policies/risk management and effective demand forecasting processes.

COVID-19

COVID-19 continues to pose significant challenges to the risk management and resilience of businesses globally. Centrica has a robust approach to risk management which enables rapid mobilisation of resources to react and mitigate the ongoing impacts of the pandemic, and working practices continue to be monitored and modified as required. Changes in operational processes and working practices were adopted to minimise the impact of COVID-related absences. We are actively sourcing alternative parts and accelerating stock through the supply chain to mitigate the risk of shortages of parts and components, but there are no specific changes to any Principal Risks.

Legal, Regulatory or Ethical Compliance

During the year the Skilled Persons Review under s166 of the Financial Services and Markets Act 2000 was successfully closed and the legal challenge to the Belgian regulator imposing a fine on CBS for its bid pricing on the flexible reserve market upheld. While the risk climate remains stable, compliance continues to be an important area of focus.

Customer Service

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

Industrial Action

Contingency plans were implemented to manage the impact of industrial action in Q1 2021 on our customers, colleagues and our business. New employee terms and conditions were introduced in April 2021 and new collective agreements signed with Trade Unions. These set out new ways of working with the Trade Union and the introduction of a Centrica-wide set of policies and procedures. We continue our dialogue with our Trade Union representatives and work towards building positive relationships. We will continue to monitor this risk closely through 2022.

Technology

Advances in technology bring both opportunities and threats in the medium term. Failure to adapt and exploit opportunities from advances in technology in the medium term will impact our ability to grow, compete and meet the changing needs of our customers. Digital connectivity and intelligent systems supported by advanced analytics and artificial intelligence will drive unanticipated changes. We continue to automate and integrate our operations and monitor the changing technology landscape, but this has not led to any specific changes in Principal Risks.

Supply Chain

Supply chain issues with boiler and part supply are being closely monitored as a forward-looking risk, driven largely by microchip shortages. Measures have been taken to minimise the short-term impact, including securing alternative supply routes and working closely with our suppliers. Group Procurement have developed an impact assessment of potential financial and operational impacts of current supply chain issues on the 2022 forecast. We are actively monitoring the situation closely with our suppliers but at present this is not leading to a change to the Principal Risks.

Principal Risks

The following Principal Risks were adopted by the Board in 2021 and reflect the position of the Group at the point of signing the accounts. The risks are presented in order of magnitude to the Group based on net residual risk after mitigations. The Risk Climate is the expected change in the risk landscape from the previous risk review, based on the environment and controls in place.

Commodity Risk

Risk Category: Financial

Group Priority: Cash Flow Growth

Risk Climate: Deteriorated

Overview

Risk of financial loss due to our exposure to market, credit and operational risk.

- Material downward movements in commodity prices can impact in-year P&L through impact on sale of asset production, and impact on the long-term valuation of asset portfolios.
- Commodity exposure arises within the trading businesses, which provide a route to market for Centrica's upstream and power generation operations, source electricity and gas for the Group's energy supply businesses and trade on a proprietary basis. We also have commodity exposures within our LNG portfolio and, in particular, the Cheniere, Shenergy and Mozambique contracts.
- Changes in our customer demand requirements can result in a commodity exposure as we balance our established hedges at market prices.
- Hedging commodity price risk in the markets exposes Centrica to credit risk (and supply shock), which is the risk of a loss if a counterparty fails to perform on its obligations. Trending directional price moves leads to a build-up of mark to market which is a component of credit risk.
- Volatile commodity markets can also increase cash and working capital requirements for both ourselves and our counterparties (with the latter increasing credit risk and the risk of contagion).

Mitigations

- Review of hedging policies in bi-annual Group Committee.
- Financial risks reviewed regularly in dedicated Risk Committee forums within trading entities.
- The monthly Downstream Energy Margin Meeting is a forum for all relevant parties to review demand forecasting performance, hedge positions, risk and P&L, with actions recorded and tracked to completion.
- Increased credit risk exposure review and mitigation actions taken, both within the individual BUs and at a Group level.
- Updated exploration & production (E&P) hedging policy to help mitigate risk of commodity fluctuations.

Developments

- Implementation of bi-annual Group Risk Hedging Policy Committee.
- Trading positions have been scaled down to align with risk appetite given that high market prices in a high volatility environment have driven increased market risk.
- Teams more actively managing credit exposures, which have increased to very high levels, through triangulations and other risk reducing trades. Teams are also actively monitoring counterparty liquidity stresses.
- Daily cash movements on margined counterparties have been significant, driven by the high price and high volatility commodity price environment seen in 2021. Positions have been flattened with the highest risk counterparties to minimise exposures to daily cash movement.
- Increased outage risk of aging assets leads to greater volume uncertainty.

Weather Risk

Risk Category: Financial

Group Priority: Cash Flow Growth

Risk Climate: Deteriorated

Overview

The impact on present or future profitability resulting from volume impacts as a result of deviation to normal weather.

- The impact is compounded by the application of the price cap which limits recovery for unseen demand.
- In normal conditions, downstream is exposed to revenue loss in warm weather which may be compounded by selling hedges at a loss.
- When commodity prices are higher than the cap allowance, as is the case for Winter 21/22, the risk exposure is primarily to cold weather when additional volumes may be required for downstream customers at a cost higher than can be recharged.

Mitigations

- The monthly Downstream Energy Margin Meeting is a forum for all relevant parties to review weather impact and hedging proposals and performance, with actions recorded and tracked to completion.
- Options to mitigate weather risk in British Gas, to narrow the range of gross margin outcomes, are reviewed ahead of winter seasons with decision rights held by the CEO.
- Ensure adequate access to liquidity in stressed scenario.

Developments

- Increased frequency of updated demand curves which capture changes in demand driven by deviations from seasonal normal weather.
- Group strategic hedge approved to reduce the exposure to high price and cold weather risk across Centrica business units.

Our Group Priorities

- Customer Obsession
- Operational Excellence
- Most Competitive Provider
- Cash Flow Growth
- Empowered Colleagues
- Safety, Compliance and Conduct Foundation

Asset Production

Risk Category: Operational

Group Priority | Risk Climate: Stable

Risk that failures in the development or integrity of our investments in operated and non-operated assets could compromise asset production or the long-term viability of our assets.

- Failure to invest in the maintenance and development of our assets could result in significant safety issues or asset underperformance through unplanned outages.
- Failure to capture adequate return on our 20% nuclear investment due to operational issues suppressing earnings and cash flows or increased decommissioning costs.

- Group annual plan includes contingencies to cover events such as unexpected outages from assets.
- Group-wide minimum operational and safety standards are applied to all assets, whether operated or non-operated, and adherence against them is monitored and reported.
- Maintenance activity and improvement programmes are conducted across the asset base to optimise effectiveness and maximise production levels.
- We use our presence on the Board of EDF Energy Nuclear Generation Group Limited to monitor the performance of the Nuclear fleet.
- The E&P portfolio is not dependent on a single asset and the impact of an outage is diluted. The Spirit Energy joint venture structure also mitigates the impact of outages, and the risk will be reassessed following the completion of the sale of the Norway assets.

- We experienced nuclear plant availability issues throughout 2021. We are waiting for the outcome of an investigation into corrosion on a reactor at Hartlepool to determine whether there will be further outages at the Hartlepool and Heysham 1 nuclear stations. The closure of Dungeness and Hunterston nuclear stations has reduced the risk.
- During 2021, despite the continuing impact of the pandemic, Spirit Energy maintained all activity and programmes critical to the safe operation of assets.
- In December 2020 an outage occurred at Whitegate power station in Ireland. Repairs were completed and the asset returned to service in December 2021.
- The Rough field returned to service in November and is performing in line with planned levels. Discussions are continuing about options for the future of this asset.

Cyber Risk

Risk Category: Operational

Group Priority | Risk Climate: Stable

Risk of failure to prevent impacts from the denial of service, cyber espionage and the related theft/disclosure of confidential/ customer data leading to reputational, regulatory and financial impacts.

A cyber attack presents a risk to Centrica operations in the following ways:

- Confidentiality: leakage of customer or company confidential data by threat actor, third party, staff or system error, either maliciously or by accident.
- Integrity: accuracy of Centrica's data due to malicious or accidental alteration by internal or external parties, or malicious actor.
- Availability: loss of assets, including data, due to cyber compromise.

Due to the diversity of Centrica's technology, the Company could suffer any or all of the above which could lead to:

- Regulatory compliance impact or fines, including but not limited to, General Data Protection Regulations (GDPR), Payment Card Industry-Data Security Standard (PCI), Financial Conduct Authority (FCA) and Prudential Regulation Authority (PRA).
- Financial impact of investigating and recovering from a cyber attack.
- Reputational impact of negative media coverage.

- Ongoing collaboration and information sharing with industry peers and National Cyber Security Centre.
- The Cyber Security Change Programme focuses on improvements to controls that increase the difficulty of targeting Centrica and being able to exploit weaknesses.
- Information Security tooling deployment across the Group, that detects and prevents advanced attack techniques.
- Training and awareness campaigns and simulated Phishing attacks throughout 2021 to raise awareness and highlight responsibilities in protecting data.
- Cyber attack simulations to identify control gaps and undertake remediation activity.

- The external Cyber threat landscape has seen a significant shift in the use of targeted Ransomware campaigns against corporations, utilising Ransomware as a service. The sophistication of attacks has increased, with data removed, and backups disabled to increase the pressure to pay.
- The increased connectivity of Industrial Automated Controls Systems used to manage domestic, commercial and national infrastructure increases their vulnerability to a cyber attack.
- As a power utility operator, Centrica will be of interest to Nation State for commercial data and potential disruption.
- Beyond ransomware, Centrica's business will be a target for activities such as mandate fraud and fake invoicing.
- The Cyber risk climate is continually evolving and has the potential to deteriorate with increased breadth and volume of attacks. A deterioration has not yet crystallised but the Group remains on high alert.

Political and Regulatory Intervention

Risk Category: Strategic

Group Priority | Risk Climate: Stable

Risk of political or regulatory intervention and changes, or a failure to influence such changes.

- The Group faces uncertainty as to whether the Government will influence the price cap mechanism or impose a windfall tax to respond to soaring wholesale energy prices. This could result in profit margin erosion and/or damage to our reputation.
- There is uncertainty as to the timing and application of the SoLR levy process and the Special Administration Regime.
- Risk of further government intervention to support vulnerable customers that may not be funded through the price cap mechanism.
- Continuing focus on ESG interventions and impact on investor confidence in our responses.
- The Group faces potential erosion of profit margins through potential further FCA interventions on pricing impacting our UK Services business.

We continue to be committed to an open, transparent and competitive UK energy market which provides choice for consumers.

- Ongoing continuous engagement with policy makers to help form future regulatory requirements.
- Dedicated Corporate Affairs and Regulatory teams which examine upcoming political and regulatory changes and their impact and report to the Leadership Team via the monthly External Affairs meeting.
- Understanding the expectations of stakeholders through reputational surveys and review of media sentiment.

- The planned regulatory reform through the impending 'Energy Bill' will present significant medium-term opportunities and challenges for the Group.
- The Group is actively engaged and committed to influencing the shaping of the approach to the Green transition in the UK and responds to Government consultations on related policy.
- We will engage in further Government and regulator consultation on the future of the UK retail energy market.

Overview

Capability of People

Risk Category: Operational

FY 20: Capability of People, Process and Systems

Group Priority

Risk Climate: Stable

Risk of failure to attract and retain key talent. Deterioration to health and wellbeing of workforce.

- Failure to attract and retain key capabilities, and safeguard the health and wellbeing of the workforce across the business could have a detrimental impact on our ability to meet our strategic objectives.

Highly Competitive Markets

Risk Category: Strategic

Group Priority

Risk Climate: Stable

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

- Successful delivery of our strategy requires helping our customers live sustainably, simply and affordably in a competitive marketplace, with increased focus on climate change, renewables and a move to lower carbon products and propositions.
- Pace of change is critical given competitive pressures, ability to right-size the cost base and take advantage of market opportunities.
- Driving transformation at pace creates additional delivery and technology risk through investment in markets which may not become material (i.e through uncertainty of net zero pathway).
- Increasing competition for sites for renewable development could prevent Centrica Energy Assets from establishing a foothold in the market.

Climate Change

Risk Category: Strategic

Group Priority

Risk Climate: New Risk

Impact of Market, Regulatory and Policy changes affecting the Group.

- Increased pressure from Government, investors and customers to commit to meaningful carbon reduction targets.
- Execution of Centrica Business Solutions strategy to realise opportunities from the electrification of Energy and Transport industries.
- Timing and execution of British Gas pivot to decarbonised heating and power products and services.
- Increased focus on 'greenwashing' and greater rigour on Renewables Guarantee of Origin, impacting renewable products and propositions.

Mitigations

Capability of People

- Extensive focus on rebuilding capabilities and providing targeted learning and development opportunities, improving capacity and implementing retention enhancement strategies.
- Talent management and planning forums reinstated.
- Continuous focus on our values and culture aligned to our purpose.
- Greater focus on diversity and inclusion at all levels of the organisation, and open access to colleague-led employee networks.

Highly Competitive Markets

- Significant focus on profitable growth and innovation across all BUs including customer retention in the downstream businesses. Focus on developing our products to respond to changing customer needs and sentiment.
- Regular review of organisational model to support delivery of strategic objectives.
- Transition to a lower cost platform is a significant step in addressing the challenge from rapidly scaling lower cost players.
- Regular review of skills and capability to sustain a strong ethically-minded and performance-focused culture.
- New asset strategy communicated with clear targets, close review of market fundamentals, competition and expected returns.

Climate Change

- People & Planet targets published in early 2021 include net zero targets for Centrica and our customers.
- Centrica's Climate Transition Plan published in October 2021 outlines our plans to move to a low carbon future.
- The SESC, which is chaired by an independent non-executive director, typically reviews climate change information three times a year. The SESC additionally maintains oversight over climate-related content and discuss as frequently as required at CLT meetings which are held monthly.
- We have committed to compliance with TCFD requirements, including climate change scenario analysis providing insight into the risks, opportunities and timing of change (see pages 33 to 35).

Developments

Capability of People

- BUs and functions have been closely monitoring the impact of the 2020 reorganisation and modernising of employee terms and conditions on knowledge and skills retention.
- Throughout the pandemic there have been increased direct employee communications from the CLT, with continued emphasis on wellbeing, mental health and ways of working, and the introduction of Flexible First to combine working at home with time on site. Pulse surveys are regularly completed to gauge employee sentiment and address concerns.
- Regular 'Straight Talking' sessions are conducted by senior management to identify the root causes of colleague engagement issues and rebuild trust.

Highly Competitive Markets

- Core markets continue to be highly competitive. Our response is to focus colleagues and technology on helping businesses and households to use energy more efficiently and sustainably.
- Continued disruption in the Energy supply market with potential further rationalisation of suppliers.
- Embedding the restructuring of our business allowing us to respond to our customers' needs more easily.
- Focus on becoming the most competitive supplier delivering cost efficiency through an agile new system.
- Training the next generation of apprentices to deliver low carbon technologies e.g. heat pumps and electric vehicle chargers, while exploring the future of hydrogen.
- Renewables market highly attractive, given increasing focus of governments and businesses in meeting net zero targets, level of competition rising to meet demand.

Climate Change

- COP 26 and focus on Corporate response to Climate Change.
- Sale of Spirit Energy Norway assets to decarbonise our asset strategy.
- UK 6th carbon budget adopted.
- UK government heat & buildings, Hydrogen and net zero strategies.
- Potential repurposing of Rough for hydrogen storage.
- Electrification of transport and new heating technologies, reallocating capital investment to realise opportunities from moving to a low carbon economy.

Legal, Regulatory & Ethical Compliance

Risk Category: Compliance

FY 20: Legal, Regulatory and Ethical Standards Compliance

Group Priority

Risk Climate

Stable

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

- Any material real or perceived failure to follow Our Code or comply with legal or regulatory obligations would undermine trust in our business.
- Material or sustained non-compliance could lead to financial penalties, reputational damage, customer churn and/or legal and/or regulatory action.

- The Board sets the tone from the top through Our Code and leadership behaviours.
- Regulatory compliance monitoring activities performed by dedicated teams to drive Group-wide consistency and quality.
- Control frameworks in place to deliver customer experience in line with requirements over sales compliance, billing, retentions, customer correspondence and complaints handling. These are regularly reviewed by relevant leadership teams through KPIs.
- The Financial Crime Team monitors threats throughout the business and adequacy of response to the threat of bribery and corruption.
- A global 'Speak Up' helpline exists to provide a consistent Group-wide approach to reporting unethical behaviour.
- Continuous dialogue with Ofgem and the FCA to influence the regulatory environment.

- Our approach to customer visits is continually reviewed to ensure that employees are operating in line with government guidelines and that the health and safety of employees and customers is maintained.
- The Our Code employee annual training for 2021 included expense fraud and information security dilemmas as part of a campaign to raise awareness of increased fraud risks.

Health, Safety, Environment: Process Loss of Containment

Risk Category: Operational

FY 20: Health, Safety, Environment: Process Containment

Group Priority

Risk Climate

Stable

Risk of an unplanned or uncontrolled release of any material from primary containment that could result in fatalities, injury and/or environmental damage resulting in legal claims, reputational and financial impacts.

- Our operations have the potential to result in personal or environmental harm.
- Significant HSE events could have regulatory, financial and reputational repercussions that would adversely affect some, or all, of our brands and businesses.

- Continued investment in training to ensure maintenance of safe operating practices.
- HSE Management Systems are established to include policies, standards and procedures to protect employees, third parties and our environment.
- Continuous engagement with regulatory agencies such as the Environment Agency, Oil and Gas Authority and UK Health and Safety Executive.
- Assurance over our HSE processes and controls provided by our in-house HSE teams supported by external subject matter experts where needed.

- Minimum manning levels continue to be assessed and contingency plans made for key assets (offshore and onshore) in light of COVID-19.
- Mitigations have been implemented to address potential operational issues from higher staff absence rates or staff contracting COVID-19.
- The HSE Function works with the business to ensure effective HSE resources and competency operate consistently and effectively across the business.

Assessment of Viability Disclosure

Requirement

In accordance with provision 31 of the 2018 UK Corporate Governance Code the Directors have assessed the prospects and viability of the Group taking into account the business model (as set out in the Strategic report on pages 12 to 13), current position in the context of liquidity and credit metrics of the Group, and principal risks.

Assessment of prospects

The assessment considers the current position of the Group, the Group's strategy, longer-term market trends and customer needs, and the Group's principal risks as well as forecast cash generation against long-term obligations to repay debt and fund the defined benefit pension schemes.

Our business model is designed to allow us to focus on meeting the changing energy supply, services and solutions needs of our customers, helping them transition to a lower carbon future while positioning ourselves to deliver returns for shareholders and meet our broader obligations to society over the long-term.

Key factors in assessing the long term prospects of the Group include the following:

1. The Group's competitive position today

Centrica has strong brands with large customer bases as the number one supplier in many of the markets in which it operates. In its core markets: British Gas Energy and British Gas Services are the largest residential energy supplier and home services provider in the UK; Bord Gáis is the second largest residential energy supplier in Ireland; and Centrica's Energy Marketing & Trading business is a leading route to market services provider across Europe. Centrica also has the largest heating engineering workforce in the country who are highly trusted by our customers, and are well-positioned to continue to support new fuels and technologies

In assessing our prospects beyond the strategic planning period, the Board considers how these strengths position the company to grow long-term shareholder value.

2. Market trends affecting future prospects

- The current commodity price volatility and its impact on the UK energy supply market.
- Increasing progress and Government support for net zero, corporates committing to clear net zero targets.
- Despite recent competitor supplier failures, competition may remain intense with margins under pressure, and we expect that to remain the case as the market emerges from the current crisis. However, due to the way Centrica forward hedges its commodity requirements we are not as exposed to volatile market prices as other recently failed suppliers.
- Falling costs for battery, solar and wind, electric vehicles deployment accelerates, growing need for flexibility.
- Role of data analytics, artificial Intelligence and automation increasingly important.

3. Customer needs

- Hassle-free, empathetic, personalised and safe service. Offering solutions, not just products.
- Responsible options (including green tariffs) and expert guidance to help them achieve their net zero goals.
- Trusted and credible counterparty.
- Lower costs and greater efficiency.

We put customers' needs at the centre of everything we do and this is the core part of our strategy, as set out in the People and Planet and Strategic Report sections of this Annual Report on pages 7, 10 to 12 and 36 respectively.

4. The Group's strategic objectives

The Group's strategic purpose include sustainability, simplicity and affordability, as set out on page 6 of this Annual Report. These support the assessment of the Group's prospects.

5. Principal risks facing the Group, as set out on pages 38 to 43

The risks we consider to be of greatest significance in assessing our prospects include:

- Further political or regulatory intervention, including increased focus on Environment, Social and Governance interventions, responding to climate change and uncertainty as to whether the Government will influence the price cap mechanism to respond to soaring wholesale energy prices;
- External risks associated with COVID-19, weather and commodity price movements;
- Highly competitive markets;
- Compromised asset production and HSE impacts of process loss of containment; and
- Risks associated with the effectiveness of our internal control environment in relation to cyber risk, data protection and customer conduct.

A more detailed summary of the business strategy is provided in the Strategic report on pages 10 to 11 and more detail on the principal risks facing the Group on pages 38 to 43.

Climate change is the most important driver guiding Centrica's prospects today and is a core part of our purpose as reflected by the actions we've taken, which include:

- We've outlined our plans for how we intend to decarbonise power, heat and transport through our Climate Transition Plan published in October 2021.
- We will continue to build out our green supply and solutions offerings for customers.
- We're training the next generation of apprentices to deliver low carbon technologies like heat pumps and electric vehicle chargers while exploring the future of hydrogen.
- We're committed to creating additional green and transition generation with up to £500 million to deploy through Centrica Energy Assets in renewable and flexible assets by 2025.

Good progress has been made on managing the prospects of the Group during 2021, including the completion of the Direct Energy sale in January, the announced sale of Spirit Norway and the delivery of the Group restructuring activity, which has simplified our management structure, reduced management layers and increased the proportion of our colleagues who interact directly with customers enabling us to put customers at the heart of everything we do. In addition, our balance sheet is now much stronger, with a net cash position as of 31 December 2021.

The Board has confidence in the long-term prospects of the business. The Board believe that the strategic steps taken in 2021, and the Group's strategy and purpose will set the Group up to be successful in the long term as market trends continue to evolve and key risks are managed.

Viability Sensitivity Tests Assessed	Links to Principal Risks	Risk >5% of opening headroom[1]?
A. External risks associated with a reduction in commodity price down to historic price levels	• Financial Markets Commodity Risk • Highly Competitive Markets	Yes
B. Risk of higher bad debt due to the large increase in the UK price cap in 2022 and from further economic disruption to customers from COVID-19, and the operational impact of further COVID restrictions	• Political and Regulatory Intervention • Highly Competitive Markets	No
C. Regulatory risks in relation to loss of sensitive data, and the operational impact of sustained employee industrial action.	• Legal, Regulatory & Ethical Compliance • Political and Regulatory Intervention • Highly Competitive Markets • Cyber Risk • Capability of People,	No
D. Significant disruption to the asset-based business leading to loss of production and/or earnings	• Asset Production • Health, Safety, Environment: Process Containment Event	Yes
E. The risk of significant adverse weather	• Financial Markets Weather Risk	No
F. Increased margin cash requirements arising from adverse market conditions	• Financial Markets Commodity Risk	No
G. Removal of 25% of drawn uncommitted Letters of Credit	• Financial Markets Weather Risk • Financial Markets Commodity Risk • Asset Production • Cyber Risk • Political and Regulatory Intervention • Highly Competitive Markets	No
H. Increased collateral requirements arising from a single-notch credit rating downgrade	• Financial Markets Weather Risk • Financial Markets Commodity Risk • Asset Production • Cyber Risk • Political and Regulatory Intervention • Highly Competitive Markets	Yes

(1) Headroom is calculated as undrawn committed facilities plus total liquid resources.

Assessment of viability

The assessment is based upon the Group Annual Plan for 2022 and the longer-term strategic forecast for 2023 and 2024 which are approved annually by the Board. The Board continues to believe that a three-year time horizon is the appropriate timeframe to assess viability, and is also consistent with the Group's planning cycle and the period of reasonable visibility in the energy markets. The Group's focus on the energy supply and services businesses means the most significant risks continue to be shorter-term in nature including asset performance, commodity prices, weather and competitive pressures creating disruption in our customer-facing markets.

Important context to the viability assessment is the management of the Group's financing profile through accessing a diverse source of term funding and maintaining access to carefully assessed levels of standby liquidity which support the Group's planned financial commitments. As at 31 December 2021, the Group had total committed credit facilities of £4.8 billion, of which £0.4 billion expires in 2024 and the remaining £4.4 billion expire in 2025. The undrawn committed facilities as at 31 December 2021 were £3.0 billion in addition to total liquid resources of £3.6 billion.

On 8 December 2021, the sale of Spirit Norway (including Statfjord UK) was announced. This transaction will improve the Group viability assessment through removal of the risks associated with this part of the business, and is factored in to the viability assessment conducted.

The viability assessment identifies eight sensitivities (A to H) shown in the table above, which incorporate the impact of our principal risks as set out on pages 40 to 43. These risks were selected as they have the most material impact on cash flow and liquidity. These sensitivities were applied to the baseline financial forecast which uses the Group Annual Plan for 2022 and the longer-term strategic forecast for 2023 and 2024.

The key assumptions made in the specific sensitivities include:

- Historical evidence and the evaluation of similar events observed in the market have been used to inform the potential impact of modelled scenarios;
- The recent increase in gas and power prices has also been reflected in the commodity price sensitivity. In previous years a 30% reduction to the base forecast has been used, but to reflect the particularly high price curve in 2022 we have modelled a 60% stress to 2022 (which equates to gas at 52p/th and power at £55/MWh). We have retained a 30% stress to 2023/24 as those prices have not increased as much as the nearer time period (equating to gas at 44p/th in 2023 and 37p/th in 2024, and power at £46/MWh in 2023 and £43/MWh in 2024). Oil prices have not been as volatile, therefore the 30% reduction has been retained (equating to $55/bbl, $45/bbl and $43/bbl in 2022, 2023 and 2024 respectively) (Sensitivity A);
- A sustained loss of production from one of the highest producing oil and gas fields (Sensitivity D);
- A repeat of historically seen adverse UK weather resulting in the need to purchase additional power and gas at higher prices which cannot be fully recovered through customer billing (Sensitivity E);
- There would be some offset between Sensitivity A and Sensitivity E, because in a low price environment weather would have a smaller impact.

Further Group-wide assumptions include:

- No material acquisitions or disposals of Group business areas, other than the disposal of Spirit Norway which was announced on 8 December 2021.
- No new debt funding within the three-year period of the assessment.
- The Group retains its existing credit ratings (BBB/Baa2) during the three-year period of the assessment, although the impact of a one-notch reduction is modelled in our sensitivity tests.

The risk of further impacts of COVID-19 has been modelled, due to the ongoing uncertainty over new variants of the virus. An impact similar to that seen in the first wave of the pandemic in H1 2020 has been modelled, where lockdown restrictions impacted our services and solutions activity. This risk models the impact of engineer absence through either sickness or self-isolation and reduced customer appetite for in-home visits which would result in a drop in services and solutions activity to the same extent as seen in 2020.

In Sensitivity B, in addition to the COVID-19 economic impact, we have also considered the impact of the expected price cap increase, which raises the risk of many more customers falling into fuel poverty, which in turn could lead to higher levels of customer bad debt, which has been modelled to be the same impact as seen in 2020.

The eight sensitivities have been grouped into three scenarios as set out in the table below. It is not plausible that all eight sensitivities would occur at the same time, and therefore each of the three scenarios is considered as a plausible combination of the above sensitivities. Within these scenarios, commodity (sensitivity A), bad debt and operational COVID-19 risks (sensitivity B), and risks relating to credit rating, collateral and liquidity (sensitivities F, G and H) were selected as constant events in all three scenarios.

Sensitivities grouped into three scenarios	
Scenario 1: A significant external event outside the Group's control such as a significant and sustained reduction in commodity price, increased bad debt, continuation of COVID-19 restrictions throughout 2022, along with a regulatory/industrial event and additional debt and liquidity risks	A + B + C + F + G + H
Scenario 2: A significant external event outside the Group's control such as a significant and sustained reduction in commodity price, increased bad debt, continuation of COVID-19 restrictions throughout 2022, along with a significant disruption to the asset-based businesses, and additional debt and liquidity risks	A + B + D + F + G + H
Scenario 3: A significant external event outside the Group's control such as a significant and sustained reduction in commodity price, increased bad debt, continuation of COVID-19 restrictions throughout 2022, along with adverse weather impacts affecting the energy supply businesses, and additional debt and liquidity risks	A + B + E + F + G + H

The scenarios have been assessed to confirm whether the Group would have sufficient liquidity available to meet its future planned financial commitments against its existing undrawn committed credit facilities of £3.0 billion, and that the credit metrics calculated would not imply a sustained fall to below investment grade (S&P BB and Moody's Ba1 NP).

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

- The Directors considered whether any of the scenarios breached the available headroom in the three-year period and concluded that sufficient headroom was available in all scenarios.
- The Directors considered whether any of the scenarios indicated a deterioration in the credit rating metrics which would lead to a two notch downgrade to sub-investment grade. They concluded that the Group has a reasonable expectation that its net debt ratios would continue to sustainably support investment grade ratings (at least BBB- for S&P, and at least Baa3 for Moody's) for all scenarios.

While mitigations were not required in any of the above scenarios to ensure the Group was viable, additional mitigations could be deployed to increase headroom and reduce the risk of a credit downgrade, including reductions in operational and capital expenditure.

Reverse stress testing has also been performed to identify and analyse the circumstances under which the Group's business model would no longer be viable. Examples considered, all occurring simultaneously, included further sustained low commodity prices significantly beyond the level assumed in the severe but plausible viability scenario, a two notch credit rating downgrade to sub investment levels, business underperformance, further upstream asset production issues, a GDPR fine levied at 2% of global annual revenue and liquidity funding events.

The reverse stress test models all of these scenarios occurring to an extreme extent and at the same time. Even after applying these additional stresses, there was still headroom available in 2022 and 2023. Should all modelled events occur at maximum foreseeable severity, the headroom would then be fully utilised in 2024. However, the combined severity and extent of these modelled events far exceeds any impacts that have historically been experienced by the Group. In addition, the exposure related to a double notch credit rating downgrade has been modelled on the current high price environment. If prices were to drop significantly, the exposure would be much lower. As such, the likelihood of all events occurring concurrently, and at the severity modelled, is judged to be very remote.

Conclusion

The Directors have considered all the above factors in their assessment of viability, including the availability of mitigating actions within their control in the event that one of the scenarios above materialises. We have performed sensitivity analysis that enables the Directors to confirm that they have a reasonable expectation of the Group's ability to continue to operate and meet its liabilities, as they fall due, over a period of at least three years.

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

Raj Roy
Group General Counsel & Company Secretary
23 February 2022