CREATING VALUE RESPONSIBLY

CAIRN ENERGY PLC
CORPORATE RESPONSIBILITY REPORT 2019
Cairn Energy PLC is an independent, UK-based oil and gas exploration, development and production company. Cairn has explored, discovered, developed and produced oil and gas in a variety of locations throughout the world and has extensive experience as operator and partner in all stages of the oil and gas life cycle.

Creating Value Responsibly
Cairn is committed to working responsibly as part of our strategy to deliver value for all stakeholders. This means working in a safe, secure, environmentally and socially responsible manner.

Our Operations
We currently hold interests in seven countries. Cairn’s exploration activities have a geographical focus in North-west Europe, West Africa and Latin America, and are underpinned by interests in production and development assets in the North Sea. Our headquarters in Edinburgh, Scotland, are supported by operational offices in London, Senegal and Mexico.

- **Exploration:** We hold emerging acreage in Senegal, Mexico, Israel, Côte d’Ivoire and Mauritania, frontier acreage in Suriname and mature acreage in the UK.
- **Development:** We hold an interest in the Sangomar Field (Senegal) development project. This was an exploration asset which we have progressed into development.
- **Production:** We hold non-operated interests in two production assets in the UK North Sea, Catcher and Kraken, which delivered first oil in 2017.

Operational highlights

<table>
<thead>
<tr>
<th>Production (bopd)</th>
<th>~23,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil and gas sales revenue</td>
<td>US$504m</td>
</tr>
<tr>
<td>Capital expenditure</td>
<td>US$242m</td>
</tr>
</tbody>
</table>

1 Barrels of oil per day.

This Report
This document comprises Cairn Energy’s full Corporate Responsibility (CR) report 2019. It covers our approach and performance from 1 January to 31 December 2019, across all assets and activities over which we have operational control. We exclude data where we do not control operations, but we do consider the risks associated with our partners’ control of such activities. Based on our material issues, the content in this report is considered in four main themes: Governance (page 17), People (page 32), Environment (page 54) and Society (page 65).

We have commissioned ITPEnergised to provide third-party assurance of the integrity of our greenhouse gas emissions data.

See page 76 for more information about scope and boundaries, and page 15 for more detail about our materiality assessment.

Read our full assurance statement.
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We are committed to working responsibly as part of our strategy to deliver value for all stakeholders. This means working in a safe, secure, and environmentally and socially responsible manner.
A Responsible Approach

We strive to deliver value in a safe, secure, and environmentally and socially responsible manner for all our stakeholders. Internally, we have comprehensive systems and standards in place to reinforce our culture of working responsibly. Externally, we adhere to key global standards promoting responsible working practices.

Leadership and strong corporate governance are key to ensuring we operate in accordance with these standards and systems.

Values
Our core values are known as the 3Rs: Building Respect, Nurturing Relationships and Acting Responsibility.

Code of Ethics
Employees and partners are required to work in accordance with the Code, which sets out our core values, behaviours and Business Principles.
Revised and reissued in 2019

Key Policies
- Health, Safety and Security
- Environment
- Social Responsibility
- Major Accident Prevention
- People
- Tax

Corporate Responsibility Management System
Our key management system instructs employees how to carry out business activities in accordance with the business strategy, Code of Ethics and CR Policies and is reviewed annually by the Board.
CRMS revised against leading global performance standards in 2019

Human Rights
Our Human Rights Guidance defines how we identify, assess and manage potential human rights issues at key project stages.
Guidance updated in 2019

Anti-bribery and corruption
We have a zero-tolerance position on ABC matters – everyone we work with must sign up to our ABC policy.

United Nations Global Compact
We support this initiative for businesses committed to aligning their strategies with universally-accepted principles in human rights, labour, the environment and anti-corruption.
Participation renewed in 2019

Extractive Industries Transparency Initiative (EITI)
We participate in the EITI, a coalition of governments, companies and society promoting payment transparency in the oil, gas and mining sector.
Membership renewed in 2019

United Nations Sustainable Development Goals
We support the 17 goals which help to guide us in minimising the impacts and maximising the benefits of our activities in countries where we work.

International Finance Corporation
We align our CRMS with the IFC Performance Standards on Social and Environmental Sustainability.

Modern Slavery Act
We operate in accordance with the UK MSA. Our selection procedure for service providers includes modern slavery assessments. Our MSA statement is available online.

Task Force on Climate-Related Financial Disclosures
We continue to assess our reporting against TCFD, complying with a number of recommended disclosures.
Frameworks and Standards

Our culture of working responsibly is built on global management frameworks and standards. Internally, we have comprehensive systems in place to reinforce our culture of working responsibly. Externally, we adhere to a range of agreements and international practices that promote responsible working practices.

In accordance with our Business Principles, we report on CR matters under four themes: Governance, People, Environment and Society. The graphic on the right summarises the key standards, agreements and frameworks that promote the responsible corporate behaviour and working practices that we measure our performance against.

Compliance with local regulations
We are always committed to complying with regulations set by our host countries. Legislation varies according to location and where host country regulations for the oil and gas sector are underdeveloped, we are guided by our CRMS irrespective of location, which is based on International Association of Oil & Gas Producers (IOGP) standards and UK and international best practice. This ensures we apply the same procedures and standards consistently, wherever we operate.

1 The IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector in developing countries.

Read about how we’ve performed against the UNGC principles in our UNGC Index.
The UN Sustainable Development Goals

We support the United Nations Sustainable Development Goals (UN SDGs). The SDGs are a series of 17 goals to promote prosperity for all while protecting the environment.

They provide the business community with a framework for assessing the impact and value of their activities. We assess our contributions through civil society commentary, stakeholder enquiries and community engagement.

Not all 17 SDGs can be applicable to every business. Our contributions to the goals applicable to our business in 2019 are summarised on the right.

We believe we can play a meaningful role in helping to address the SDGs. Not all the SDGs are relevant to our business in all circumstances, nor to each of our assets. However, across the value chain, many of our activities add value to society by contributing positively towards the SDGs. Similarly, we can see where we may need to mitigate for potentially negative impacts on both society and environment.

The potential for some goals to conflict with one another exists. For example, as an oil and gas company, we acknowledge that producing fossil fuels contributes to global climate change but also provides affordable energy and promotes economic, social and human development.

Aligning our efforts with the Global Goals helps inform the development of our Impact Benefit Plans, which we now draft for each significant project. These plans evolve with each development of our Impact Benefit Plans, which we now draft.

<table>
<thead>
<tr>
<th>Minimise negative impacts</th>
<th>SDG</th>
<th>Maximise positive impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implemented measures to minimise disruption to fishing activities offshore Mexico, Suriname, Norway and the UK (page 72)</td>
<td>SDG 17</td>
<td>Requisite payments to host governments throughout our operations (page 22)</td>
</tr>
<tr>
<td>Enhanced employee travel health and security risk management (page 35)</td>
<td>SDG 8</td>
<td>Continued to offer employee health benefits across organisation (page 41)</td>
</tr>
<tr>
<td>Continued to apply CRMS to protect health and safety of workers (page 45)</td>
<td>SDG 8</td>
<td>Developed and delivered health and wellbeing initiatives (page 41)</td>
</tr>
<tr>
<td>Trained employees in travel health and security risk management (page 45)</td>
<td>SDG 8</td>
<td>Continued to support English language training at the Earth Sciences Institute (ESI) in Senegal (page 68)</td>
</tr>
<tr>
<td>Implemented EIA and Environmental Management Plan for operations in Mexico, Norway, Suriname and UK to protect water quality around our operations (page 56)</td>
<td>SDG 1</td>
<td>Maintained a robust equality and diversity policy, increased female board representation during year (page 36)</td>
</tr>
<tr>
<td>Subjected all 2019 operations to EIA and environmental management measures in line with our CRMS and Environmental Policy (page 64)</td>
<td>SDG 1</td>
<td>Implemented robust programmes for accident prevention, preparedness and response (page 43)</td>
</tr>
<tr>
<td>Produced oil and gas to meet energy demand through the transition to a low-carbon economy. Contributed to energy security for host nations. Senegal development expected to contribute to domestic gas supply, substantially replacing higher carbon sources of electricity generation in Senegal (page 68)</td>
<td>SDG 7</td>
<td>Continued to adhere to our robust human rights policies to ensure human rights violations do not occur in supply chain (page 74)</td>
</tr>
<tr>
<td>Continued to implement policies for local procurement and supplier development (page 52)</td>
<td>SDG 8</td>
<td>Improved awareness of human rights with a workshop and training (page 74)</td>
</tr>
<tr>
<td>Continued to support the development of a National Institute of Oil and Gas (INPG) through our joint venture in Senegal (page 68)</td>
<td>SDG 8</td>
<td>Engaged with Marine authorities in Mexico and set up a local grievance mechanism (page 14)</td>
</tr>
<tr>
<td>Continued to support Invest in Africa in Senegal, training local businesses and setting up a portal for SMEs to access oil and gas contracts (page 70)</td>
<td>SDG 7</td>
<td>Continued to support EITI in promoting transparent payments to governments by the extractive industry and promoting fair distribution of benefits in host nations (page 22)</td>
</tr>
<tr>
<td>Continued to apply robust waste and chemical management plans throughout our operations (page 68)</td>
<td>SDG 12</td>
<td>Promoted human rights, environmental and safety standards through contracts and monitoring (page 57)</td>
</tr>
<tr>
<td>Mitigated emissions by minimising energy consumption and flaring (page 67)</td>
<td>SDG 11</td>
<td>Contributed to climate change adaption project through social investment (page 69)</td>
</tr>
<tr>
<td>Implemented deferred production of gas in preference to flaring with non-operated partners (page 29)</td>
<td>SDG 11</td>
<td>Promoted deferred production of gas in preference to flaring with non-operated partners (page 29)</td>
</tr>
<tr>
<td>Continued to support the UNGC for local procurement and supplier development (page 52)</td>
<td>SDG 10</td>
<td>Supported the new 2019 EITI standard (page 22)</td>
</tr>
<tr>
<td>Continued to support EITI in promoting transparent payments to governments by the extractive industry and promoting fair distribution of benefits in host nations (page 22)</td>
<td>SDG 10</td>
<td>Supported institutional training in Senegal (page 68)</td>
</tr>
<tr>
<td>Promoted deferred production of gas in preference to flaring with non-operated partners (page 29)</td>
<td>SDG 10</td>
<td>Continued to adhere to our robust human rights policies to ensure human rights violations do not occur in supply chain (page 74)</td>
</tr>
</tbody>
</table>

External recognition

Our planning, commitments, actions and progress towards achieving the SDGs continue to be recognised with two stars by Support the Goals. This ‘traffic-light’ system awarded stars to Cairn for publicly stating a focus on key SDGs and sharing examples of how its actions support the goals.

Cairn Energy PLC Corporate Responsibility Report 2019
CEOs Review

Cairns strong operational performance in 2019 was delivered through production and cash flow generation at the top end of guidance and the Group ended the year with an increased net cash position and undrawn debt facilities.

A significant milestone was achieved in Senegal with a Final Investment Decision taken for the Sangomar development. Reserve additions were made in both Senegal and the North Sea and the Company encountered exploration success alongside Eni in Mexico.

The sale of Cairns Norwegian business, combined with exits from exploration positions in Ireland and Nicaragua, demonstrate continued focus on capital allocation as the company seeks to generate further value for shareholders on a sustainable basis.

In the year ahead, Cairn looks forward to continuing its near-term exploration drilling programme offshore Mexico while progressing the first phase of development execution offshore Senegal. These activities are supported by strong cash flow from our producing assets and a continued fiscal discipline on balancing expenditure. In addition, we anticipate resolution of the proceedings against the Government of India under the UK-India Investment Treaty. Cairn will continue to focus on executing and delivering its strategy efficiently and responsibly as it seeks to add further value for shareholders.

Energy transition²

Cairn recognises that the world is facing significant challenges associated with climate change and we acknowledge that global commitments to minimise temperature rises will require significant growth in lower carbon energy sources. Throughout the year the Board continued to focus on the associated risks and appropriately positioning the company’s strategy.

Cairn’s strategy is to play a responsible and competitive role in the production of oil and gas within this transition, providing affordable, sustainable energy alongside renewable sources.

We are committed to ensuring our investment decisions are targeting resources that can play a part in the global energy mix and will continue to attract capital in a world where demand for hydrocarbons may be below today’s levels. We are actively engaged in reducing our carbon emissions wherever possible.

Working responsibly²

Our culture is deeply rooted in our commitment to working responsibly. This means working to deliver value for our stakeholders in a safe, secure, environmentally and socially responsible manner. This is how we retain the trust and support of our stakeholders, which enables us to operate.

Our longstanding core values are at the heart of our culture. They are known as the 3Rs: Respect, Relationships and Responsibility.

Our Code of Ethics sets out these core values as well as the behaviours and principles which we expect not only our employees, but all those who we work with, to apply on the Company’s behalf.

Externally, adherence to key global agreements and standards promoting responsible working practices within business is also critical to us. This includes the United Nations Global Compact, the Extractive Industries Transparency Initiative and the United Nations Sustainable Development Goals.

Board changes

Cairn appointed two new independent non-executive directors, with Catherine Krajicek and Alison Wood joining the Board in H2 2019. Cairn recently announced the appointment of Erik B Daugbjerg as an independent non-executive director with effect from 14 May 2020. Following this appointment, Todd Hunt will retire as a non-executive director immediately following the Company’s Annual General Meeting on 14 May 2020.

COVID-19

As the COVID-19 virus continues to develop, following the original date of the CEO’s review, the safety and well-being of our people, as in all of our operations, remains our primary concern. We must all follow the controls established by host Governments.

We are able to adopt flexible working practices (including remote working and restricting business travel) to support our people while continuing to meet business needs. We will continue to assess the risks to the business and the people who work for and with Cairn during the emergency, which will help us resume normal working operations as soon as circumstances allow.

For more information regarding our response and impact on the business, please see the People section of this report on page 41 and our website www.cairnenergy.com.

Simon Thomson
Chief Executive
9 March 2020
Our Business Principles

Our long-established set of Business Principles frame the way we work, helping us to manage risks and behave ethically and responsibly to people, to the environment and to wider society. They are integrated into many of our systems and processes, including our CRMS, Operating Standards, Group Risk Management Procedure and People Management Manual.

The Board has ultimate responsibility for ensuring our culture of working responsibly exists across the organisation. This is supported by three levels of assurance:

- our values, Code of Ethics and Business Principles, and our policies, processes and systems, which all employees, contractors and suppliers are required to comply with;
- the internal oversight of key committees and groups, including our Senior Leadership Team and Management Team, Risk Management Committee and Audit Committee; and
- internal and external assurance audits, and stakeholder opinions.

See page 15 for a full list of Material Issues and their reference number.
2019 CR Highlights

During 2019, we made progress with our ongoing activities in the UK, Norway, Mexico, Suriname and Senegal.

Environment

- **Biodiversity**: Continued to assess biodiversity risks in new venture and operational projects, including monitoring marine mammals and sea turtles during our 2D seismic programme offshore Suriname and the implementation of risk avoidance and mitigation measures in our UK, Norway and Mexico drilling programmes.
- **Spills**: Zero spills of oil or chemicals to the environment.

Read more about Behaving Responsibly towards the Environment on page 54.

People

- **Health and safety**: Zero Lost Time Incidents and one Recordable Incident across the Group.
- **Contractors**: Worked with Invest in Africa, a non-governmental organisation (NGO), to establish an online portal for sourcing pre-approved contractors in Senegal.
- **Employee well-being**: Our health and well-being programme, originally offered to colleagues in the UK and Norway, has now been rolled out globally. It focuses on three areas: Getting Healthy, Maintaining Health and Regaining Health.
- **Training**: Phase two of our Management Bootcamp programme is ongoing and will run in 2020.
- **Major accident and hazard prevention**: Having revised and rolled out our CMAPP across the Group, we launched a training module for employees in early 2019, raising internal awareness and understanding about CMAPP.
- **Engagement**: Established an Employee Voice Forum to improve direct engagement between employees and the Board, with regular feedback to colleagues.

Read more about Behaving Responsibly to People on page 32.

Society

- **Engagement**: Revised our Stakeholder Engagement Guidelines.
- **Managing social impact**: Implemented social management measures for Block 9, as approved by the Mexican authorities.
- **Social and economic benefits**: Aligned our Impact Benefit Planning process with the UN SDGs.
- **Community development**: Continuing to support social investment activity in Senegal through joint venture.
- **Human rights**: Updated our Human Rights Guidelines, which define how we identify, assess and manage potential human rights issues at key project stages, and our selection procedure for service providers includes modern slavery assessments. Also held human rights seminar with experts in business and human rights, and CR professionals from our UK and Norway offices.

Read more about Behaving Responsibly to Society on page 65.
Corporate Responsibility Strategy

As the world transitions to a lower-carbon energy future, oil and gas are expected to remain primary energy sources for many years to come. We continue to meet growing energy demand in a responsible manner, creating value for all stakeholders through our portfolio of exploration, development and production assets.

Our values: the 3Rs

Our long-standing core values are at the heart of our culture. These values, based on respect, relationships and responsibility, are known as the ‘3Rs’.

Building Respect
We act with respect for people, communities, the environment, human rights and the law.

Nurturing Relationships
We act honestly, transparently and with integrity to develop strong and lasting relationships with our stakeholders.

Acting Responsibly
We behave fairly and ethically, and are accountable for our actions. We believe in, and act on, our responsibility to care for people, society and the environment.

High performing behaviours

To guide our employees in their daily work, we have identified a series of High Performing Behaviours, based on the 3Rs. Promoted throughout the organisation to help everyone to contribute to the success of the business, these behaviours are:

- be safe;
- be entrepreneurial;
- be focused;
- be a leader;
- be collaborative;
- be open; and
- be empowered.

We embed these behaviours in our culture through annual performance reviews and objective setting.

See the Chairman’s Statement and Governance section in our Annual Report and Accounts for more information.
Measuring Our CR Performance

Our strategic CR Objectives set our business direction for any given year against the background of our long-term strategy. Developed with the Board, they are grouped under four themes: Governance, People, Environment and Society. These themes span topics and associated issues identified as being the most important for our business and our stakeholders through quarterly risk reviews, an annual materiality assessment and ongoing stakeholder engagement throughout the year. Proposed new CR Objectives are reviewed and approved by the Board.

Key Performance Indicators (KPIs)

Our CR Objectives form part of our annual KPIs, which enable us to measure the delivery of our strategy and progress against our objectives. The 'maintain licence to operate' KPI encompasses the CR Objectives and measures our ability to deliver a range of social, environmental and economic benefits in a safe, secure, and environmentally and socially responsible manner (see Our Business Principles on page 9).

Understanding our key risks

To work responsibly, we need to identify and manage the risks that are most significant to our business. By continuing to review, understand and mitigate these risks, we provide greater protection to our people, society, communities and the environment.

Effective risk management is critical to our CR performance. We regularly review how our most significant risks are being managed and record them in a risk register. The risk register and stakeholder feedback (see our Annual Report and Accounts) are the two primary sources of information we use when prioritising issues (see page 16).

Working together and with others

We train our people to help them understand how to embed CR into our activities. Additional support is provided by a group of CR specialists, who work alongside project teams to ensure that potential CR impacts are considered in project planning and during operations.

We also leverage the experience, expertise and resources of our joint venture partners, NGOs and industry bodies such as the IOGP.
Working With Our Stakeholders

Listening to and responding to our stakeholders helps us to take their interests into account and communicate our performance transparently.

By following the principles of inclusivity, materiality, responsiveness and impact – as defined in AccountAbility’s AA1000 Accountability Principles Standard – we gather the perspectives of both internal and external stakeholder groups, use them to help identify our most important CR issues and respond to any concerns and questions in a structured way.

All projects are subject to bespoke Stakeholder Engagement Plans. These help us to identify stakeholder concerns, understand risks, identify actions to mitigate those risks and foster effective communication during the project (see graphic). The plans are reviewed regularly to ensure changes in project scope and stakeholder expectations are taken into account.

<table>
<thead>
<tr>
<th>1. Define strategic purpose and scope engagement</th>
<th>2. Assign responsibility</th>
<th>3. Identify stakeholders and their interests and concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Develop strategy (consultation, engagement, disclosure, grievance mechanism)</td>
<td>5. Outline strategy in Stakeholder Engagement Plan</td>
<td>6. Implement (revisit strategy as needed)</td>
</tr>
<tr>
<td>7. Monitor and repeat</td>
<td>8. Assess and review</td>
<td>Managing our stakeholder engagement</td>
</tr>
</tbody>
</table>

Cairn Energy PLC Corporate Responsibility Report 2019
Stakeholder Engagement Plans in 2019

Senegal
We have maintained a Stakeholder Engagement Plan for Senegal, in line with our transition to being a non-operated partner. We have continued to engage with our joint venture partners, peer companies and social investment partners.

Mexico
During 2018, we developed an initial Stakeholder Engagement Plan for Mexico. This involved stakeholder mapping informed by independent studies, media monitoring and local staff, and an internal workshop to develop a plan across the different stakeholder groups. During 2019, we developed more specific plans associated with our field operations.

UK and Norway
Although our UK and Norway operations are in a mature market, similar plans were developed ahead of drilling in 2019.

Suriname
A stakeholder engagement plan was developed ahead of seismic activities, starting in Suriname in 2018 and updated in 2019. Engagement will continue around future activities and social investment projects.

Stakeholder engagement through the year
We dedicate considerable time and effort to engage with stakeholders. Throughout the year, this activity included:
- presenting to investment analysts, investors and shareholders at regular one to one and group meetings as well as conferences;
- working with governments to secure licenses to operate;
- partnering with contractors and suppliers;
- participating with peers at industry events and organisations;
- staff and safety briefings for employees and contractors;
- participating in ESG surveys;
- collaborating with academic institutions and social investment actors; and
- engaging with stakeholder in our operating locations in advance of projects.

We also respond directly to concerned individuals and organisations on a wide range of specific issues. In 2019, the many and varied topics included company strategy and performance, transparency of payments to governments, diversity, remuneration, climate change resilience, safety and accident prevention, and biodiversity.

We had one reported grievance in 2019, concerning the potential effect of noise from our drilling operations in Mexico on surrounding fisheries. Noise from drilling operations is assessed within the Environmental Impact Assessment (EIA) process by independent consultants.

Read more about stakeholder engagement in our Annual Report and Accounts.
Prioritising Issues

The issues of importance to Cairn and our stakeholders

To work responsibly, we need to manage the issues that are most significant to our business and to our stakeholders. We report on the 28 issues classified as being of ‘high’ or ‘significant’ importance, as well as those deemed to be of ‘medium’ significance. The issues are summarised in the matrix on the right, considered under the themes of Governance, People, Environment and Society, and analysed throughout this report.

Issues of high material importance are also covered in our Annual Report and Accounts.

How we assess material issues

The materiality assessment considers a series of relevant issues determined from international reporting requirements including IPIECA’, GRI’ and SASB®, and comparing our approach with that of peer companies. We then rank these issues (as high, significant, medium, low or insignificant) to indicate their importance to Cairn based on risk, and their importance to stakeholders based on engagement.

We assess scores for ‘importance to stakeholders’ across five different stakeholder groups (investors, governments, employees, community and business partners). ‘Importance to Cairn’ is assessed through quarterly risk reviews. We track each issue deemed material to manage and address associated impacts. The results of this materiality assessment are presented to the Board on an annual basis and reviewed in detail by executive Board members.

Every two years, we engage representatives from each of these five groups of stakeholders, using an independent communications specialist to gain feedback on the issues we have identified as material to the business. As we last did this in 2017, we undertook this material engagement process once again in 2019.

5 Global Reporting Initiative – www.globalreporting.org
6 Sustainability Accounting Standards Board – www.sasb.org

Cairn Energy PLC Corporate Responsibility Report 2019
### Stakeholder engagement as part of materiality

This year, we interviewed 17 internal and external stakeholders. The stakeholders from within our business represented central procurement, finance and human resource functions, as well as our international locations, while external stakeholders spanned suppliers, partners, NGOs, peer companies and industry associations.

Using the GRI guidelines on materiality to inform the process, each interviewee ranked the 58 issues from 0 to 5 for two aspects:
- the significance of the economic, social or environmental impact of Cairn’s business on the issue, which we used to proof our own assessment of risks to the business and ‘importance to Cairn’; and
- the issue’s influence on stakeholders’ assessments and decisions, used to assess and modify our own analysis of the ‘importance to stakeholders’.

In addition, stakeholders were asked to identify any other issues they felt were missing or should be removed or combined (on the right). Issues proposed for consideration by Cairn in future materiality assessments included technology transfer, such as our scholarship for students at the Institute of GeoEnergy Engineering (page 31), safeguarding against exploitation (page 74), technical competency (page 44) and retaining as well as attracting new hires (page 35).

The table on the right outlines the 17 issues where our assessments differed notably and any subsequent changes to the materiality matrix that were made as a result.

<table>
<thead>
<tr>
<th>Movement of material issues</th>
<th>Stakeholders’ assessment</th>
<th>Materiality assessment change</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Governance</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anti-Competitive Behaviour</td>
<td>Higher than Cairn’s</td>
<td>L to M</td>
<td>All stakeholder groups assessed this issue to be more important than expected, elevating it from Low to Medium materiality – see page 19.</td>
</tr>
<tr>
<td>Contractor ABC</td>
<td>Higher than Cairn’s</td>
<td>M to H</td>
<td>Most stakeholder groups assessed this issue to be more important than expected, elevating it from Medium to High materiality. In line with other ABC-related issues – see page 51.</td>
</tr>
<tr>
<td>Management of Material Issues</td>
<td>Higher than Cairn’s</td>
<td>M to H</td>
<td>Most stakeholder groups assessed this issue to be more important than expected, elevating it from Medium to High materiality. This seems appropriate as risk management underpins the business, as covered throughout this report and our Annual Report 2019.</td>
</tr>
<tr>
<td>Operations in Sensitive and Complex Locations</td>
<td>Higher than Cairn’s</td>
<td>M to H</td>
<td>Most stakeholder groups assessed this issue to be slightly more important than expected, elevating it from Medium to High materiality – see page 20.</td>
</tr>
<tr>
<td><strong>People</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor Selection</td>
<td>Lower than Cairn’s</td>
<td>Remains H</td>
<td>Stakeholder groups had differing views on the significance of this issue, with one stakeholder group dominating a lower assessment of importance. The issue remains of High materiality – see page 41.</td>
</tr>
<tr>
<td>Equal Pay, Equal Opportunity</td>
<td>Lower than Cairn’s</td>
<td>Remains M</td>
<td>Some, but not all, stakeholder groups assessed this issue to be of lesser importance to them. The issue remains of Medium materiality – see page 36.</td>
</tr>
<tr>
<td>Infectious Diseases</td>
<td>Lower than Cairn’s</td>
<td>Remains M</td>
<td>Some, but not all, stakeholder groups assessed this issue to be of lesser importance to them (before the recent coronavirus outbreak). The issue remains of Medium materiality – see page 41.</td>
</tr>
<tr>
<td>Major Accident Prevention</td>
<td>Lower than Cairn’s</td>
<td>Remains H</td>
<td>Overall, stakeholders assessed this issue to be of lesser importance to them. The issue remains of High materiality – see page 43.</td>
</tr>
<tr>
<td>Workplace Safety</td>
<td>Lower than Cairn’s</td>
<td>Remains H</td>
<td>Some, but not all, stakeholder groups assessed this issue to be of lesser importance to them. The issue remains of High materiality – see page 45.</td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Use and Alternative Sources</td>
<td>Higher than Cairn’s</td>
<td>Remains M</td>
<td>Stakeholder groups had differing views on the significance of this issue, which remains of Medium materiality – see page 56.</td>
</tr>
<tr>
<td>Material Use</td>
<td>Higher than Cairn’s</td>
<td>L to M</td>
<td>All stakeholder groups assessed this issue to be more important than expected, elevating it from Low to Medium materiality – see page 56.</td>
</tr>
<tr>
<td>Other Emissions</td>
<td>Lower than Cairn’s</td>
<td>Remains M</td>
<td>Most stakeholder groups assessed this issue to be slightly less important than expected. The issue remains of Medium materiality – see page 57.</td>
</tr>
<tr>
<td>Reduce, Recycle and Waste Management</td>
<td>Lower than Cairn’s</td>
<td>Remains M</td>
<td>Most stakeholder groups assessed this issue to be slightly less important than expected. The issue remains of Medium materiality – see page 58.</td>
</tr>
<tr>
<td><strong>Society</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Health</td>
<td>Lower than Cairn’s</td>
<td>Remains M</td>
<td>Overall, stakeholders assessed this issue to be of lesser importance to them. The issue remains of Medium materiality.</td>
</tr>
<tr>
<td>Economic and Physical Displacement</td>
<td>Lower than Cairn’s</td>
<td>Remains M</td>
<td>Some, but not all, stakeholder groups assessed this issue to be of lesser importance to them. The issue remains of Medium materiality.</td>
</tr>
<tr>
<td>Security and Human Rights</td>
<td>Lower than Cairn’s</td>
<td>Remains H</td>
<td>Stakeholder groups had differing views on the significance of this issue, with one stakeholder group dominating a lower assessment of importance. The issue remains of High materiality – see page 20.</td>
</tr>
<tr>
<td>Working Conditions/T&amp;Cs</td>
<td>Lower than Cairn’s</td>
<td>Remains H</td>
<td>Stakeholder groups had differing views on the significance of this issue, with one stakeholder group dominating a lower assessment of importance. The issue remains of High materiality – see page 73.</td>
</tr>
</tbody>
</table>
Strong corporate governance and effective risk management are vital if we are to deliver on our strategy, achieve our objectives and create long-term shareholder value. We rely on a comprehensive framework of policies and management systems, including our Corporate Responsibility Management System (CRMS), to assess and manage risks effectively. These are underpinned by our core values, Business Principles and Cairn Operating Standards, all of which are understood and adhered to across the Group.
ETHICS, ANTI-BRIBERY AND CORRUPTION (ABC), AND TRANSPARENCY

We take a clear stand on ethical matters. Our zero-tolerance position on issues such as fraud, bribery and corruption helps us to access funding, build trust, maintain our licence to operate and deliver value. We also report transparently on executive remuneration and payments to governments.

**STRATEGIC OBJECTIVES**
- Maintain licence to operate
- Deliver a sustainable business
- Production performance

**PRINCIPAL RISKS**
- Lack of adherence to health, safety, environment and security policies
- Fraud, bribery and corruption
- Political and fiscal uncertainties
- Misalignments with JV operators

**MATERIAL ISSUES**

*High materiality:*
- Anti-Bribery and Corruption Practices
- Business Partner Alignment on CR Issues
- Fines and Prosecutions
- ABC – Government Practices
- ABC – Contractors’ and Suppliers’ Practices
- Operations in Sensitive Environments

*Medium materiality:*
- Anti-Competitive Behaviour
- Remuneration
- Tax and Payments to Governments
- Advocacy and Lobbying
- Data Protection

**2019 PERFORMANCE AGAINST CR OBJECTIVES**

Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.
- We revised and reissued our Group Code of Ethics to all personnel globally and published it.
- We launched an e-learning module on the Code of Ethics, which also covers ABC-related issues.
- We renewed our membership of the EITI, a coalition of governments, companies and other organisations promoting payment transparency in the oil, gas and mining sector.
- We improved our integrated audit plan to focus more on anti-bribery and corruption.
- We audited our non-operated joint ventures and improved our mechanisms for assuring our activities.

**2020 CR OBJECTIVES**
- We will review the data and indicators we report to all audiences for improvement opportunities.
- We will improve our accident and incident reporting mechanisms.
- We will conduct Group-wide ABC risk assessment.
- We will develop Dutch and French versions of the Code of Ethics.
- We will implement annual compliance certificates to be signed-off by Senior Managers.
- We will develop ABC KPIs for the presentation of quarterly Risk Management Committee meetings.

Detailed performance data on Ethics, anti-bribery and corruption, and transparency is available in our Data Appendix.
Operating With Integrity

At Cairn, we operate with integrity at all times, seeking to maintain the trust of our stakeholders. We are committed to working responsibly as part of our strategy to deliver value to all stakeholders, with a clear focus on working in a safe and secure as well as environmentally and socially responsible manner.

- The Board promotes high standards of corporate governance and delivers its strategy in line with shareholders’ long-term interests and engages with other stakeholders to deliver benefits.
- The Senior Leadership Team provides oversight and guidance on vision, strategy, culture, corporate governance, corporate responsibility, and health, safety and environment (HSE) matters.

We take our responsibility for operating in an ethical, transparent way seriously. At the heart of this lies a culture based on working responsibly. This means having the right values, principles and policies in place, embedding them in our systems and processes, and making sure our people uphold them.

See the Chairman’s Statement in our Annual Report and Accounts for more information.

Code of Ethics

Our Code of Ethics underpins the way we work and sets out our core values, behaviours and Business Principles. Every employee is required to sign up to the terms of the Code as part of their employment conditions and to abide by it in all their business activities. Their performance is also assessed against the Code. Internal audits conducted by independent parties regularly assess our compliance with different elements of the Code.

In turn, we require contractors and service providers working on our behalf to comply with the Code and we audit them against it to ensure consistent application.

The Code details our Company position and provides guidance on a range of issues that shape our business relationships, including conflicts of interest, bribery and corruption, political contributions, tax principles, insider trading, and competition and anti-trust. Anti-competitive behaviour in particular is an issue of increasing importance to stakeholders, as seen in this year’s materiality assessment (see page 16).

In 2019, we revised the Code to improve alignment with our four CR reporting themes of Governance, People, Environment and Society. New regulations around corporate criminal offences (such as tax evasion) have been built in and there is a greater emphasis on strategic issues such as the global energy transition.

The Code, now also available in Spanish, has been reissued.

Measuring performance

Zero incidents of non-compliance with the Code of Ethics.

Zero employee dismissals for non-compliance with the Code.
Business Partner Alignment on CR Issues

Working ethically requires our business partners, as well as our employees, to align with us on CR issues. This spans adhering to our revised Code of Ethics on page 19, monitoring performance at board meetings, objective KPI setting and the careful selection of contractors.

Examples of close collaboration on CR include:
- working with Brindex on global energy transition;
- ensuring that our drilling activities in the Southeast Gulf of Mexico with JV partner Citla Energy meets the International Finance Corporation’s Performance Standards; and
- liaising with JV partner Woodside in Senegal, as we work towards a final investment decision on the Sangomar development (formerly SNE).

Ethics

We continue to track ethical issues of importance, both to us and society in general, such as the requirements of the UK Modern Slavery Act and the Equality Act. Our integrated audit plan, developed in 2019, assessed the supply chain risks for all partners and projects, with a focus on modern slavery, anti-bribery and corruption, and health, safety, environment and security (HSES).

Some of our assets are located in areas where ethical issues arise. These range from the concerns of local people in occupied territories to the potential for environmental impacts in sensitive habitats.

- Our JV partner completed a 3D seismic programme offshore Western Sahara (a disputed territory in May 2018). We submitted a final interpretation report to the regulator Office National des Hydrocarbures et des Mine (ONHYM) and fully completed our commitments in this region by mid-2019.

ABC assessments for new ventures

All entries into new territories require an anti-bribery and corruption (ABC) risk assessment, intended to highlight exposure to potential risks and ensure due diligence across all aspects of planned opportunities and projects. It is critical to identify high-risk locations where official corruption is a major issue that could impact our operations and our reputation. Much of our new ventures activity is located in such high-risk locations.

Our Investment Proposal (IP) process involves screening for a range of potential risks, including specific ABC risks. If the threat is significant, further assessments are undertaken, using specialists where necessary, and actions for managing the risks are developed or the decision not to proceed is taken.

Staff are trained in our Code of Ethics and our ABC management system and, where a heightened threat of ABC risks is identified in a new venture, the staff involved must complete further training.

Reporting issues of concern

Employees are encouraged to report any incident they believe may compromise the Code of Ethics or when they have any concerns surrounding ethical issues, by speaking directly to their regional director or using a confidential phone line. The whistleblowing charity Public Concern at Work also offers an external channel for staff to use anonymously if they prefer. Where appropriate, independent investigations are conducted.

Employees trained in Cairn’s anti-corruption policies and procedures

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18%</td>
<td>16%</td>
<td>20%</td>
<td>34%</td>
<td>100%</td>
</tr>
</tbody>
</table>

See our website for more information.
Transparency and Reporting
As a listed public company, we report annually in line with UK regulations. We responded to all queries associated with our 2018 Annual Report and Accounts, and to information requests from stakeholders including investment analysts and shareholder representatives.

This CR report is also intended to provide the investment community, interest groups and broader communities with easy access to comprehensive information about our approach and performance. We apply global standards to ensure our reporting is of the highest quality, including reporting against the Global Reporting Initiative (GRI) Sustainability Reporting Standards at a ‘Core’ level.

The Investors section on our website provides relevant, up-to-date information, including details of our Group Tax Strategy. We also communicate about our business activities in a transparent manner through investor roadshows and regular announcements that comply with London Stock Exchange requirements and which are made publicly available on our website.

Data protection
In compliance with EU General Data Protection Regulation (GDPR) legislation, in force since May 2018, we document the processing of personal data, by both Cairn and third parties on our behalf, and publish revised privacy notices for greater transparency. In addition, mandatory training has been delivered and a Data Privacy Coordinator supports the Group in complying with GDPR and internal risk governance.

Remuneration and executive pay
Remuneration in general, and executive pay in particular, remains an issue of keen interest among our shareholders and wider society.

Cairn is incorporated in the UK and listed on the London Stock Exchange. Therefore, we are required to report against the revised UK Corporate Governance Code, which was published in July 2018 and came into force on 1 January 2019. Although several requirements were already satisfied by our existing policies and practices, our Remuneration Committee ensured that Cairn is fully compliant with the requirements of the revised Code.

Full details can be found in the Directors’ Remuneration Report in our Annual Report and Accounts.

External recognition
We continued with our annual submission to the CDP®, a not-for-profit charity that provides a global carbon disclosure system for investors, companies, cities, states and regions. Cairn received a B- rating which is in the ‘management band’, this is higher than the Europe region average of C and higher than the oil and gas extraction and production sector average of C. CDP defines the management band (B/B-) as “taking coordinated action on climate issues.”

See About This Report on page 76 and download our full GRI Content Index for further information.

1 The GRI is an international independent organisation that helps businesses, governments and other organisations understand and communicate the impact of business on critical sustainability issues such as climate change, human rights and corruption.

2 www.cdp.net/en
Payments to Governments
Supporting disclosure and financial transparency

We support financial transparency in our industry, ranging from how revenue receipts are used to the tax contributions made by oil and gas companies, because we believe it will lead to long-term sustainable growth and build greater trust in Cairn.

We report payments to governments in our Annual Report and Accounts in compliance with EU legislation and as part of our voluntary commitment as a member of the Extractive Industries Transparency Initiative (EITI). This year, we renewed our membership of the EITI, which requires companies to publish payments to governments, and governments to publish receipts from companies – both of which are independently verified. Norway, Senegal and the UK have all joined the EITI, and Mexico has been approved for membership. We actively participate in EITI working groups in Senegal and are looking at the requirements for doing so in Mexico. We also supported the adoption of the new 2019 EITI standard, approved at the EITI Global Conference 2019, which requires implementing countries to publish all extractive contracts, licences and payments to and from governments from 2021, and share any information about fines and prosecutions, as and when relevant.

As in previous years, our 2019 disclosures included the payments to governments detailed in our EITI reporting, such as corporate income tax, licence fees and withholding tax. We also report additional payments including VAT, payroll taxes and social security costs.

Aligned to the EITI’s requirements in the UK, the publication of payments to governments on a country-by-country basis is also required under the EU Accounting Directive. These include production entitlements; taxes levied on income, production or profits (excluding VAT, personal income tax or sales tax); royalties; dividends; and signature, discovery and production bonuses.

Meeting our taxation obligations

We operate in several locations with diverse tax obligations and requirements, and seek to comply with local rules and regulations in every territory. Our Group Tax Strategy, published on our website, is to not enter into any artificial tax planning and, in managing our tax affairs, to align any tax planning with genuine commercial activity.

The Group has been in arbitration against the Republic of India under the UK–India Bilateral Investment Treaty since 2014. The Arbitral Tribunal has indicated that it expects to be in a position to issue the award in the summer of 2020.

See our Annual Report and Accounts for more information.

Fines and prosecutions

We are committed to transparent compliance in the UK, EU and other jurisdictions where we work, many of which are increasingly complex and uncertain from a legislative perspective. We also comply with a number of voluntary standards.

Participation in public policy development and lobbying

Cairn does not engage in party politics or make donations to political parties, candidates or lobbyists. Nonetheless, given the significance of legislation, regulation and the awarding of new licences to our business, the governments of the countries where we operate are key stakeholders. Each of our assets is responsible for engaging with host governments, as part of its local Stakeholder Engagement Plan which encompasses licence agreements, regulatory requirements and interfaces with a wide range on non-governmental stakeholders.

Our involvement in public policy development and lobbying is mainly conducted through industry bodies such as the International Association of Oil & Gas Producers (IOGP) or regional industry groups. These regional bodies include: Oil & Gas UK; the Association of British Independent Oil Exploration Companies (BRINDEX); the Irish Offshore Operators’ Association (IOOA); the Norwegian Oil and Gas Association (OLF); and the Association of Mexican Hydrocarbon Businesses (AHMEXI).
ECONOMICS AND FUNDING

The cash flow from our production assets funds our exploration and development activity. This self-funding business model enables us to deliver our strategic objectives. Facing increasing pressure to improve performance within a challenging business environment, we also work closely with our JV partners to allocate capital efficiently.

STRATEGIC OBJECTIVES
- Maintain licence to operate
- Portfolio management
- Production performance
- Deliver a sustainable business

PRINCIPAL RISKS
- Volatile oil and gas prices
- Failure to secure new venture opportunities
- Delay in Senegal production start-up schedule
- Underperformance on Kraken and Catcher assets
- Political and fiscal uncertainties
- Diminished access to debt markets
- Climate change policy and its impacts on energy transition

MATERIAL ISSUES
High materiality:
- Global Energy Transition
- Climate Change Policy and Planning
- Funding
- JV Partner Funding
- Investment
- Management of Risks and Material Issues

Medium materiality:
- Corporate Responsibility Governance

2019 PERFORMANCE AGAINST CR OBJECTIVES
Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.

- We reviewed our CRMS against the AA1000 AccountAbility Principles (2018) and made improvements recommended by our audit findings.
- We undertook an internal audit of our application of the Corporate Major Accident Prevention Policy (CMAPP) and rolled out a training and compliance programme.
- We developed a draft dashboard of significant energy transition indicators to help us monitor trends in metrics and assist our Board in understanding strategic developments.
- We took steps to improve our reporting against the elements of the TCFD and committed to comply with several recommended disclosures.
- We examined our portfolio resilience using different climate scenarios.

2020 CR OBJECTIVES
- We will re-audit our CRMS against the requirements of OSPAR 2003/5.
- We will revise our CRMS in line with IOGP good practice.
- We will endorse the World Bank’s ‘Zero Routine Flaring’ Initiative.

Detailed performance data on Economics and funding is available in our Data Appendix.
Our Impact
Our positive contribution
We are committed to making a positive contribution, wherever we operate, by delivering tangible benefits to our stakeholders. These include:
- governments, which grant permits and our licence to operate;
- communities, which give us our social licence to operate; and
- employees, contractors and suppliers, which provide the necessary expertise and resources to carry out our activities and create value.

We distribute value through payments to:
- governments and authorities, including taxes and duties;
- promote social and community development in our host countries;
- our contractors and suppliers;
- our employees in the form of salaries and other benefits; and
- shareholders and funding institutions.

Increasing standards in a challenging business environment
Our sector has to balance changing and emerging risks, as well as growing pressure to improve operating standards, against a need to focus on cost efficiency. Volatile oil prices continue to be a principal risk, so efficient capital allocation across the portfolio is crucial. Despite the increasing pressure we face to improve cost efficiency, we never compromise our operating standards or undermine our commitment to working safely and responsibly.

Similarly, investment analysts, shareholders and funding institutions request increasingly detailed information about our CR standards, performance and reporting.

By participating in industry bodies such as the IOGP, we can monitor the latest developments in best practice, incorporate them into our CRMS and apply them, both at a corporate level and in our projects.

Improving how we manage corporate responsibility
Increasingly, providers of capital want to ensure that we meet the highest CR standards across all our activities, including IFC and OSPAR requirements as well as international and national regulations.

Our CRMS:
- prescribes the requirements for working responsibly;
- enables us to embed processes and procedures throughout the organisation; and
- helps us to identify, evaluate and address potential health and safety, security, environmental and societal risks, benefits and impacts.

TOTAL VALUE GENERATED AND DISTRIBUTED IN 2019

<table>
<thead>
<tr>
<th>Beneficiary</th>
<th>Governments</th>
<th>Communities</th>
<th>Contractors and suppliers</th>
<th>Employees</th>
<th>Investors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic value distribution</strong></td>
<td>Taxes, fees, etc.</td>
<td>Social investment</td>
<td>Capital spend</td>
<td>Employee salaries and benefits</td>
<td>Interest charges, borrowing costs and bank charges</td>
</tr>
<tr>
<td>Value (Group) US$</td>
<td>$37.8m</td>
<td>$0.48m</td>
<td>$313.0m</td>
<td>$39.1m</td>
<td>$29.3m</td>
</tr>
</tbody>
</table>
Auditing and updating our CRMS
Our CRMS details our requirements to work responsibly and includes our policies, procedures and guidance. In 2019, we conducted an external AA1000 audit, which involved reviewing our CRMS and reporting against the AA1000 AccountAbility Principles (2018) of inclusivity, materiality, responsiveness and impact in May 2019, and including modifications in the CRMS issued in late 2019.

We also assessed the application of the Corporate Major Accident Prevention Policy (CMAPP) across the Group’s operated activities in the UK, Norway and Mexico in November 2019 (see page 44).

Assessing the CR risks of investing in new opportunities
Investing in new opportunities is a significant part of our activities, as a potential operator or a JV partner. To protect our investments, we continue to assess CR risks when evaluating new relationships or locations. Although some opportunities may be financially attractive, we may decide that the ethical, safety or environmental risks cannot be viably managed to acceptable levels, as articulated by our risk appetite statement. For example: we do not operate in UNESCO World Heritage sites.

Through our CRMS, we rigorously evaluate all new opportunities to understand all the risks associated with the location and the investment, and to ensure the integrity and credentials of the partners involved. This process includes evaluating any CR-related concerns using Investment Proposals (IPs), and determining any necessary action. All significant new venture projects require Board approval following an assessment of risks.
MAINTAINING STANDARDS WITH JOINT VENTURE PARTNERS

Our joint venture partner in Mexico, Citla Energy, is owned and funded by ACON Investments, the China Mexico Fund and the International Finance Corporation (IFC). The latter offers investment and advisory services to encourage private-sector development in less-developed countries. As such, Citla is obliged to comply with the IFC’s Performance Standards, as are any partners with joint operating agreements.

At least once a year, an independent consultant audits Citla and, by association, its operating partners. These audits check that Citla is exerting its influence to ensure that its partners, including Cairn, are complying with the IFC Performance Standards.

Cairn’s own operating standards largely align with the IFC but there have been instances where Citla and Cairn have needed to collaborate to ensure their drilling activities in the South East Gulf of Mexico meet the IFC’s requirements.

For example, our own Environmental Impact Assessment (EIA) for exploration drilling was prepared in alignment with Mexican legislation, as well as the specific definitions and criteria stated in IFC’s Standards. This identified habitat for the critically endangered Kemp’s ridley turtle. Together with Citla and the IFC, we agreed a range of measures to mitigate against any potential impacts from our offshore supply vessels, such as maintaining a minimum distance from reported sightings, setting a vessel speed limit and having a dedicated marine observer on board.

Cairn and Citla have also raised awareness among suppliers and contractors around the grievance mechanisms we have in place, and we have developed an HSSE plan, giving Citla a degree of contractual influence over the technical and environmental aspects of our joint activities.

“Our experience of working with Cairn has been extremely positive. We communicate openly, we work as equal partners and despite Citla being a relatively new company, Cairn values our experience, expertise and local insight.”

William Murdoch, HSSE Manager, Citla Energy
Climate Change Policy and Energy Transition

Climate change policy and its impacts on the energy transition was identified as an emerging risk to our business in 2018. We have been tracking developments in this area for many years and, with increasing focus from investors and other stakeholders, we recognised it as a principal risk to the business for the first time in 2019. We are actively monitoring developments at both strategic and operational levels as we continue to examine the implications for our business, as well as for the sector in general.

Transparency

We remain committed to reporting against the UN Sustainable Development Goals – with SDG 13 (Climate Action) being of particular relevance – and voluntary requirements of the Task Force on Climate-Related Financial Disclosure (TCFD). In 2019, we conducted independent reviews of Cairn’s reporting against TCFD requirements and the position of key investors and selected peer companies. We worked closely with the Association of British Independent Oil Exploration Companies (BRINDEX)3, of which we are a member, to develop an agreed position on TCFD, in support of the UK Government’s target of reducing greenhouse gas emissions to net zero by 2050.

We continued with our annual submission to the CDP4, a not-for-profit charity that provides a global carbon disclosure system for investors, companies, cities, states and regions. Cairn received a B-rating which is in the ‘Management band’. This is higher than the Europe regional average of C and higher than the oil and gas extraction and production sector average of C. CDP defines the management band (B/B-) as “taking coordinated action on climate issues”.

Governance5

During the year, senior management and the Board have focused on Energy Transition at Board and Senior Leadership Team (SLT) meetings with a key outcome being the development of CR objectives and KPIs for energy transition and climate action in 20206.

The strategic role of our Senior Leadership Team includes reviewing climate action issues for the business, with executive and senior managers looking at the overall understanding of Cairn’s position, international drivers, risk and opportunities.

Our Management Team’s operational responsibilities involve reviewing corporate and operational risk and opportunity registers, to assimilate information gathered at a project, asset, department and corporate level.

Our annual CRMS review in September 2019 involved reporting back to the Board with an external perspective of Cairn’s position with regard to TCFD reporting. This included an examination of the position of selected peer companies, primary shareholders and investors. During the year, we have taken action to improve our reporting against TCFD recommendations and we will continue to make improvements in this area.

This was followed by a ‘deep-dive’ energy transition and climate action risk workshop aimed at increasing our Board’s oversight and understanding of climate-related risks and opportunities. The workshop looked at strategic risks and contained a presentation from a leading advisory and asset management firm. It also considered potential ways to improve governance mechanisms for the Company as a whole.

Strategy

The Energy Transition is a long-term issue and our strategy is to be transparent, improve governance and analyse our portfolio with a view to developing ways of meaningfully dealing with the issues that arise in the context of the energy transition period ahead.

Energy demand projections and the balance of energy sources are discussed in the World Energy Outlook (WEO) 20197. It indicates annual growth in energy demand of between 1% and 1.3% until 2040, due to the rising population and the expanding global economy. The WEO also states that there is a gap between the promise of energy for all and the reality that almost one billion people do not have access to electricity. This frames the challenges of introducing renewable energy sources and providing an affordable supply.

In its Sustainable Development Scenario, which maps out ways to meet sustainable energy goals in full, the WEO report states that the breadth of the world’s energy needs means there is no simple or single solution. The role for oil and gas is indicated as remaining significant. Oil demand is unlikely to flatten out until the 2030s and gas will form part of a crucial mechanism for delivering energy to consumers and as a source of energy flexibility.

We continue to believe that we have a significant role in this energy mix for the foreseeable future, providing affordable energy to complement renewable sources. We will focus on efficient delivery within the context of the UN SDGs.

Risk management8

In recent years, there has been a tangible rise in interest in energy transition and climate action from selected financial institutions, the ethical investment community and the media. This led us to examine our portfolio resilience in 2018, an exercise we revisited in 2019 using different climate scenarios, including limiting global temperature rise to well below 2°C (see below).

Following our initial portfolio resilience work, our commercial team determined that the impact on Net Present Value of the most stringent climate scenario had a smaller impact than the standard downside oil price sensitivity already considered for investment proposals. This is covered in more detail below under ‘External Scenario Analysis’. The scenarios are also applicable to the early assessment of opportunities to include in our investment proposals.

3 www.brindex.co.uk/Climate-Change
4 www.cdp.net/en
5 Read more on page 29
6 Read more on page 38
7 International Energy Agency, World Energy Outlook 2019
8 Read more on page 39

27
We also set up a workstream to identify the key indicators of global energy transition for our business, to enable routine reporting to the Board. This involved the initial development of a dashboard of global initiatives and trends that may influence the take-up of different energy technologies. This will consider developments in this area that may impact the business over the short, medium or long term. We also consider physical risks including the potential for increased impact on our activities from adverse weather and sea-level rise and we will continue to improve the level of scrutiny in these areas as information becomes available and on a geographic basis.

**External scenario analysis**

In 2018, Cairn retained an independent consultant, Critical Resource, to assess the resilience of economic returns from the Group’s asset base under different climate change policy scenarios in alignment with the recommendations of the TCFD. In 2019, we expanded the scope of work to more challenging scenarios and to fully assess the existing portfolio and our ongoing investment decisions under scenarios where demand for oil is significantly reduced over time in response to policies to reduce carbon emissions and minimise global warming.

Critical Resource is an independent consultant advising on political, stakeholder and sustainability issues. Based in London, they specialise in provision of Group-level strategy and engagement services including climate change to extractive industries. They maintain an advisory network of issue specialists from the industry, investor, government, academic and NGO sectors with a strategic Senior Advisory Panel to provide input to them on emerging sustainable business issues.

Using the International Energy Agency’s climate modelling framework, Critical Resource has created multiple scenarios, including a Sustainable Development Scenario (SDS) which envisages a transition to a lower carbon economy well beyond current stated government policies in order to meet the United Nations Sustainable Development Agenda and limit long-term temperature rises to well below 2°C (as recommended as best practice by the TCFD). The SDS sees global CO₂ emissions at roughly half current levels by 2040, and global oil demand gradually falling from now to below half of current levels by 2050. Under the SDS, Critical Resource has also assessed the expected impact of different transition patterns: a smooth transition over time; a less disciplined transition that results in a steady oversupply of hydrocarbon energy sources; and a market shock scenario with a near-term significant oversupply as a result of accelerated government policy changes.

Critical Resource has translated each of these scenarios into an oil price impact, a geo-political and fiscal risk impact and a cost of capital impact, and we have modelled the effects on Cairn’s existing asset base and future investment decisions. The results have then been compared with economic evaluations using the Group’s base planning assumptions which have a three-year forward curve pricing for Brent followed by US$65/bbl long-term, as well as the group’s downside case which tests all investment decisions for a base internal rate of return of at least 10% at long-term US$50/bbl Brent.

Under all of these SDS model variations, each of Cairn’s existing assets delivers returns in excess of our downside case 10% internal rate of return threshold. We therefore remain confident that the Group’s portfolio is resilient to energy transition policy changes and will remain relevant in a global economy that is expected to transition to lower carbon sources of energy.

Investment decisions in our exploration acreage are also tested against the SDSs to ensure that successful discoveries will be viable under the projected oil demand and pricing scenarios at the time of expected development. Each of our current exploration commitments meets these criteria and all future drilling decisions will be tested against these scenarios to ensure we are targeting resources that can play a part in the global energy mix and will continue to attract capital in a world where demand for hydrocarbons may be materially below today’s levels.

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10 They maintain over 200 experts and draw on intelligence from over 80 countries.

11 The International Energy Agency, Sustainable Development Scenario allows for an accelerated transition to low-carbon economy and a 50% chance of the long-term temperature rise is limited to 1.65°C. If net negative emissions are taken into account, the scenario has a 50% probability of limiting the rise to 1.5°C.
Policy and legislation

We continue to assess legislation and policy drivers across our activities. These are specific to regions or countries in which we operate or plan to enter. We reviewed international and local legislation for existing implications, along with potential mechanisms that may be introduced at a later date, for example, under country-specific National Determined Contributions submitted as part of the Paris Agreement. As part of our routine engagement with partners on non-operated activities, we continued to assess our Catcher and Kraken production assets against the EU Emissions Trading Scheme (EU ETS) Regulations in 2019, maintain compliance, and look at partner strategies and the associated costs.

In the year ahead, we will focus on operator plans associated with addressing EU ETS (Phase IV), which commences in 2021. In 2019, we also qualified under the UK Energy Savings Opportunity Scheme (ESOS) Regulations (Phase II). We completed the obligatory assessment, support pack development and submission based on 2018 data, well in advance of the December deadline.

Metrics

Operational performance

We routinely collect greenhouse gas emissions data from our operated activities. Target setting remains a challenge, given that we do not operate any production assets and our operated emissions arise from highly variable field activities. In 2019, we operated three drilling programmes, compared to one in 2018; consequently, operated emissions rose accordingly.

We plan our operations to be safe and efficient, and aim to minimise our time in the field, reducing emissions and costs. We select rigs, vessels, bases and aviation to meet the requirements of the programme, with safety as a priority. Different environments dictate their type, minimum capability and size.

In 2019, we looked more closely at our non-operated production emissions. This included compliance and flaring during maintenance activities, in line with our aim to avoid flaring and preference for deferred production where possible. To this end, in 2020, we plan to endorse the World Bank Global Gas Flare Reduction partnership, which seeks to phase out all routine flaring by 2030. We aim to use our leverage with operating partners to support this position and factor it into any future developments operated by Cairn.

As part of our examination of partner operator performance, our Management Team reviewed the carbon intensity of our non-operated production assets. These appear to compare favourably with others in the UKCS. However, further work is required to develop transparent methodologies. Consequently, in 2020, we plan to develop ways not only to improve comparisons between our non-operated production assets but also to enable the early assessment of other assets in development. This will help us to produce metrics of value to the Board and SLT to inform investments and strategic decision making.

From a seismic and drilling perspective, our intention for 2020 is to develop mechanisms for assessing the relative carbon emission performance indicators of the key equipment we use (rigs and vessels) and more fully incorporate them into our selection process. This will help us to choose the most efficient equipment to achieve our well-drilling objectives, while maintaining strong performance in accident prevention and safety.

Performance in communities

Cairn has a strong track record of working with communities on CSR initiatives, from our historic operations in India to more recent initiatives in Senegal. As part of our commitment to working with communities, we continue to support opportunities that promote sustainable projects and empowerment, which we link to the UN SDGs. A process is currently underway to identify climate adaptation-related projects and consider how we can support them through social investment programmes in our different countries of operation.

In 2019, we started evaluating potential mangrove rehabilitation programmes in Suriname and Senegal, which will help to improve environmental diversity and improve livelihoods. This may also help communities in adaption to climate-related risks and impacts.

12 UN Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP21) in Paris, December 2015. Countries participated submitted NDC as part of their commitment which indicate policies to be pursued to limit global average temperatures to well below 2°C.
13 Read more on page 55.
14 Read more on page 55.
16 Read more on page 66.
Every year, the Cairn Board incorporates a workshop into one of its Board meetings to consider and address a key risk to the business. This year’s session focused on some of the energy transition-related challenges facing our industry. The objective of the workshop was to give the Board further insight into these challenges and to consider initiatives to strengthen the governance of risks and opportunities associated with the evolution to a low carbon economy.

The session began with an internal overview of the challenges facing the extractives industry. Access to capital, risk to commercialisation of developments and the negative perception of extractive companies in general were all identified as risks to Cairn. The evolving regulatory landscape, with new policies and legislation being introduced globally, was also identified as a potential risk to our licence to operate in certain locations in the future.

The workshop included a presentation from Lazard Asset Management, an investment management company and Cairn shareholder. Lazard’s representatives provided the Board with an external view of how energy transition risk, and Environmental Social and Governance (ESG) risks more generally, are influencing investment agendas. Lazard gave an investment perspective on institutional asset owners facing increased pressure from regulators and beneficiaries to consider ESG factors in their investment processes. This was considered within the context of a number of financial institutions withdrawing investment from fossil fuel projects.

Lazard also provided an insight into initiatives that companies like Cairn could implement to position themselves as a more attractive oil and gas company to invest in. These were then considered against the current initiatives we have identified to strengthen our management of energy transition risk. Initiatives such as TCFD and the UN SDGs were identified as key areas against which Cairn should be demonstrating progress. There was discussion and recognition of the positive work we are undertaking on both of these initiatives with identification of impacts – both positive and negative – against the UN SDGs and a commitment to improved reporting against TCFD requirements.

The key outcome of the workshop was the Board’s decision to elevate energy transition policy from an emerging risk to a principal risk to the business. With this shift in emphasis, senior managers are now charged with developing short-, medium- and long-term actions to manage this risk appropriately, from new policies and governance arrangements to reweighting KPIs linked to managing GHG emissions.
ENERGY SCHOLARSHIPS AT HERIOT-WATT UNIVERSITY

Cairn has pledged £300,000 to a new energy scholarship programme at Heriot-Watt University in Edinburgh. The scholarships are designed to develop talent and promote research in clean energy from a subsurface and geoscience perspective, which are key areas of expertise in our business.

The funds will be available over three years for postgraduates studying for Master's degrees in Applied Geoscience at the Institute of GeoEnergy Engineering. Research projects need to focus on clean energy themes such as carbon storage and geothermal energy.

Heriot-Watt University, a world-renowned leader in subsurface geoscience, helps to evaluate carbon storage sites and geothermal energy applications. Having collaborated on research projects in the past, the university was a natural partner for the scholarship scheme, which will complement our ongoing internship and graduate programmes.

The Cairn Energy Prize will also award £500 each year to the student with the best clean energy-focused geoscience project, from any part of the university.

"The Cairn Energy scholarships underlines the confidence the industry has in Heriot-Watt’s ability to find subsurface solutions that address the transition to low-carbon energy."

Professor John Underhill, Chair of Exploration Geoscience, Heriot-Watt University
Our people are critical to our success and every day, we rely on their commitment, talent and knowledge to deliver our strategy. As well as nurturing the right relationships and fostering a high-performance culture based on opportunity, equality and diversity, we prioritise procedures, values and behaviours that promote health, safety and security.
EMPLOYEES

Through the skills and experience of our people, we are able to deliver our strategy. With a clear focus on business results, our efforts are underpinned by our core values of building respect, nurturing relationships and acting responsibly (the 3Rs) and our High Performing Behaviours. Read more about our culture in Governance on page 17.

STRATEGIC OBJECTIVES
- Maintain licence to operate

PRINCIPAL RISKS
- Lack of adherence to policies
- Health, safety, environment and security

MATERIAL ISSUES
Medium materiality:
- Anti-Discrimination (employees)
- Workplace Culture and Employee Leadership
- Talent Attraction (selection)
- Equal Pay, Equal Opportunity
- Human Capital Development

2019 PERFORMANCE AGAINST CR OBJECTIVES
Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.
- We developed and implemented a fit-for-purpose system that gives visibility across the Cairn Group to all planned learning and development events.
- We undertook a gender pay gap analysis and identified a series of key actions.
- We articulated our approach to diversity and inclusion, addressing the UK Corporate Governance Code of Ethics requirements.
- We added four new bespoke modules to our long-established Management Bootcamp development programme for people managers.
- We launched the Cairn Academy, an online portal to promote awareness, understanding and compliance on important governance, regulatory and security topics.

2020 CR OBJECTIVES
- We will implement a talent management programme.
- We will assign competency learning modules to technical roles.
- We will design and implement a communications strategy to improve employee engagement, performance and feedback.

Detailed performance data on Employees is available in our Data Appendix.
Training and Development

We believe in developing our people and managing them well. To help them fulfil their potential and deliver our objectives, we continue to offer training opportunities across the Group.

Through our ongoing commitment to professional development, managers work with team members to support their career aspirations and help them to deliver greater value to the business. We offer opportunities through e-learning modules, traditional classroom training, workshops, conferences and field trips, and we regularly have people on overseas secondments as part of their development.

Management development programme

Designed to support individual, team and company success, our long-established Management Bootcamp is a development programme that empowers our managers to support and motivate their teams to deliver results. Four new bespoke modules – covering Performance-Enhancing Discussions; Conscious Management; Enhanced Team Performance and Engagement; and Effective Coaching Skills – were added to the programme in 2019. All people managers will have completed them by the end of 2020. To maintain a strong pipeline, places are also open to staff interested in becoming managers in the future.

Other learning and development opportunities

In addition to attending their annual conference, each of our geoscientists went on one of a series of field trips to South Africa, Greece and Morocco, while several members of our Wells, Geoscience and Finance teams undertook secondments to other parts of the Group. These assignments broaden exposure to different projects, practices and perspectives.

Executive Assistants’ Development Day

Our community of highly experienced Executive Assistants (EA) supports our senior teams. Their complex role often requires multi-tasking, working with ambiguity and identifying pragmatic solutions to the logistical or organisational challenges facing our fast-moving business.

To give each EA a greater understanding of their own personal resilience and how they might approach their day-to-day challenges differently, the team went off-site to attend a facilitated development session. The EAs learned about personal resilience, acquired problem-solving strategies and explored ways to build or restore key relationships. Time was also spent on building confidence and successfully dealing with difficult or challenging situations, with each EA examining how to apply their individual strengths when coping with adversity.

Feedback from all participants was very positive:

“It was so good to learn different techniques.”

“I really appreciate being given the time out to learn about this.”

“It surpassed my expectations – really worthwhile.”

“It was very helpful, with hints and tips on how to cope under pressure.”

Total management and non-management training

(Average hours per employee)

<table>
<thead>
<tr>
<th>Year</th>
<th>Management grade employees</th>
<th>Non-management grade employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>53</td>
<td>49</td>
</tr>
<tr>
<td>2018</td>
<td>34</td>
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</tr>
<tr>
<td>2017</td>
<td>36</td>
<td>33</td>
</tr>
<tr>
<td>2016</td>
<td>37</td>
<td>36</td>
</tr>
<tr>
<td>2015</td>
<td>39</td>
<td>42</td>
</tr>
</tbody>
</table>

The Cairn Academy, launched in 2019, enables colleagues to undertake both mandatory compliance and self-help refresher training and improve their understanding of important governance, regulatory and security topics as well as our processes and procedures. We plan to give all staff access to relevant learning and development opportunities through this online platform.

Other training provided in 2019 included:
- training on Cairn’s anti-bribery and corruption policies and procedures;
- a Group-wide Corporate Major Accident Prevention Policy (CMAPP) training module for key employees, raising internal awareness and knowledge of our procedures to prevent major accidents;
- HSE team members attending a human rights training workshop; and
- human rights and modern slavery training, rolled out as two separate e-learning modules.
**People Management**

To deliver on our strategy, we need to attract, retain and develop the best talent, and ensure that our people are deployed in roles and activities where they will add the most value.

Enabling and empowering people to work at their best is the key to maintaining a high-performing organisation, so proactively managing our talent is critical for us. We have people across all levels of our business with the competence and potential to deliver our strategy. We are working with several partners to build a flexible assessment system that identifies any skills gaps so that we can implement focused, accelerated development.

**Talent acquisition and retention**

We work with key sourcing organisations across the UK to help us find the best talent to match our needs and aspirations. We have attracted them to live and work in Edinburgh from across the UK, as well as from Europe and the United States. We also recruit talented local professionals in our overseas offices.

Our drive for inclusion and diversity in the workplace is woven into practices such as recruitment. During 2019, we worked with our recruitment partners to track the gender split across all the applications we received.

Our Nomination Committee regularly evaluates the combination of skills, experience, independence and company knowledge on the Board and makes recommendations as appropriate. In this way, the Committee ensure that appointments and succession plans are based on merit and objective criteria, and promote diversity of gender, social and ethnic backgrounds, cognitive and personal strengths.

Succession planning tools currently used include a mentoring programme (where members of the Board act as mentors) and a ‘Future Leaders’ programme, both of which are aimed at developing high-potential individuals for senior roles within the business.

For more information about how we manage our talent and succession plans, see the Nomination Committee Report in our Annual Report and Accounts.

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**Assessing our effectiveness**

Our processes for identifying talent needs, recruitment, development and retention involves a three-tiered approach:

- focusing our succession planning on the key roles in our business that create and enable the most value;
- starting a young leadership programme to accelerate the development of our pipeline of future leaders; and
- providing robust management through annual objectives and development plans agreed with line managers. Through this process, high performers will be identified and diverted into either (or both) of the above tiers.

**Regulatory and systems development**

Our workplace policies and systems are designed to ensure our people have what they need to deliver our annual work programme. For example, our Enterprise Resource System (ERP) and related processes are now fully embedded across the Group. With offices in Edinburgh, London and Mexico City all using a common platform, we will benefit from common business practices, less paperwork, more accurate record keeping and easier reporting.

**Promoting our industry to young people**

In 2019, we continued to support and sponsor events that promote science, technology, engineering and maths (STEM) subjects. Our STEM ambassadors supported an event at the National Museum of Scotland in Edinburgh, with more than 3,000 students attending to get an understanding of how studying STEM subjects can lead to a range of exciting career opportunities. We supported the ‘Extreme Environments’ exhibit, which tested how well people could tackle tasks and solve puzzles while upside down, as an astronaut might have to.

Three colleagues, who are mentors to PhD students through the Centre for Doctoral Training (CDT), spoke to attendees at the CDT’s annual conference. Our mentors were invited to share their insights and help students prepare themselves for careers in the energy sector.

In addition, we held a summer intern programme for seven university students and provided work experience opportunities for two students.
Diversity and Inclusion

Our future success depends on having a diverse range of talented people with the necessary skills, competencies and passion. For us, diversity and inclusion is about recognising and respecting our different capacities, capabilities and cultures, and finding synergies from our differences.

We seek to foster a workplace that respects personal dignity and rights, is non-discriminatory and provides fair rewards. We recognise diversity in all its dimensions: national origin, age, race and ethnicity, religion/belief, gender, sexual orientation and marital status. We also focus on other inherent traits such as socioeconomic background, education, training, sector experience, organisational tenure and personality types/cognitive diversity.

In line with the Corporate Code of Governance, we recognise the importance of diversity and inclusion to the markets in which we operate, all our stakeholders and the communities we serve. Our People Management Policy guides how equality and diversity are built into all aspects of recruitment and selection, training and development, and remuneration and benefits. We also have diversity policies on disability, equality and diversity; full-time employees; part-time employees; and harassment.

We continue to develop our diversity metrics to promote equality of opportunity, pay and reward on a non-discriminatory basis.

**Gender split**

<table>
<thead>
<tr>
<th>Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>48</td>
<td>19</td>
</tr>
<tr>
<td>Board</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

**Board members by gender**

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>2018</td>
<td>78%</td>
<td>22%</td>
</tr>
<tr>
<td>2017</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>2016</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>2015</td>
<td>89%</td>
<td>11%</td>
</tr>
</tbody>
</table>

**Staff by employment type**

<table>
<thead>
<tr>
<th>Type</th>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>252</td>
<td>26</td>
</tr>
</tbody>
</table>

**Total workforce**

**278**

**Average age**

**44**

(2018: 46)

**Maternity returners**

**100%**

staff returned to work after maternity/paternity/adoption leave
Employee Engagement

Our people are the foundation on which our success is built, and we aim to create positive, collaborative work environments in which they can all fulfil their potential. We want our people to be the best they can be at work and feel respected, involved and valued by colleagues and managers.

We engage with our people through a number of channels, including regular staff meetings, monthly ‘pulse’ surveys and biannual Employee Voice Forum meetings (see below), as well as Annual General Meetings (AGMs), staff focus groups and our intranet. Such engagement has led to greater clarity about our strategy, a new approach to entering new countries, a revised model for internal communications and team workshops about collaboration.

‘Have your say’ pulse surveys

As part of a new employee engagement strategy, we introduced monthly ‘Have your say’ pulse surveys across the Group in late 2018. During the first year, these short, regular snapshots have had consistently high participation rates (over 90% of employees) and attracted more than 3,000 comments from staff.

Our online survey tool allows us to focus on key areas and to compare our results with our industry peers. We have consistently tracked equal to or above the energy sector on overall employee engagement throughout the first 12 months. Each member of our Senior Leadership Team personally sponsors an action from the results and champions its progress across the business. We are starting to see positive results and will report on them next year.

Employee Voice Forum

In May 2019, we launched our Employee Voice Forum, chaired by Non-Executive Director Nicoletta Giadrossi. Its eight members put colleagues’ concerns, ideas and suggestions forward for the Board to consider during their decision-making discussions. The forum also utilises the outputs from our pulse surveys to identify common themes and to stimulate debate and discussion.
SECURITY

We have a duty of care to our people, assets, investments, reputation and data across our operational areas. We need to remain vigilant to emerging threats and offer support, advice and training as necessary.

STRATEGIC OBJECTIVES
- Maintain licence to operate

PRINCIPAL RISKS
- Lack of adherence to health, safety, environment and security policies

MATERIAL ISSUES
High materiality:
- Asset Security
- Personnel Security and Travel

Medium materiality:
- Office Security

2019 PERFORMANCE AGAINST CR OBJECTIVES
Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.

- We rolled out our security arrangements in advance of offshore operations, including remote operational bases in Mexico.
- We completed the roll-out of security apps to travelling staff.
- We started to review our internal Group Security Guidelines documentation and application of the UN Voluntary Principles, and included new risks including those relating to piracy.
- We reviewed our travel risk policy, supported it with training and ran an additional training exercise on kidnapping and ransom situations.

2020 CR OBJECTIVES
- We will issue revised security guidelines.
- We will complete a review of business continuity, including external workspace support.

Detailed performance data on Security is available in our Data Appendix.
Keeping our People Safe

In an ever-changing worldwide security landscape, we have a duty of care to our people and our assets, and place high importance on protecting our investments, reputation and data.

Through our Journey Management System, employees can access plans and traveller guides before they travel and while they are away. In medium- and high-risk locations, such as Mexico and Côte d’Ivoire, we have Security Management Plans in place and, where necessary, ground security teams to provide safe transit to hotels, airports and meetings.

We continued to monitor and respond to emerging threats, acting on intelligence from embassies, civil authorities and contractors. We are a member of the IOGP Security Committee and attended its annual meeting in November 2019 in Dubai.

Location threats in 2019

In response to a member of our team failing to follow our field security procedure in Mexico, we conducted a thorough investigation; this was reported to senior leadership and the Management Team. The investigation prompted us to reassess and strengthen our existing approach to management of personnel visiting the field. We revisited our on-the-ground support in field and city locations, as well as emphasising to all personnel concerned the need to follow procedures. We stressed both company and personal responsibilities from a safety and security perspective.

Since then, our travel risk policy has been reviewed and a session held to remind our people of their responsibility to follow our travel policy, maintain individual safety and protect company capability.

In addition, detailed security training was delivered to those personnel exposed to more complex and high-risk security environments. This included practical ways to reduce personal exposure.

Security intelligence gathering in Mexico was also improved following increasing reports of offshore criminal activity and some deterioration in civil security. This resulted in updated guidance to personnel, and sharing of information between some deterioration in civil security. This resulted in updated

Entry into new countries

As well as monitoring the security situation in operational locations, we also look at threats in potential countries of interest. This forms part of our due diligence process and new country entry requirements as we explore opportunities.

With a large number of staff travelling on any given day, we have established several mechanisms to assess and address the risks they may face, both before and during travel and feedback after travel to improve our intelligence. Such information is made available to all employees via our intranet (see Health and Well-Being on page 40). Our Global Risk Manager system provides us with daily safety alerts, allows us to track travellers and provides them with an SOS capability should they get into distress.

In 2019, our active New Ventures team visited several locations for the first time for meetings and field visits. This required us to assess the risks associated with travel, and to make the necessary security arrangements, which may include dedicated security teams, drivers and interpreters.

Security of assets

We have recently checked our approach to protecting our assets against the anti-piracy policies and procedures adopted by our major service companies such as Maersk, to ensure they align with industry best practice and have appropriate mitigation in place.

We also conducted a gap analysis against the provisions of the Industrial Safety, Operational Safety and Environmental Protection Administration System (SASISOPA) legislation in Mexico. We found no non-compliances in the security of our operations or third-party providers of aviation, accommodation and logistics services.

Security breaches and cyber security

Although we experienced no cyber security breaches from deliberately malicious software during 2019, we regularly review our arrangements to ensure we continue to protect our IT infrastructure from such malware incidents. With the increasing convergence between physical and cyber security management, we continue to communicate threats, strategies and improvement plans to maintain a holistic and collaborative approach throughout the Group.

We have a dedicated cyber security manager and a service that constantly manages current threats and manages risks.

To keep up with potential threats in this fast-moving area and take the necessary measures to prevent security breaches and data loss, we actively participate in several industry bodies, including the IOGP Security Committee, and take guidance from the Information Commissioner’s Office and the GCHQ-run National Cyber Security Centre.

Having gained Cyber Essentials accreditation (part of the UK Government’s 10 Steps to Cyber Security), we completed Cyber Essentials Plus in November 2019.
HEALTH AND WELL-BEING

Providing a safe working environment and maintaining people’s health and well-being are core corporate responsibilities, and of paramount importance to Cairn. This forms the basis of everything we do.

**STRATEGIC OBJECTIVES**
- Maintain licence to operate

**PRINCIPAL RISKS**
- Lack of adherence to health, safety, environment and security policies

**MATERIAL ISSUES**
Medium materiality:
- Workplace Health and Well-Being
- Infectious Diseases

**2019 PERFORMANCE AGAINST CR OBJECTIVES**
Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.
- We rolled out our well-being programme globally.
- We implemented health programmes in Mexico.
- We continued to support our infectious disease prevention programme for travellers.

**2020 CR OBJECTIVES**
- We will develop guidance and train regular travellers on working in extreme environments.
- We will continue our internal health and well-being programme.

Detailed performance data on Health and Well-Being is available in our Data Appendix.
Addressing International Health Challenges

Our approach to addressing international health challenges includes maintaining strong prevention measures. The main threat remains the risk of exposure to infectious diseases, either where we have assets or during travel to prospective business destinations. In operational locations where endemic diseases are prevalent, such as malaria in Senegal and Zika in Latin America, we have tried-and-tested mechanisms in place to minimise the risk.

As part of our Journey Management System, we perform Travel Risk Assessments for international travellers to identify and reduce health risks before travel. This includes inoculation and specific country briefings, as well as general advice on basic travel health, natural disasters, security alerts and female traveller security. Our Traveller Health and Security intranet site provides all personnel with safety and security advice and travel management procedures for our countries of operation. In 2019, our ongoing efforts to support our travellers included the development of a new travel policy.

COVID-19

COVID-19 was first reported in China at the end of December 2019. As the virus has developed, Cairn has tracked the advice provided by the World Health Organisation (WHO) and local governments. Throughout the crisis, Cairn has also sought to understand the impact of this advice on its daily business, and the implications for our people – those who work for us directly and indirectly.

In this context, Cairn convened a group of relevant managers at the end of January for a more detailed briefing, followed by weekly updates. The response to the virus has been managed by our Crisis and Emergency Response Team (CERT), which meets regularly online to coordinate Cairn’s actions, in line with our Business Continuity Plan. Our pandemic guidance includes alert, action and recovery phases, which we will adhere to as the crisis progresses.

Our people, their families and their communities are our priority. We prepared flexible working (including remote working and restricting business travel) in advance to support our people while continuing to meet business needs. We will continue to assess the risks to the business and the people who work for and with Cairn during the emergency, which will help us resume normal working operations as soon as circumstances allow.

See Security on page 39 for further information about how we keep our people safe.

Limiting exposure to hazardous materials

Although we have limited direct exposure to potentially hazardous materials, we still have robust requirements for chemical and waste management in our Corporate Responsibility Management System (CRMS) to protect human health and the environment. These include selecting the least damaging materials wherever possible; providing suitable storage facilities and personal protective equipment (PPE) as necessary; conducting work risk assessments; and having relevant handling procedures in place.

For example, in the UK, we selected an oil-based drilling fluid to ensure major accident safety considerations were met while still achieving our well objectives. Although more damaging if released into the environment than water-based equivalents, we maintained compliance with the UK legislation on waste, including shore-based disposal. We also conducted specific on-board training to ensure personnel understood the risks to both health and the environment, and promoted secure handling and disposal practices in accordance with our CRMS requirements and Waste Management Plan.

We also take rigorous steps to ensure our contractors have compatible processes and systems to protect their people. These range from having appropriate exposure detection and protection arrangements in place to running emergency drills. We also require our contractors and other facilities to provide suitable water supplies and wastewater disposal facilities to prevent infection and illness from water-borne or other pathogens.

Ensuring staff well-being

Staff wellness continues to play an important role across our business. In 2018, we launched a new health and well-being programme in the UK and Norway to help our staff understand how their behaviour and lifestyle can affect their health and well-being, explore their values and attitudes and, where appropriate, change their behaviour. Now in its second year, the programme of activities has been rolled out globally, and we have held regular events focused on three areas: Getting Healthy, Maintaining Health and Regaining Health.

We also extended the programme to include financial health and gender-specific health sessions delivered by a local GP. We continue to offer the popular option of an annual health assessments for all members of staff.

Recognising the impact of social interaction and strong working relationships on mental health, we have also continued to provide staff with opportunities to socialise at a team, functional and Company-wide level.

We maintain health benefits for all our employees, including general, travel and dental benefits.

See Security on page 39 for further information about how we keep our people safe.
ACCIDENT PREVENTION AND SAFETY

We constantly work to minimise risks to people and the environment, having put extensive safety measures and procedures, to avoid accidents, in place for every phase of our activities.

STRATEGIC OBJECTIVES
- Maintain licence to operate

PRINCIPAL RISKS
- Lack of adherence to health, safety, environment and security policies

MATERIAL ISSUES
High materiality:
- Major Accident Prevention
- Workplace Safety

2019 PERFORMANCE AGAINST CR OBJECTIVES
Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.
- We revised our CMAPP as part of our routine CRMS review, continued the roll-out of CMAPP training and emphasised the importance of our CMAPP assurance and competence requirements in all projects.
- We revised our Well Engineering and Operating Standards, including the Well Control Manual and the independent Well Examination Standard, in line with the latest best practice.
- We developed and implemented local emergency response teams and capability for our operations in the UK, Norway and Mexico.
- We implemented our emergency readiness tool to be used before commencing any operations in the UK, Norway and Mexico.
- We implemented the revised IOGP’s Life Saving Rules into our revised CRMS.

2020 CR OBJECTIVES
- We will implement our CMAPP leadership visit KPI.
- We will implement CMAPP audit findings.
- We will implement a quality assurance and control improvement programme linked to the Project Delivery Process (PDP).

1 International Association of Oil & Gas Producers – www.iogp.org

Detailed performance data on Accident Prevention and Safety is available in our Data Appendix.
Preventing Major Accidents

Well engineering

Our reputation for responsible exploration is underpinned by a rigorous approach to incident prevention. All our wells adhere to the highest industry standards, which require us to use appropriate materials, up-to-date installation methods and drilling fluids; these enhance drilling performance while meeting safety demands and minimising our impact on the environment.

To prevent major accidents arising from well engineering and construction, we rely on the effective application of design criteria and safety barriers. These are built into our programmes and management systems, which we verify through a series of internal and external assurance processes, including independent inspections of proposed well designs. We also apply management-of-change procedures for modifications, which may impact the design or operation of a well to ensure we maintain its integrity.

Our wells are designed to comply fully with the requirements of both our Well Engineering and Construction Management System (WECMS) and CRMS. They are also designed (and assured) beyond the requirements for the expected geological conditions. A number of our WECMS Standards were revised in 2019 to the latest good practice, including:

- the Group Well Project Delivery Process;
- the Group Well Engineering Planning, Design and Execution Practices;
- the Group Well Examination Standard;
- the Group Well Control Manual; and
- the Group Management of Change Standard.

Our well design, planning and inspection procedures conform to international good practice and existing legislation, and are applied wherever we operate.

Our principal mechanisms for well control are as follows:

- **Primary well control**: Our dual-barrier approach involves control measures designed to maintain drilling and production fluids, and to test blow-out preventer (BOP) systems rigorously and regularly. If a test is unsuccessful, we make the well safe and stop drilling until the problem is found and any required remedial work completed.

- **Secondary well control**: This includes measures to prevent wellbore fluids escaping from the well using a BOP. The BOP is made up of a series of hydraulically operated rams that can be operated in an emergency from the rig or a backup remotely operated vehicle. The BOP is rated for well pressures significantly higher than those expected. It is subjected to a series of regular maintenance and test requirements.

- **Tertiary well control**: This third line of defence covers well control options such as drilling a relief well and using a capping device.

### WELL CONTROLS

#### Well engineering controls

**Primary well control**

Wellbore full of fluid and managed drill fluid weight keeps the well stable

Activate secondary well control if the primary well control fails

**Secondary well control**

Well control incident procedure/methods and failsafe mechanical sealing device (blow-out preventer) can manage an incident and shut down a well

Activate tertiary control if the primary and secondary well controls fail

**Tertiary well control**

Toolbox of methods to address a well releasing hydrocarbons: relief well, sub-sea ‘cap and secure’ and oil spill contingency arrangements

#### Well assurance controls

**Planning and procedures**

External

- Major hazard assessment
- External well examiner
- Well experts and peer review
- Regulator and partner review
- DWOP\(^1\)/TWOP\(^2\)/LWOP\(^3\)
- Independent reviews of critical equipment and systems

Internal

- CPDP\(^4\) gate
- Project risk register
- Corporate risk review
- WEC\(^5\) competency assessment
- Rig inspection and acceptance
- Daily operations review meetings

**Well operations**

1. Drill Well on Paper
2. Test Well on Paper
3. Logging Well on Paper
4. Cairn Project Delivery Process
5. Well Engineering and Construction

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Cairn Energy PLC Corporate Responsibility Report 2019
Preventing major incidents in operated assets

Our Corporate Major Accident Prevention Policy (CMAPP) strengthens our commitment to mitigate the risks and emergency response capability. Required under the UK Offshore Installations (Offshore Safety Directive) (Safety Case) Regulations 2015, it was introduced in October 2017 and revised in October 2019.

CMAPP places a greater emphasis on:
- how our contractors manage and maintain Safety and Environmental Critical Elements (SECEs) of their equipment, and preventing a major incident through robust control and maintenance mechanisms;
- demonstrating and verifying the high levels of competency required among our staff and contractors, and conducting appropriate training and succession planning to maintain capability; and
- transparent, independent assurance processes covering document control, data management and storage.

All contractors are required to meet the requirements of our Code of Ethics and CR policies including CMAPP. These are included in the contract.

During the year, Cairn’s Management Team – whose responsibility includes how Cairn complies with CMAPP across all operations – went to Spadeadam in Cumbria for a one-day Major Accident Awareness Training session. The objective was to re-emphasise the potential consequences following loss of containment incidents in the oil and gas industry. Part of the training focused around drilling and production operations and the importance of instilling a sense of vulnerability to what can happen if these are managed inappropriately.

A Group-wide, computer-based CMAPP training module for employees was released in early 2019, raising internal awareness and knowledge. Also, an independent internal audit was conducted before the end of 2019 to assess how our standard operating procedures and Project Delivery Process align with CMAPP. The report identified four findings and highlighted improvements to be implemented in 2020. These include improvements in our competence assessment mechanisms; enhancements to CMAPP training; optimisation and improved application of lessons learnt; and improvement to some enabling processes with indirect impacts on the management of major accident hazards and risks.

PROJECT DELIVERY PROCESS

Our Project Delivery Process (PDP) ensures we understand and control risks at key stages in all our projects. During the oil and gas life cycle, the PDP helps us focus on important CR issues and apply local and international standards for all operated projects under our control.

Specific projects (seismic, drilling, etc.) must meet defined criteria at designated stages. Each stage has defined actions and deliverables, which must be signed off by an internal, independent ‘gatekeeper’. This allows project integrity and performance to be reviewed throughout the process, and enables us to identify and implement corrective actions where necessary.

As part of our CMAPP application, we use assurance processes at each stage of the PDP. These cover the selection and assessment of contractor and service providers, their capabilities, systems and equipment, and Safety and Environmentally Critical Elements (SECEs). This encompasses the performance requirements of SECEs, preventative maintenance, competence of personnel and interfaces between our contractors and field assets. We deploy external experts to assure us that the appropriate mechanisms are in place and that we act on closing any high-priority findings before operations commence.
As part of our ongoing improvement cycle, the CMAPP was also reviewed by an independent former UK regulatory inspector, at the end of 2019, to ensure the continuing robustness of the policy. As a result, an enhanced commitment to reviewing and updating our understanding of major accident hazard exposure, including changes of key personnel and operational activities, has been added.

We experienced no major incidents in our operated and non-operated activities in 2019.

Unexploded ordnance (UXO)

Unexploded devices left over from past military conflicts on shore, in coastal areas or at sea is a risk facing our operations that we assess in advance of operations. This was a possibility in the UK, in the vicinity of the Chimera well that we drilled in 2019. For the deployment of anchors associated with the drilling, we commissioned a specialist consultancy, 6 Alpha, to conduct a threat and risk assessment, review geophysical survey data and perform a subsea assessment of potential seabed features. Their sign-off certification verified that our procedures reduce the risks associated with UXO to as low as reasonably practicable (ALARP) levels at the site.

Managing occupational safety

Providing a safe working environment is a core corporate responsibility, and minimising risks to people and the environment is of paramount importance to us. Managing safety risks involves applying risk assessment techniques, and where risks cannot be avoided, we apply mitigation such as engineering controls, safe working procedures and personnel preventative equipment (PPE). Leadership activities include management visits and behavioural-based management initiatives and audits. The routine procedures we implemented include a permit-to-work system, toolbox talks and safety drills. We actively engage with contractors to ensure they have effective systems in place and apply strict assurance processes to assess them.

Our Management Team is responsible for embedding our CR approach and procedures across the Group. Regional directors are responsible for ensuring that operations adhere to our health, safety and environment (HSE) standards and procedures; that all risks are managed to ALARP levels; and that plans are in place to manage these risks. Overall accountability for working safely and responsibly remains with the Board, but applying these procedures in our operations falls to the Management Team.

Our robust incident management process ensures incidents are recorded and investigated, and lessons learnt. Performance updates are reported to the Board.

Managing day-to-day operational safety hazards involves several mechanisms to promote safe working procedures but largely falls under the systems of our contractors wherever they operate key activities such as drill rigs. Clear oversight is provided by our own personnel.

Our review and revision of our CRMS in 2019 improved the visibility of our assurance and competence assessment, as part of the PDP process and in support of the CMAPP and CRMS requirements. This will continue in 2020.

Our performance in 2019

Overall, our occupational safety performance in 2019 compared well with IOGP benchmarks. We experienced a single Restricted Workday Case (RWDC) in Mexico when a rig crew member injured a finger during equipment handling; the root cause was failure to follow procedure.

We had two first aid cases: one during UK operations (bruised hands) and one in Mexico (twisted ankle). No spills to sea occurred in 2019.

<table>
<thead>
<tr>
<th>Total Recordable Injury Rate (TRIR)</th>
<th>(Total recordable injuries per million hours worked)</th>
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<tbody>
<tr>
<td>2019</td>
<td>0.98</td>
</tr>
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<tr>
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<tr>
<td>2016</td>
<td>1.03</td>
</tr>
<tr>
<td>2015</td>
<td>1.03</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Lost Time Injury Frequency (LTIF)</th>
<th>(Lost time injuries per million hours worked)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019*</td>
<td>0.00</td>
</tr>
<tr>
<td>2018</td>
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<tr>
<td>2017</td>
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<tr>
<td>2016</td>
<td>1.03</td>
</tr>
<tr>
<td>2015</td>
<td>0.29</td>
</tr>
</tbody>
</table>

Notes:
1. IOGP benchmark figures are not yet available for 2019.
2. The point at which the cost of reducing the risk further is considered to be disproportionate compared with the potential benefit.

Cairn TRIR and LTIF statistics can be higher than the IOGP benchmark after only one incident, or a small number of incidents. This is because our exploration activities are often short in duration, meaning there are relatively few hours worked compared with ongoing production and other long-term operations.
Supporting safety and environmental management on non-operated assets

In 2019, we continued to support our partners in the prevention of major accidents, and safety and environmental issues, on our non-operated assets in the North Sea. With increased production from both Kraken (operated by EnQuest) and Catcher (operated by Premier), we continue to support improvements to both safety and environmental performance.

The relative influence we have over joint venture partners depends on the circumstances associated with the activity, our share of the asset and the regulatory framework under which we operate. If we are the operator, our joint venture partner may seek to influence us through Operating Committee Meetings (OCMs) and Technical Committee Meetings (TCMs). The opposite is the case when our partner is the operator.

New venture non-operated onshore blocks in Côte d’Ivoire were assessed in terms of the planned activities and proposals of our partners. Given the location of these blocks along the country’s coastline, the assessments were focused on safety, environmental impact and community issues. We are also tracking developments in our non-operated activities in Mauritania.

In 2019, we have continued to review our approach to overseeing non-operated assets. In October, an internal audit was carried out to assess whether appropriate controls were in place for the management of the Sangomar development (formerly SNE) non-operated asset in Senegal. The audit concluded that processes and controls are in place for non-operated joint venture management relative to addressing key risks and focusing our resources.

In 2020, we will seek to further influence our operating joint-venture partners in line with our policies and procedures.

CASE STUDY

PREPARING FOR SAFE DRILLING OFFSHORE MEXICO

Following extensive preparatory evaluation work, Cairn successfully bid for two blocks in the 2017 Mexican bid round 2.1: Blocks 7 & 9.

For Cairn, this marked the first entry into both Mexico and Latin America. With drilling commencing within 26 months of award, Cairn moved quickly to drill two non-operated wells and participate in two non-operated wells focused at all times on executing safe and responsible operations.

As a new country entry, Mexico presented a number of legislative, administrative and regulatory differences to previous operations. Complex employment legislation, environmental regulations, and an intricate legal and regulatory framework necessitated a well-integrated approach across numerous departments. Establishing a multi-disciplinary team spanning the whole business was therefore critical to plan and deliver the project in line with Cairn’s operating standards.

Establishing a presence in Mexico was our first priority. This began with the set-up of our Mexico City office, staffed with a high percentage (~75%) of Mexican nationals, and a logistics base near the offshore blocks in the Tabasco state on the eastern coast, which combined to form the backbone of our activities in Mexico.

Our experienced operations team, many of whom have worked on previous Cairn operations in Greenland, Morocco and Senegal, were able to identify suitable local partners and locations to operate with and from.

The oil and gas industry is well established in Mexico, and the country’s existing infrastructure to support oil and gas exploration is impressive. Major service companies and manufacturers are long established and well positioned. As such, Cairn worked to identify key local partners and, where expertise was lacking, to work with more experienced international companies.

Tendering for each service, from the drilling unit to the provider of Personal Protective Equipment, was done through our formal competitive tendering process; following extensive multi-disciplined evaluations covering HSE, local content, technical capability and commercial value, partners were selected. Once we had selected our partners and operational hubs it was a case of establishing expectations.

Cairn’s HSE and operational standards are non-negotiable. They are communicated within contracts, start-up meetings, operational audits and management visits; the company’s success relies on our team’s commitment to operational excellence.

As preparation for drilling activities progressed, an operational execution team deployed to the Mexico office to support the team we had established as well as our key contractors. This approach ensured that the technical expertise of oil and gas operations were blended with the knowledge of local Mexican providers, helping to deliver the safe drilling of our operated wells.

Each project is different, and each location that Cairn operates in is unique. However, the most important element of our operations has been and always will be the focus on preparedness and execution of safe and responsible operations.
Crisis Management and Emergency Response

Improving our emergency response capability

For a rapid, effective response in the event of a major accident or incident, we maintain a three-tiered crisis and emergency response capability.

Local Incident Response Teams (IRTs) are in place on individual assets such as rigs, vessels, bases and aviation for field responses.

These are supported by Incident Management Teams (IMTs) for each operated project to deal with tactical emergency responses.

Our Crisis and Emergency Response Team (CERT) in Edinburgh provides both strategic and tactical support as required, depending on local capability. The CERT Leader can muster on-call specialists to:

- advise HSE, Legal, Operations/Assets, Logistics, Human Resources, Finance and Corporate Affairs personnel;
- assist in crisis and emergency management; and
- help prevent escalation in accordance with the priority issues of People, Environment, Assets and Reputation – the so-called PEAR principle.

Ongoing training

During 2019, we held two emergency risk exercises for Block 9 in Mexico and two emergency response readiness exercises for our Chimera well in the UK. Two further exercises in Mexico were conducted by Maersk in November. These simulations tested our responses to scenarios such as a switch room fire, a ditching helicopter and a crane accident.

We used an independent crisis and emergency management company to develop our scenario-based exercises. Depending on the scenario and scope, these test our readiness to respond to field incidents and assess if the different tiers are able to respond appropriately and effectively should such incidents escalate. The exercises were designed to build knowledge.
of emergency scenarios; test the understanding of our primary control mechanisms; and enhance organisational resilience by testing communication routes, facilities and equipment, contingency plans and assumptions.

Two further table-top exercises were undertaken with Maersk to assess business continuity, testing our ability to respond to major security incidents affecting personnel.

Each role within CERT has an online self-training module; further refresher sessions are held weekly, covering a range of scenarios, including earthquakes, pandemics and business continuity.

Incident Command System (ICS) training was conducted in Edinburgh and Mexico, and Cairn became the first IOGP operator in the Gulf of Mexico to align its emergency response plans with ICS.

Handling high-impact, low-probability events

We always prepare our operations for the low probability of a high-impact event and have robust plans in place to manage such incidents. Oil spill risk is of high concern to stakeholders (see Prioritising Issues on page 15), and we remain committed to applying the IPIECA–IOGP Industry Practice. We continue to improve our preparedness in relation to understanding local country spill management capabilities; developing oil spill plans; equipment logistical arrangements and deployment planning; and identifying the capabilities of contractors.

We remain an associate member of Oil Spill Response Limited (OSRL), a specialist organisation working to assist operators in responding effectively to oil spills. We also invest heavily in other supplementary OSRL memberships to gain access to specialist response equipment and techniques for containment, dispersal and surveillance.

These include the Subsea Well Intervention System (SWIS), which consists of:
- the Subsea Incident Response Toolkit (SIRT), to assist with well debris clearance, surveying and support equipment;
- the Global Dispersant Stockpile, which consists of substantial amounts of commonly used dispersants that can be drawn on should local supplies run out; and
- the Capping Stack System (CSS), which gives us access to well-capping stacks at four strategic locations worldwide. These can be deployed to prevent oil from escaping into the sea, avoiding the need for sub-sea dispersants.

In addition, for our Chimera operations, and as required under legislation, we maintained membership of OSRL’s UKCS oil spill aerial surveillance service and the Offshore Pollution Liability Association (OPOL) compensation scheme.

In 2019, we worked with OSRL to develop our Temporary Offshore Oil Pollution Emergency Plan (TOOPEP) for the Chimera well in the UK and its equivalent for our operated wells in Mexico. We worked with Akavaplan Nova to develop our TOOPEP for our operated wells in Norway. These plans were accepted or approved by the regulators in each jurisdiction. Each plan contained control mechanisms and supporting information, ranging from supporting contract details to modelling information.

We continue to plan for drilling relief wells as an option to address a major event, depending on a range of factors relating to logistics and effectiveness. In addition, we looked at improving our capping system response by developing local logistics plans and improving Response Time Models using IOGP good practice released late in 2019.

Planning for the future

Using our emergency preparedness tool developed in 2018, all operations in 2019 were assessed for key elements of readiness before approval to proceed as a clear assurance step under the PDP. This included local regulatory approval, competency assessment and ensuring sufficient training has been conducted. We will continue to build our in-house capacity in terms of personnel and equipment.

3 The IPIECA–IOGP Oil Spill Response JIP (OSR–JIP) was set up to implement learning opportunities in respect of oil spill preparedness and response following the April 2010 well control incident in the Gulf of Mexico. As part of this effort, the OSR–JIP has produced more than 20 good practice guides. IPIECA is the global oil and gas industry association for environmental and social issues.
High-quality contractors represent a significant proportion of our workforce, and therefore play a critical role in our business activities. We focus on building strong working relationships with contractors who share and deliver on the principles and standards we support.

**STRATEGIC OBJECTIVES**
- Maintain licence to operate

**PRINCIPAL RISKS**
- Lack of adherence to health, safety, environment and security policies

**MATERIAL ISSUES**

High materiality:
- Contractor Selection, Capacity and Leadership

**2019 PERFORMANCE AGAINST CR OBJECTIVES**
Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.
- We implemented a revised integrated audit plan for contractors.
- We ensured that contractors selected for well operations in the UK, Norway and Mexico met CMAPP requirements.

**2020 CR OBJECTIVES**
- We will look at improvements to our supply chain procedures, including tendering.
- We will improve the KPIs we use for assessing contractors.

Detailed performance data on Contractors is available in our Data Appendix.
Using Contractors

Contractors comprise a significant proportion of our workforce, so our relationships with them are fundamental to our success. We continue to rely on high-quality and competitively priced suppliers to provide much of the expertise, equipment and services needed to maintain our operational capability.

In 2019, contractors accounted for approximately 80% of our organisational workforce and undertook 61% of the hours worked. Our main use of contractors during the years focused on supporting our operated drilling projects in the UK, Norway and Mexico.

Our entry into Mexico saw contracts placed for around 50 services related to our first operated exploration wells, comprising drilling rigs, long-lead equipment procurement, well services, marine vessels, helicopters and logistics services. Similarly, for the Norway programme, our first operated wells required a significant number of services to be procured and contracted. The Chimera project in the UK awarded a number of contracts, either following a competitive tender process or rolled forward from the Ekland project in 2018.

We have continued to play a role in our non-operated licences. In the UK, we continue to support the activities of the operator on the Catcher and Kraken projects and worked with our JV partners in the contractor selection process for the Sangomar development (formerly SNE) in Senegal. There was also a new addition to the license portfolio in Côte d’Ivoire, where Cairn participated and reviewed the contracting process used by Tullow for some preliminary survey work.

EMployees and Contractors

Cairn workforce
This includes Cairn employees and other time-writing personnel who have been contracted for more than three months to an organisational position.

- Men: 160
- Women: 118

Contractors
1085

People who work for Cairn, whether employees or contractors, are united by our shared ambitions and priorities.
While many of our contractors are drawn from international companies (rigs, for example), we continue to promote and use local services where possible. In Mexico and Norway, for example, the vast majority of the partner companies that Cairn engages with are local organisations. Principal service contractors are often large, multinational organisations and are often contracted through a Master Service Agreement, which specifies the performance objectives and responsibilities of both parties. These agreements typically run for around five years before being retendered. We also encourage our principal contractors to engage local personnel, if appropriate skills and services exist. In Mexico, each of our key contracts contains a percentage target for the achievement of local content, which is assessed during the tender process and monitored and reported against during the execution of the contract.

**Contractor selection tools**

For many projects in the UK and Norway, we have used the Achilles’ platforms (FPAL in the UK and JQS in Norway) to identify and assess reliable contractors across Europe. As a member and subscriber, we use the Achilles platforms as a pre-selection tool when looking for potential contractors across the European oil and gas market.

We are participating in developing a similar system for use in relation to operations in Senegal. The African Partner Pool, managed by NGO partner Invest in Africa (IIA), launched in April 2019 and already has around 400 suppliers registered to date. The system – co-founded by Capricorn Senegal Limited, our operating subsidiary in Senegal, alongside joint venture partner Woodside, BP and Kosmos Energy – builds skills and capacity in the local supply chain through training and guidance for SMEs. Suppliers can register their interest in finance opportunities, obtain access to training and access tender opportunities for oil and gas contracts through this new portal.

We also held an introduction to Oil and Gas seminar in Senegal in August 2019 to help contractors and suppliers understand and meet the high safety and quality standards required in the oil and gas industry. The audience included representative from the IOCs, government officials, Tier 1 subcontractors and local small and medium-sized enterprises (SMEs). Further sessions are planned, in line with our commitment to local economic growth (see Society on page 65).

**The tender process**

For our operated activities, when we initiate a tender, we engage with contractors we believe have the appropriate HSE and CR credentials. However, this must be demonstrated as part of the tender process. As well as preparing invitation to tender documents, we include our Code of Ethics, to which they are expected to conform. We also issue the prospective contractor with an HSE CR questionnaire, based on IOGP guidance for working together in a contract environment. This is tailored to the project and the services required, and provided along with our terms and conditions, a scope of work and all relevant policies.

If a contractor scores zero in any section of the questionnaire, and continues to do so after follow-up requests, they are eliminated from the tender evaluation process. A benchmark score is used for passing this initial selection hurdle, ensuring that all selected contractors can demonstrate the minimum acceptable level of competence in all aspects of HSE management. Those not meeting these requirements are also eliminated, and their submissions are therefore not considered during the commercial evaluation.

The scores, along with any supporting documentation, inform the scope of any follow-up activities required, including acceptance audits of vendors deemed to be project critical. This information may also highlight areas to address when setting up bridging arrangements.

In 2019, we reviewed our contractor selection procedures, and will look to make improvements, in 2020, to contractor key performance indicators (KPIs) in the HSE CR questionnaire.

### Selecting suitable contractors

We need our contractors to share our beliefs and meet our standards to maintain our licence to operate, so effective selection, strong working relationships and good performance are all essential.

All contractors are selected on the basis of adherence to our principles and standards, experience, service capability, competence and competitiveness. Our approach to evaluating contractor tenders also includes an anti-bribery and modern slavery assessment.

<table>
<thead>
<tr>
<th>Year</th>
<th>National</th>
<th>Non-national</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>67%</td>
<td>33%</td>
</tr>
<tr>
<td>2018</td>
<td>80%</td>
<td>20%</td>
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<td>2017</td>
<td>19%</td>
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<tr>
<td>2016</td>
<td>23%</td>
<td>77%</td>
</tr>
<tr>
<td>2015</td>
<td>15%</td>
<td>85%</td>
</tr>
</tbody>
</table>

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CR issues for our contractors

Ethics, anti-bribery and corruption (ABC)
We assess contractors to ensure they apply compatible standards and have clear reporting mechanisms. We have a zero-tolerance approach to bribery, fraud and corruption (see page 20) and conduct risk-based due diligence when selecting contractors.

Human rights and forced labour
Under the provision of the UK Modern Slavery Act, we scrutinise our supply chain to avoid modern slavery. We have added appropriate clauses on modern slavery into all of our vendor contracts to ensure contractors understand their legal obligations and our requirements. Along with integrated auditing, we have built this into our global Master Service Agreements with direct (Tier 1) service companies (see page 51).

Data protection
In compliance with EU General Data Protection Regulation (GDPR) legislation, in force since May 2018, we document the processing of personal data, by both Cairn and third parties on our behalf, and publish revised privacy notices for greater transparency. In addition, mandatory training has been delivered and a Data Privacy Coordinator supports the Group in complying with GDPR and internal risk governance.

Integrated contractor audit plan
To ensure all our activities conform to our CRMS, human rights and ABC management systems, and Cairn Operating Standards (COS), we developed an integrated contractor and supply chain audit plan. Focusing on those contractors and locations considered to represent the greatest risk, the plan identifies corporate and operational risks, and develops an audit and assurance programme to demonstrate effective controls are in place before and during all projects.

Assurance audits and assessments check management systems, equipment controls on individual rigs and vessels, and also personnel competency and their understanding of roles and responsibilities. Consultant organisations have access to online training modules to raise awareness of the human rights and labour standards we expect.

In 2019, we revised our audit plan for contractors, and risk-assessed all key contracts and services.

Local, national and international contractors
The categorisation of local, national and international vendors depends on where in the world we are working.

In Senegal, we categorise spend with a nationally registered company as fully qualifying for national spend, whereas the requirements underpinning what qualifies as national content in Mexico are much more complex and stipulated by legislation. Under the Production Sharing Contract (PSC), we must achieve a certain threshold of local content through each phase of the licence.

Beyond having a contract with a Mexican company, we need to understand the nationality of its personnel and whether the equipment and materials used is of Mexican origin. Our selection process has been supported by workshops to help contractors to evaluate local content. A number of such workshops were held with key contractors and engagement on this subject continued with the contractors throughout 2019.

Given the need to track spend against specific categories and criteria, we have implemented an electronic platform to capture, manage and report on this information. At the workshops that were held with our contractors, training was provided on the system requirements. We are also required to obtain an annual certification from each supplier confirming the level of national content achieved.

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4 A Production Sharing Contract (PSC) is an agreement between contractor and government through which the contractor bears the exploration, production and development risks and costs in return for a stipulated share of the profit resulting from this effort.
2019 Operational Highlights:

Contractors

**Norway**
- The award of all contracts required to support the execution of the Lynghaug and Godalen exploration wells was successfully completed.
- We are using the Achilles JQS platform to identify and help validate potential contractors for the 2019 drilling project.
- Survey contractors were engaged for site survey and environmental baseline work for the Duncan well.
- Preparations commenced for the drilling of the Duncan well in 2020, with the drilling rig contracted and long-lead equipment ordered.

**Mexico**
- Award of contracts for long-lead equipment, well services, marine vessels, helicopters and logistics support was completed to support the 2019 two-well exploration drilling programme offshore Mexico.
- Workshops were held with all key contractors on national content obligations and reporting requirements.
- An electronic platform was implemented for capturing national content information.
- We engaged site survey contractors for environmental and social baseline work for Block 9.

**UK**
- We successfully planned and executed our Chimera well without major accident or incident.
- Tendering and award of long-lead equipment and well services contracts to be used on our 2019 UK well programme and with capacity for these contracts to be used for potential future wells was completed.
- We conducted site surveys to establish and check for unexploded ordnance at the Chimera location.
- We are using Achilles FPAL to source vendors for our UK projects.

**Suriname and Senegal**
- The contract for 2D seismic acquisition work offshore Suriname was concluded with work being completed in two phases.
- Contract for the processing and reprocessing of the 2D seismic data in Senegal was awarded.
- We supported our partners in Senegal in the transfer of operatorship for the Sangomar (formerly SNE) development project, to ensure knowledge was shared and standards maintained. We continued to support the roll-out and implementation of the IIA APP supplier portal.
Environmental protection is a key operational priority for Cairn. We take a precautionary approach, with rigorous risk assessments and robust working methods at every stage of a project. These help us to avoid or minimise any adverse impact on the environments in which we work, without affecting our commitment to safety.
ENERGY TRANSITION AND EMISSIONS

The global demand for energy is growing due to population growth, urbanisation and rising consumption. Even as society transitions to a low-carbon economy, we believe that the ongoing need for energy will continue to require the efficient use of hydrocarbon fuels for some time to come.

STRATEGIC OBJECTIVES
- Maintain licence to operate

PRINCIPAL RISKS
- Lack of adherence to health, safety, environment and security policies
- Climate change policy and its impacts on energy transition

MATERIAL ISSUES

High materiality:
- GHG Emissions (including venting and flaring)
- Global Energy Transition
- Climate Change Policy and Planning

Medium materiality:
- Energy Use and Alternative Sources
- Other Emissions
- Discharges to Sea, Water, Land and Sound
- Reduce, Recycle and Waste Management
- Water Abstraction and Use
- Materials Use
- Use of Local Resources

2019 PERFORMANCE AGAINST CR OBJECTIVES
Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.
- We continued to assess energy transition risks and our reporting against the TCFD.
- We made our first submission to the Energy Saving Opportunity Scheme in December 2019.
- We improved our tracking of non-operated greenhouse gas emissions and EUETS compliance.

2020 CR OBJECTIVES
- We will aim to develop carbon intensity methodologies to assess our assets and projects.
- We will seek to influence our UKCS partners to reduce their carbon intensity.
- We will determine energy efficiency benchmarks to improve the performance and selection of operating assets.

Detailed performance data on Climate change, energy and emissions, Resource use, Discharges, Waste and Environmental compliance is available in our Data Appendix.
Resource Use

Energy use

Given that our seismic and drilling programmes are not constant, Cairn’s energy consumption fluctuates year on year, depending on the level of activity we have in any given year. In 2019, we operated three drilling campaigns (five wells) and one seismic programme compared to a single operated drilling activity (one well) in 2018. Indirect energy use arises primarily from travel to support our operations and in New Venture activities, which have also been active in 2019. Heating, cooling and electricity use in 2019 was similar to 2018, with variation associated with local weather conditions.

Direct energy use largely arises from combustion sources, principally marine diesel used in operations which are directly related to the level of activity we have in any given year. In 2019, we operated three drilling campaigns (five wells) and one seismic programme compared to a single operated drilling activity (one well) in 2018. Indirect energy use arises primarily from travel to support our operations and in New Venture activities, which have also been active in 2019. Heating, cooling and electricity use in 2019 was similar to 2018, with variation associated with local weather conditions.

The Energy Saving Opportunity Scheme (ESOS) Regulations 2014 require large UK organisations to undertake comprehensive assessments of their energy use and energy efficiency opportunities at least once every four years. As part of ESOS Phase II, we made our first submission in November 2019, well in advance of the December deadline.

Full compliance with these regulations will help us to develop energy reduction and efficiency plans, lower our carbon emissions and make cost savings. The recommendations from the ESOS work, which focused on the Edinburgh office, will be looked at by our office facilities team.

Water management

We appreciate that our business both impacts and depends on water resources close to our operations. We also acknowledge that access to clean, safe water is a fundamental human right and one of the UN SDGs, and of importance to local communities and the environment. Therefore, our water resource strategy covers:

- assessing the need for using and abstracting freshwater;
- exploring ways to manage freshwater more efficiently;
- identifying and implementing ways to reduce our operational impacts on freshwater; and
- enhancing our reporting of freshwater resource management.

In 2019, our use of freshwater was limited to some used in drilling and for domestic purposes, both offshore and onshore.

Read about our treatment of wastewater in Discharges, Waste and Sound on page 58.

Chemical management

Although we have limited direct exposure to chemicals and other potentially hazardous materials, we still have robust requirements for chemical management in our Corporate Responsibility Management System (CRMS). The liquid and solid chemicals we use, such as drilling fluids for exploration, are selected to be fit for purpose but also to minimise any impact on human health or the environment. In most locations, they are submitted for approval by the regulatory authority.

We identify and assess their potential risks and impacts as part of our routine approach to planning operations, and select chemicals based on international good practice and local legislation. We also use Environmental and Social Impact Assessments (ESIAs) or similar tools to determine their potential impact of emissions and discharges from planned operations on local environments. This takes into account the local environmental resources and their uses by others.

The UK and Norway

In the UK and Norway, chemical management is in full compliance with regulatory requirements, which implement Decision 2000/2 of the OSPAR convention for the Protection of the Marine Environment of the North-East Atlantic (as amended by OSPAR Decision 2006/1). The decision details the approach to the selection of chemicals for use and discharge in offshore activities. In addition to requiring the comprehensive testing of chemicals, the decision requires the pre-screening, ranking, and hazard assessment and risk management of chemicals. The process requires substitution of certain chemicals for less hazardous alternatives.

All information on proposed chemicals, their use and discharge was submitted to the relevant regulatory authorities: the Norwegian Environmental Agency (NEA) and the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED). After this information was submitted and approved, we used a software tool to track all use and discharges. Any changes to the chemicals required during drilling were similarly submitted to the relevant regulatory authority for approval before use.

In all instances, oil-based drilling fluids were used, due to the issues likely to be encountered in geological formations. These were selected on the basis of safe delivery of the well and chemicals with the least environmental impact in the event of unplanned release. The routine management of spent fluids and associated wastes involved bringing these to shore for secure licenced treatment in-country.

Mexico

For our operations in Mexico, all proposed chemicals were submitted to the Agencia de Seguridad, Energia y Ambiente (ASEA), as part of our Environmental Impact Assessment for review. The assessment and associated chemical lists were approved in August 2019. The chemicals used were selected on a similar basis to the UK and Norway, tracked and reported to Cairn by our chemical suppliers, and all are in full compliance with local regulatory requirements.

1 Known locally as the Manifestación de Impacto Ambiental (MIA).
Greenhouse Gas Emissions

Greenhouse gas (GHG) emissions from our activities arise mainly from the combustion of fuels such as marine diesel by rigs and transport vessels and form a relatively modest part of our operational footprint. We monitor and manage the GHGs emitted during our activities and disclose them in accordance with industry requirements, methodologies and standards. Some of the locations we work in, such as the UK, are heavily regulated, so complying with national regulatory requirements is an important aspect.

We report on an ‘operational control’ basis, which means that we include emissions from those assets that are operated by us but not those controlled by our partners. The majority of the GHG emissions associated with our sector occur in the supply chain, which means our influence over carbon management and reporting is largely to the selection of contractors and the efficient use of modern equipment. For example, one vessel contracted for our marine operations in Norway was powered by liquified natural gas (LNG). The availability of such alternative fuels varies with location.

In absolute terms, our annual GHG emissions are heavily influenced by the level of operational activity over the year. In turn, these are impacted by safety considerations, technical requirements, the distance between operations and support bases, and local environmental and meteorological conditions.

Most of our emissions arise from exploration and appraisal activities, but these are not constant year on year. In 2019, Cairn experienced a high level of operational activity with three concurrent drilling campaigns, including one operated well in the UK, two in Norway and two in Mexico, as well as 2D seismic studies in Suriname. This compared to a single operational well in the UK in 2018.

With the increase in activities associated with these operations, as well as the necessary support vessels and handling operations, our total GHG emissions in 2019 increased by 479% to 43,496 tonnes CO\textsubscript{2}e compared to 2018. Normalised emissions also increased to 43 tonnes CO\textsubscript{2}e per 1,000 hours worked. Over 91% of our GHG emissions in 2019 arose from the consumption of diesel fuel used in our activities and less than 7% from air travel.

Emissions rose substantially in 2019 compared with 2018, directly related to the level of activity, the type of equipment used and well issues experienced in Mexico. We drilled a single well in 2018 using a jack-up rig, whereas we drilled five wells in three jurisdictions in 2019 using anchored and dynamically positioned (DP) rigs with a 2D seismic campaign in addition. Jack-up rigs use less fuel in general and none for positioning during drilling compared to DP rigs, which tend to be used in deeper waters. Normalised emissions per 1,000 hours worked also increased for the same reason and as a result of some waiting on weather and issues experienced drilling the Bitol well in Mexico.

ITPEnergised provided independent verification of our reported GHG emissions for 2019.

Other emissions

We monitor and report on other air emissions in connection with our activities. These include carbon dioxide, nitrous oxide, sulphur dioxide, methane and volatile organic compounds (VOCs). Again, these figures increased compared to 2018 because, as with GHGs, these emissions are influenced by our level and type of operated activity.

See our GHG Assurance Statement and our Data Appendix for emissions data and methodology notes.
Reporting on emissions

The level and scope of our operated exploration activities can change significantly year by year. As we do not have any operated production assets, it is difficult to set absolute reduction targets for GHGs against a set baseline. Our production activities are more consistent over time, but as these are operated by our joint venture partners, our influence depends on a variety of factors (see page 46). We made strong representation to our partners on our UK Catcher well to defer production to prevent unnecessary flaring during maintenance.

In territories that are more heavily regulated, such as the UK, Norway and Mexico, complying with any statutory or regulatory reporting requirements is an important aspect. We also acknowledge the importance placed on global energy transition risks by our investors and continue to respond to the recommendations made under the FRC\(^2\) and the TCFD\(^3\).

In August 2019, we made our CDP\(^4\) submission, for which we were supported by a third-party consultant. Cairn received a B- rating, which is in the ‘Management’ band. This is higher than the Europe regional average of C and higher than the oil and gas extraction and production sector average of C. CDP defines the Management band (B/B-) as “taking coordinated action on climate issues”.

In 2020, we will endorse the Global Gas Flare Reduction partnership of the World Bank, committing to phase out routine flaring by 2030. We will also be looking at alternative means to improve our performance such as assessing methodologies to evaluate the carbon intensity of our assets and improved selection of equipment based on energy efficiency. To complement the resilience indicators we already have in place, we are aiming to include additional carbon intensity-related metrics in our investment proposals and continued testing of the financial resilience of our portfolio.

Discharges, Waste and Sound

For offshore activities, we carefully manage all discharges and wastes generated during operations. As with GHGs, it is difficult for us to set specific annual reduction targets due to variations in activity and equipment. Nonetheless, we are committed to minimising our environmental impact from our operations, and to reporting fully and transparently on our performance.

Waste

Our exploration activities generate different volumes and types of waste, including oil-contaminated wastes, chemical wastes, non-hazardous wastes, domestic wastes and clinical wastes from medical facilities offshore.

![Total hazardous and non-hazardous waste (tonnes)](chart)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hazardous</th>
<th>Non-hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>193</td>
<td>261</td>
</tr>
<tr>
<td>2018</td>
<td>18</td>
<td>81</td>
</tr>
<tr>
<td>2017</td>
<td>150</td>
<td>374</td>
</tr>
<tr>
<td>2016</td>
<td>245</td>
<td>381</td>
</tr>
<tr>
<td>2015</td>
<td>33</td>
<td>273</td>
</tr>
</tbody>
</table>

Adopting the precautionary principle, our waste management approach is in line with internationally accepted best practices, legal requirements and duty of care standards. We use the accepted waste hierarchy in our waste management practices. Where we do dispose or discharge, because reuse and recycling are not options, we adhere to the following:

- water-based waste drilling fluids are discharged to sea, having met the OSPAR Convention conditions and been approved by the regulator;
- oil-based drilling fluids and associated cuttings are taken to shore for processing and licenced disposal as approved by the regulator;
- waste generated during offshore support operations (excluding drilling), such as domestic use on vessels and offshore rigs, is managed in accordance with MARPOL\(^5\) requirements;
- any waste that cannot be discharged at sea or incinerated offshore is segregated and transferred for further treatment and disposal on shore; and
- wastewater generated by our offices is treated through municipal sewage and wastewater systems.

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\(^2\) The Financial Reporting Council is an independent regulator of auditors, accountants and actuaries in the UK – www.frc.org.uk.

\(^3\) The Task Force on Climate-related Financial Disclosures (TCFD) develops voluntary, climate-related financial risk disclosures for companies to use when providing information to investors and other stakeholders – www.fsb-tcfd.org.

\(^4\) CDP is a not-for-profit charity running the global disclosure system for investors, companies and authorities to manage their environmental impacts – www.cdp.net.

\(^5\) International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) under the auspices of the International Maritime Organisation, which has 174 nation members worldwide.
For all projects, we ensure that:
- waste management options in-country are understood ahead of starting operations;
- local facilities and service providers have been audited, and gaps identified and addressed;
- Waste Management Plans are developed, informed by the findings from in-country reviews and audits;
- waste is transferred to approved waste management facilities, which may require specific licences or permits;
- waste management activities are supervised for the duration of operations for each waste stream by approved waste management professionals;
- hazardous wastes that cannot be treated locally are transferred to suitable treatment and disposal facilities in full compliance with international law, including the Basel Convention; and
- waste transfer treatment and disposal records are maintained in accordance with legislation and internal requirements.

In 2019, we had a particularly active drilling programme. Operating in three jurisdictions, we generated 193 tonnes of hazardous waste and 261 tonnes of non-hazardous waste in total. In each jurisdiction, we had a Waste Management Plan developed to meet local legislation and the principles of ‘duty of care’, which requires us to manage our wastes from ‘cradle to grave’. These were developed after we had identified waste streams and disposal options to meet the least impact criteria. As we used predominantly drilling fluid, we brought wastes arising to shore for specialised treatment and disposal in line with OSPAR and CRMS requirements. All contractors selected were assessed for their capability to treat and dispose of residuals. No wastes were transferred under the Basel Convention in 2019.

### Water and wastewater

In 2019, our freshwater use increased compared with 2018 primarily due to increased consumption as a result of increased operational activity. Although we used predominantly oil-based drilling fluid in 2019, some seawater was used in drilling fluid make-up. No seawater was used in 2018. Spent oil-based drilling fluids were sent to shore for treatment in all programmes during 2019. Discharges were essentially domestic municipal wastewater although ship and rig wastewaters were discharged to sea in compliance with MARPOL.

We use some freshwater (see Resource use on page 66) in our offices and for domestic use on our rigs and vessels. In 2019, 54% of our water withdrawal (8,369 m³ out of 15,640 m³) was freshwater.

### Total water withdrawal

<table>
<thead>
<tr>
<th>Year</th>
<th>Freshwater withdrawal</th>
<th>Seawater withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>8,369 m³</td>
<td>7,271 m³</td>
</tr>
<tr>
<td>2018</td>
<td>6,251 m³</td>
<td>19,303 m³</td>
</tr>
<tr>
<td>2017</td>
<td>2,286 m³</td>
<td>11,140 m³</td>
</tr>
<tr>
<td>2016</td>
<td>2,286 m³</td>
<td>8,511 m³</td>
</tr>
<tr>
<td>2015</td>
<td>2,514 m³</td>
<td>6,302 m³</td>
</tr>
</tbody>
</table>
Sound

Through the use of air guns and vessel movement, seismic surveys generate underwater sound, which has the potential to impact marine mammals and reptiles. The environmental impact of sound associated with our drilling activities is assessed in the ESIA as we undertake ahead of all operations.

In 2019, our 2D seismic programme in Suriname was completed. All mitigations in the ESIA were applied to minimise the impact of sound from our rig on marine mammals and turtles.

Product Stewardship

The handling and stewardship of crude oil continued in 2019 for our assets Kraken and Catcher. Although the day-to-day stewardship of crude derived from these assets remains the responsibility of the operator, we have a duty to ensure that any product over which we have an influence, share or control is handled properly.

Our involvement includes ensuring that:
- the crude is transferred from floating production, storage and offloading (FPSO) units to customers using appropriate, well-managed systems to meet the specifications of the recipient; and
- any trading of the product is carried out transparently.

CONDUCTING SAFE SEISMIC STUDIES IN SURINAME

Early and regular engagement with contractors, industry peers, relevant authorities and local community representatives has helped us to complete a seismic survey off the coast of Suriname safely and responsibly.

Cairn ensures that 2D seismic projects are undertaken in a way that minimises the impact of underwater noise on marine life, through a combination of international best practice and local guidance. For this, our first activity in Suriname, we identified around 30 species of mammals and turtles in the area, including three classed by the International Union for Conservation of Nature (IUCN) Red List as endangered and two as vulnerable, through an Environmental and Social Impact Assessment (ESIA).

Our seismic contractor, SeaBird Exploration – a Norwegian company with experience of working in Suriname – was screened to ensure compliance with relevant Cairn policies and our CRMS. We also monitored safety performance, for which SeaBird was responsible.

In consultation with the WWF and the Green Heritage Fund Suriname, the mitigation plan for our 2D seismic studies involved using marine mammal observers on our survey vessel; instigating delays and shutdowns if certain species entered a 500-metre exclusion zone; and using ‘soft-start’ procedures to give wildlife time to move away from our activities. Fisheries liaison officers were also on hand to monitor interactions with local fishing vessels. We are now well positioned to begin the 3D seismic phase of our activities in 2020.
BIODIVERSITY

In recent years, the threat to biodiversity has become an increasingly high-profile global issue. We continue to place great importance on managing our potential impact on the habitats, ecosystems and species that enrich our planet, and to protect them in the locations where we work.

**STRATEGIC OBJECTIVES**

- Maintain licence to operate

**PRINCIPAL RISKS**

- Lack of adherence to health, safety, environment and security policies

**MATERIAL ISSUES**

High materiality:

- Biodiversity and Sensitive Areas

**2019 PERFORMANCE AGAINST CR OBJECTIVES**

Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.

- We have taken biodiversity risks into account in all our new venture and new country entry activities.
- We have provided Environmental Risk Assessments, Environmental Statements or supporting ESIs for our operations in 2019.
- We include environmental sensitivity assessments in investment proposals.

**2020 CR OBJECTIVES**

- We will review the latest good practice for environmental impact and biodiversity assessment, to keep our practices aligned.
- We will perform environmental assessments in planned operations and when assessing new opportunities.

Detailed performance data on Biodiversity is available in our Data Appendix.
Our Biodiversity Framework

We acknowledge that oil and gas exploration and development activities could affect biodiversity, both on land and at sea. We therefore adopt a precautionary approach, believing that where threats of serious or irreversible damage may exist, even if not scientifically proven, cost-effective measures to prevent damage should still be taken. For this reason, we do not explore, develop or enter into joint ventures in UNESCO World Heritage sites.

Our Biodiversity Framework sets out a common approach, and covers processes that apply to all our business and operations. Although ‘owned’ by senior management, it is implemented locally in accordance with our Project Delivery Process (see page 44). Our approach to this complex and critical work is set out in our CRMS. All our commitments related to preserving biodiversity are covered by our Business Principles in our Code of Ethics (see page 19) and our Corporate Environment Policy, which were reviewed and reissued in September and October 2019 respectively.

We continued to develop programme-specific Environmental and Social Management Plans for all our operated projects, as part of the ESIA or the equivalent process. In 2019, environmental surveys and impact assessments were submitted in the UK, Norway and Mexico, and accepted with associated Environmental Management Action Plans.

In highly diverse locations, specific Biodiversity Action Plans (BAPs) may be developed where there is either a significant risk to biodiversity or a clear benefit for targeted conservation. We commission external independent consultants to develop our ESIA or risk assessments and, if required, to advise and assist with managing biodiversity risks and impacts. They draw on available environmental studies and background information to understand any habitats that may be impacted. These assessments include impacts on local livelihoods due to the link between the environment and communities.

No specific BAPs were developed for operations in 2019. However, some extra precautions were set in place for the seismic programme in Suriname (see case study on page 60).

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8 United Nations Educational, Scientific and Cultural Organization (UNESCO) Convention Concerning the Protection of the World Cultural and Natural Heritage – sites that may be buildings, monuments, sites or natural features of national or international importance.
Assessing our Biodiversity Impacts

For all operations and potential locations that could affect critical habitats, protected areas or the welfare of local communities relying on ecosystem services, we undertake extensive assessments of their potential biodiversity impacts. We then work with technical specialists, government departments, NGOs and other local stakeholders to inform any mitigation activities required.

As a minimum, we always undertake environmental risk and impact assessment work before starting any project. Although the extent varies with location, we assess the potential biodiversity impacts for all projects as early as possible, and continue to do so through all stages in the oil and gas life cycle.

We consider the direct, indirect and cumulative impacts that our operations and our supply chain could have on biodiversity.

When identifying, assessing and managing biodiversity risks and impacts, we follow the requirements outlined in the IFC Performance Standard 6 (Biodiversity Conservation and Sustainable Management of Living Natural Resources), and also the appropriate national legislation and internationally accepted good practice. Any project in which significant potential impacts to biodiversity are identified undergoes additional studies and a formal assessment to demonstrate how these potential impacts will be managed.

Investment proposals consider key biodiversity issues before approval. This helps us to define potential risks, including the presence of sensitive sites and species, well in advance of entry into a new licence or location.

As part of an ongoing review of our own guidance on biodiversity, we have adopted the IPIECA IOGP’s comprehensive guidance. This guidance is widely supported by several organisations including the UNGC and the IUCN.

For further information, please see the Biodiversity section of the Data Appendix.
Environmental Baseline Surveys

Environmental Baseline Surveys (EBS) enable us to define existing biodiversity, environmental and other conditions near our activities, using a range of analytical techniques ranging from seabed sampling to photography.

We conducted several surveys in 2019 in preparation for activities in the UK, Norway and Mexico, and also undertook a number of environmental desk studies to support our New Ventures team.

As well as providing data for assessing our potential impacts on habitats and helping us to develop mitigation plans, EBS also help determine the extent of existing damage arising from the previous activities of others, protecting the Company from liabilities.

Senegal

We worked with our partner Woodside to submit our ESIA for the Sangomar development (formerly SNE). Following regulatory scrutiny by the Senegal National Technical Committee and reviews at public meetings, all responses and modifications to the ESIA were submitted to complement the exploitation plan. Final approval was granted in January 2019.

The UK and Norway

Environmental baseline surveys undertaken in 2018 were used to support EIAs, as well as subsequent permit and consent applications in 2019 for the Chimera well in the UK, and the Lynghaug and Godalen wells in Norway. No particularly sensitive or unique habitats were identified.

Although there were no discoveries, these first two operated wells were successful in terms of HSE performance: our activities remained compliant with regulatory requirements, and they were completed on time, under budget and without spills.

Mexico

The Critical Habitat Assessment (CHA) and a residual Biodiversity Impact Assessment (BIA) for Block 9, one of our operated licences offshore Mexico, identified possible impacts on marine turtles arising from our planned activities. One of the species is the critically endangered Kemp’s ridley sea turtle, the rarest species of marine turtle. Taking into account the mitigation measures already under way through our ESIA, we have proposed additional monitoring and recording of all sea turtles and marine mammals by a Marine Mammal Observer (MMO) for our offshore drilling unit and any support vessels, which will be restricted to speeds below 10 knots.

At the end of the contract, we will deliver a final environmental baseline to evaluate any change since the initial environmental baseline. Any damage must be remedied before we deliver the block back to the Mexican state.

Assessments in other locations

In 2019, Cairn has looked at a number of new locations, targeted by our New Ventures team, with substantial potential to have sensitive habitats and associated biodiversity in the blocks of interest. As part of the risk assessment process initial studies and reviews of sensitive habitats have been commissioned to identify protected areas or species, biodiverse locations and understand potential risks which may arise, not only from any planned initial activity, but also to consider later stages of the oil and gas life cycle.

As we look at locations which are either coastal or onshore, we anticipate changing risk profiles associated with biodiversity and these are considered during our assessment. It is also notable that biodiverse areas can be significant sources of livelihood for local communities and their interaction with that biodiversity must be taken into consideration during any ESIA or biodiversity assessment.

For example, our plans and current work to support a mangrove rehabilitation projects in Suriname will help improve local biodiversity and have benefits for local communities in their ability to maintain livelihoods and may also help local communities to adapt to climate change.

As part of the 2D programme offshore Suriname, marine mammal observers were employed, and all findings were submitted to the National Institute for Environment and Development at the end of the project.

We also screened sensitive environmental areas and vulnerable communities for various investment proposals in locations including Côte d’Ivoire, Israel, Nicaragua, Norway and the UK.
While we seek to make a positive difference to society through economic and community development, we also recognise that we must manage and mitigate any potential risks and impacts associated with our activities.
SOCIAL AND ECONOMIC BENEFITS

To mitigate any negative impacts and enhance the positive benefits that arise from our operations, we assess and manage the potential social and economic risks and opportunities for all new projects. We use the United Nations Sustainable Development Goals (UN SDGs) as an additional framework to guide our approach.

STRATEGIC OBJECTIVES
- Maintain licence to operate

PRINCIPAL RISKS
- Lack of adherence to health, safety, environment and security policies

MATERIAL ISSUES

High materiality:
- Local Community Stakeholders (and engagement)

Medium materiality:
- Demonstrating Value and Measuring Impact
- Local Workforce Development
- Local Content
- Social Investment
- Local Energy Access
- Community Health

2019 PERFORMANCE AGAINST CR OBJECTIVES

Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.
- We revised our guidance on stakeholder engagement.
- We revised our guidance on human rights.
- We have applied the new guidance on managing social risk in new projects that were developed last year.
- We completed our existing social investment programme in Senegal.
- We identified social investment projects in Suriname.

2020 CR OBJECTIVES

- We will revise our stakeholder engagement requirements for all social investment programmes in Mexico and Suriname.
- We will implement agreed social investment programmes in Suriname.
- We will develop our social investment programme for Mexico in line with our activities.
- We will review our wider corporate social investment position and develop a corporate programme.

Detailed performance data on Social and economic benefit is available in our Data Appendix.
Managing Social Risks

Delivering social and economic benefit

In accordance with our Corporate Responsibility Management System (CRMS), we are required to evaluate the potential social risks and impacts of any major activity we undertake. The scope and nature of that Social Impact Assessment (SIA) depends on local context and regulations. An SIA may be performed as a separate activity or, more usually, as part of an Environmental and Social Impact Assessment (ESIA).

We consult with local stakeholders, to help us to identify any potential impacts associated with our activities and to provide us with local knowledge with which to inform any action plans. This process enables us to minimise risk, maximise shared economic and social benefits, and foster long-lasting relationships with communities, governments, partners, investors and employees.

See how we use the UN SDGs as an additional framework for managing social risks and opportunities on page 7.

IMPLEMENTING SOCIAL MANAGEMENT PLANS AND MONITORING PERFORMANCE IMPACT

In Mexico, we finalised a Social Impact Assessment for our proposed offshore exploration projects in Block 9 in the Gulf of Mexico.

Developed in line with best practice from the IFC and the European Development and Reconstruction Bank, the SIA determined baseline data for the area covered by our proposed activities, evaluated our likely impacts and designed mitigation measures. The assessment also involved developing a social management plan, informed by discussions with community members, fishermen and fishing cooperatives, local government representatives, port captains and business owners.

In 2019, the plan identified actions and responsibilities, including:

- selecting contractors on the basis of shared values, principles and standards, using local contractors and services where we can, including our local shore base in Dos Bocas, helicopter provider Transportes Aereros Pegaso and support vessel provider Naviera Bourbon;
- providing information about the project to stakeholders within our area of influence through our website, newspaper articles, statutory notifications and local engagement;
- establishing a grievance mechanism;
- monitoring the implementation of the plan through direct feedback from field work in Tabasco state and a number of performance indicators;
- tracking performance internally and sharing data with joint venture partners; and
- reporting to the regulator on an annual basis.

As this is our first operational activity in Mexico, we are keen to understand how we can participate in community development and to design an Impact Benefit Plan for future operations.
Impact Benefit Plans

To deliver value from our operations and make a positive social impact wherever we work, we assist in the development of local community programmes, in consultation with governments, the public and other stakeholders, while minimising any negative impacts associated with our activities.

We use the framework of the UN Sustainable Development Goals to inform the development of our Impact Benefit Plans. These help us to focus our activities on areas where we can maximise benefits and minimise negative impacts.

See A Responsible Approach on page 5 for more details.

Creating Shared Value in Senegal

Cairn is committed to delivering lasting and positive social and economic benefits in countries where it operates. In Senegal, our objective was and is to build a resource base that can be developed to maximise the value for Senegal as a country and improve its energy security.

One of the ways in which we did this was through targeted social investment programmes, with a total expenditure of US$1.3 million to date. In Senegal, much of this has taken place through a charity committed to reducing hunger and poverty called The Hunger Project. We worked with them to develop a pilot community development project to support seven fishing communities, one of Cairn’s key stakeholders and comprising around 22,000 fishermen. The three-year project was successfully handed over to Woodside in its second year, as part of our transfer of operatorship.

Given that oil and gas activities were relatively new to Senegal, we also focused on supporting and building local industry expertise. To support the oil and gas regulatory environment in Senegal, we provided industry training to representatives of contractors, academic institutions, and regulatory authorities. This training covered oil and gas industry awareness, HSE awareness, offshore safety, offshore emergency response, including oil spill response, waste management and language training.

We have provided English language training to a total of 38 employees across DEEC (Ministry of Environment), Ministry of Energy, HASSMAR (the International Maritime Rescue Federation) and national oil company Petrosen since 2016 as well as to 111 geoscience and science students at the Earth Sciences Institute (IST) and the Polytechnic School (ESP) in Dakar. Ongoing support for these courses will now be provided by the National Institute for Oil and Gas (INPG) and other industry operators.

In support of local industry and employment, during the development phase we engaged local companies in logistics and supply base support, waste management services, aircraft handling services, transport services, fishing liaison, administration, accommodation and environmental and social consultancy services.

We also played a founding part in the launch of both Invest in Africa in Senegal, an initiative to promote the development of local small and medium businesses and facilitate their access to oil and gas industry projects and other multinational projects; and the Institut National Du Pétrole et du Gaz (National Petroleum Institute) which aims to develop national expertise in the oil and gas sector in Senegal. Both of these entities have the common aim of building national capacity and participation.

In 2018, Cairn transferred operatorship of its licence to Joint Venture partner Woodside. Woodside has developed a comprehensive social investment strategy which will be progressively implemented through the execution phase.
As part of our seismic exploration contract in Suriname, Cairn supports a number of social investment projects, in conjunction with the state oil company Staatsolie. With our 2018 and 2019 commitments to assign, we are focusing on two initiatives.

With Staatsolie and several international oil companies, we are part of a sector-wide initiative to improve technical skills and prospects in the oil industry. Together, we are investing in equipment and infrastructure at three educational establishments in Paramaribo: the Institute for Natural Resources and Engineering Studies (NATIN), a vocational technical training institution (AMTO) and the Suriname Lower Technical School.

Pending approvals, we are also looking to support an ongoing mangrove rehabilitation project, an environmental and climate change adaption initiative designed to protect low-lying coastal regions against erosion. The project uses sediment traps to protect a kilometre-long stretch of coastline to the north of Paramaribo, benefitting Weg naar Zee and other agricultural communities particularly at risk from rising sea levels. Mangrove ecosystems protect against erosion, protect and re-establish many new ecosystems, and support a diversity of flora and fauna.

With the participation of local communities, this project represents an important attempt to protect livelihoods and the environment, and to support adaption to the effects of climate change.
INVEST IN AFRICA IN SENEGAL

In 2018, Cairn played a part in the foundation of Invest in Africa (IIA) in Senegal, an initiative established to promote the development of local small and medium-sized enterprises (SMEs). The IIA facilitates their access to oil and gas industry projects, other multinational projects and the National Petroleum Institute, helping to build national capacity and participation.

In 2019, IIA made good progress:
- three ‘Introduction to Oil and Gas’ workshops were attended by representatives from international oil companies, government departments, sub-contracting firms and local SMEs;
- to facilitate mutually beneficial partnerships, a UK trade mission visited Dakar, introducing potential international partners to local SMEs involved in IIA’s work;
- IIA worked with oil companies, subcontractors, training bodies and banking partners to help local companies understand the certification needed to meet international standards, and
- IIA advised local SMEs on the need to obtain proper equipment to increase their competitiveness.

As a result, the number of local suppliers registered on IIA’s portal, The African Partner Pool, increased from 220 to 400, 19 tenders were shared and 10 contracts for the Sangomar development (formerly SNE) (our joint venture with Woodside and FAR) were won by local suppliers.
Supporting and strengthening local communities

Even though many of our assets are located offshore, we recognise that our activities can affect local people to some extent. For example, by excluding fishing vessels from the waters close to our drilling rigs on occasions, our activities can impact local fishermen, or our activities may utilise existing infrastructure and services, restricting access to them for local communities and businesses. In such instances, we share our plans with local community representatives, invite feedback on the issues that affect them and engage on ways to minimise disruption.

We also implement grievance mechanisms to ensure local communities have the means to communicate any concerns to the Company.

PREPARING TO EXPLORE

In June 2019 the semi-submersible Transocean Arctic drilling facility was engaged for two exploration wells offshore Northern Norway, the Lynghaug and the Godalen wells.

These were the first Norwegian exploration wells operated by Cairn and during the summer campaign both operations were executed as planned, without incidents and below budget. Brønnøysund and Sandnessjøen, towns of 6,000 and 5,000 people respectively, provided the offshore operations with logistical and emergency response support. For Cairn and the other operators active in these waters, Brønnøysund provides the helicopter base for offshore transit and Sandnessjøen is the designated supply base. The Rescue Coordination Centre for Northern Norway is located further north in Bodø, a town with a population of 49,000 residents. In preparation for the campaign, as well as during operations, senior staff from Cairn’s Stavanger offices visited the towns on several occasions, establishing good working relationships with local stakeholders and communities.

Throughout the campaign, around 1,000 workers supporting Cairn’s activities passed through the region, increasing demand for flights, accommodation and supply support. Cairn was in direct contact with the airline, hotel and logistics providers to ensure that services were available as required for operational needs without adversely impacting the local population.

Additionally, meetings were arranged with local mayors, the police and rescue service representatives to introduce Cairn as a company and share the plans for drilling activity that required potential support and preparedness.

What was achieved at Lynghaug and Godalen aligns well with Cairn’s core values, demonstrating the respectful and responsible way that relationships are created and maintained to deliver safe and efficient operations.
HUMAN RIGHTS

In line with international standards such as the UN Universal Declaration of Human Rights, we respect everyone who works for us or with us. We support their rights to safe working conditions, equal treatment and fair reward for their efforts, and have put mechanisms in place to maintain effective relationships with employees, communities and other stakeholders.

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**STRATEGIC OBJECTIVES**
- Maintain licence to operate

**PRINCIPAL RISKS**
- Lack of adherence to health, safety, environment and security policies

**MATERIAL ISSUES**
High materiality:
- Security and Human Rights
- Working Conditions/T&Cs

Medium materiality:
- Indigenous People’s Rights
- Cultural Heritage
- Indigenous People’s Rights
- Economic and Physical Displacement
- Freedom of Association
- Modern Slavery
- Grievance Mechanisms

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**2019 PERFORMANCE AGAINST CR OBJECTIVES**
Our CR Objectives form part of our annual Key Performance Indicators (KPIs), which enable us to measure the delivery of our corporate strategy and progress against our strategic objectives.
- We reviewed and refreshed our human rights guidance.
- We developed and integrated an audit programme for 2019.
- We assessed human rights issues for our activities in Mexico.

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**2020 CR OBJECTIVES**
- We will revise our human rights training in line with our refreshed guidance.
- We will deliver an internal ‘Lunch and Learn’ session on human rights.

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Detailed performance data on Human rights is available in our Data Appendix.
Our Approach to Managing Human Rights

Cairn’s Code of Ethics and our Corporate Social Responsibility (CSR) Policy set out our commitments to human rights. We respect internationally recognised human rights and work to ensure non-complicity in human rights abuses. We support the principles contained within the Universal Declaration of Human Rights and the United Nations Guiding Principles on Business and Human Rights. Our Human Rights Policy is integrated in our CSR Policy.

We acknowledge that slavery and other human rights abuses are a significant issue in some of the regions in which we operate. We have zero tolerance for slavery and human trafficking in all its different forms, in any part of our business, including our supply chain. For example, we assessed suppliers in Mexico – including agencies providing contractor personnel for our operations – on their position regarding modern slavery, their policies and the mechanisms they have in place to prevent it.

All personnel have a responsibility to respect human rights in their dealings with others. Our first Human Rights Handbook was developed in 2005 using a ‘rights aware’ approach, which helped us to manage risks such as water risks in Rajasthan, India. A rights aware approach means that companies recognise the human rights of the people that they affect and are affected by. To do this, companies must understand and identify the rights that are affected by their business and manage these issues appropriately.

Since 2005, there have been a significant number of global developments in the areas of business and human rights. In 2011, the United Nations published the UN Guiding Principles, which provides a standard for governments and companies to prevent, address and remedy human rights abuses.

In 2019, we updated our own Human Rights Guidelines, making it a more succinct, accessible and effective management tool. This documentation was informed by the UN Guiding Principles, the IFC Performance Standards and the ISO 26000 Guidance for Social Responsibility, as well as the Voluntary Principles on Security and Human Rights and their Implementation Guidelines. We have also reviewed guidance from industry bodies and voluntary organisations.

Our five-step process for identifying and assessing human rights issues at all levels of the business (see graphic below) has been incorporated into our CRMS documentation.

Human rights training

In 2019, we refreshed our training on human rights and modern slavery. Additionally, our HSE team participated in a specially commissioned workshop to explore the role of Cairn in respecting human rights issues in our operations. The one-day event looked at the developments in human rights and business over the last few years; it also explored human rights dilemmas, the application of our new guidance for identifying and managing potential human rights issues in our current, operational projects and new venture opportunities.

Operated and non-operated projects

Before we enter a new country as an operator, we apply human rights screening as part of our due diligence process. We assess potential impacts through ESIAs or, where necessary, undertake a Human Rights Impact Assessment. If any current or potential issues are identified, we engage with those affected to consider how best to manage them.

Prior to proceeding with a non-operated joint venture, we check any human rights issues and identify any risks that may require management by the operator.

Protecting People and Communities

We recognise that we must ensure decent working terms and conditions in our organisation and play our part in advocating decent work throughout our supply chain and in the communities we operate within. Since the introduction of the UK Modern Slavery Act, we have set CR Objectives to improve our position and published – and since updated – our Modern Slavery Statement.

Using an approach similar to that used in our anti-bribery and corruption management system (page 20), we assessed our operations to identify potential risks and vulnerabilities to modern slavery within our supply chain. We tend to use specialist local contractors with well-developed employment practices who understand our requirements and standards, which helps to mitigate against some risks in this area.

However, our suppliers often have subcontractors of their own, in locations with less robust human rights regulations. Our influence diminishes down the supply chain but we use our influence to advocate good practice among our contractors and suppliers.

We do not employ forced, bonded or child labour or any form of modern slavery, and take all reasonable steps to ensure that this does not exist in our operations or our supply chain.

We have found no significant risks of forced or compulsory labour in our supply chain in 2019.

Security and human rights

When operating in complex security environments, we recognise that we must maintain the safety and security of our operations within an operating framework that ensures respect for human rights. For our operations, we assess security risks and the potential for human rights abuses.

Security contractors are assessed on their adherence to our principles and standards, which include our aim that activities, equipment and training meet the requirements of the Voluntary Principles on Security and Human Rights and reflect the requirements of key UN human rights guidelines. Effective selection of security contractors, strong working relationships and good performance protect people and communities, and enable us to maintain our licence to operate.

For operational activities, grievance mechanisms are established to provide individuals and community representatives the opportunity to address any concerns to the company.

Our key actions on modern slavery

- Refresher labour rights and modern slavery training has been rolled out as two separate e-learning modules to employees.
- Our procedure for selecting service providers incorporates modern slavery assessments.
- Our new country entry assessment comprises a review of key indicators under international classification indices such as the Global Slavery Index\(^2\) and the US Trafficking in Persons Report\(^3\), as well as researching the risk arising.
- The standard terms and conditions within our contracts specify zero tolerance of modern slavery among suppliers and sub-contracting parties, and include our right to audit.
- We assessed three providers of personnel for our Mexico operations regarding their position on modern slavery, including their policies and mechanisms to prevent it.
- Our whistleblowing procedure includes an ability to report potential failure to comply with legal requirements and company policy, including modern slavery issues, and has been supported by training.

Measuring performance

7% of employees trained on human rights policies and procedures (2017–2018: 64%)
Protecting our employees

Our People Management Manual, which contains our Group People Policy and all employee-related policies and procedures, sets out our requirements for personnel employment. It spans recruitment and selection, diversity and inclusion, health and well-being, work-life balance, training and benefits. We expect our contractors to have similar mechanisms in place.

We require a positive working environment that respects an individual’s personal dignity and rights, and that is free from less favourable treatment on the grounds of gender, disability, race, colour, ethnic or national origin, marital status, age, sexual orientation, responsibility for dependents, religion or beliefs or any other inappropriate distinction. We do not tolerate any form of harassment, bullying or discrimination.

We continue to consult our people on organisational and performance issues, and respect contracted employees and their membership of unions. We have identified specific risks and requirements in relation to unions in certain locations such as Mexico, but respect their right to freedom of association and collective bargaining.

See Behaving Responsibly to People on page 32 for more information.

Protecting communities

Our position on human rights in the communities where we are located continues to be an important element of what we do. Most of our activities are conducted offshore, with limited impacts onshore. However, we look to address potential impacts on other marine users and around our shore bases, such as our efforts to support fishing communities near our operations off the coast of Senegal, and minimise impacts to communities close to our support operations onshore in Norway.

Our operations have not involved any resettlement of people, or impacted indigenous peoples or their cultural heritage.

Addressing grievances

We take grievances from employees or external stakeholders very seriously.

For employees, our Group Whistleblowing Procedure covers our responsibilities, the safeguards we have in place, the mechanisms for raising concerns and the investigation process.

External mechanisms for reporting concerns are also available, such as the Public Concern at Work advice service, the Gangmasters & Labour Abuse Authority and the Modern Slavery Helpline in the UK.

We also provide separate grievance mechanisms in local languages where our operations take place.

Measuring performance

100% of operations have been subject to human rights reviews or impact assessments.
About this Report

Reporting period
This report covers Cairn Energy PLC’s (Cairn’s) Corporate Responsibility (CR) approach and performance across its global operations from 1 January to 31 December 2019.

Reporting standards
Cairn reports its 2019 CR information in accordance with AccountAbility’s AA1000 Accountability Principles Standard (AA1000 APS)2: founding principles of inclusivity, materiality and responsiveness. This ensures that we engage with internal and external stakeholders, identify and assess our most important CR issues, and address and respond to them in a structured way. We also use the Global Reporting Initiative (GRI) Standards3; following the GRI’s content principles of materiality, stakeholder inclusiveness, sustainability context and completeness; and its quality principles of balance, comparability, accuracy, timeliness, clarity and reliability. We report in accordance with the Standards’ core option1. Download our GRI Content Index.

Scope and boundaries
We report on an ‘operational control’ basis. This means that we report on those assets and activities over which we have control in terms of CR policies and practices during 2019, irrespective of the licensed operating party. We exclude data where we do not control operations, but we do consider risks associated with our partners’ position and their control of such activities. In line with this, our 2019 CR information covers Cairn’s head office in Edinburgh, its regional offices in the UK, Senegal and Mexico, and field operations in the UK and Mexico.

With effect from 1 January 2020, we divested our assets in Capricorn Norge to Solveig Gas Norway AS. The transaction is expected to be completed in early 2020 and remains subject to written consent by relevant authorities. Our reporting includes data for Norway for the year up to the point of divestiture.

Data and performance indicators
We measure our performance against Group-level Key Performance Indicators (KPIs) which are aligned with the strategy and operational programme of the Company. These are reviewed annually. The KPIs in 2019 were based on strategic business objectives in the following categories:

- health, safety, environment and security, and CR;
- new ventures;
- exploration;
- development;
- production and cash flow; and
- funding.

Detailed CR Objectives and KPIs are included under the ‘Maintain licence to operate’ strategic objective. CR KPIs amounted to 15% of the total indicator score of performance across the Group in 2019, 10% of which covered ‘leading’ indicators. The remaining 5% covered ‘lagging’ indicators.

A wide variety of data is collected over a range of issues and topics grouped under the themes of Governance; People; Environment; and Society. Our CR Objectives for 2020 will be updated to direct our CR improvement programme for the year.

Baseline data
We report historical data from all our activities over the last five years. Levels of activity at Cairn vary considerably from year to year, so we do not have a fixed baseline or historical reference point.
Uncertainties and estimates

We make every effort to ensure our data is accurate and transparent, although it is not possible or practical to measure all data exactly (e.g. obtaining electricity consumption data for a small office that is part of a larger building, or recording water effluent from an office or vessel that has no water outflow meter). In such cases, we use accepted estimation methodologies that may involve the use of conversion factors (e.g. calculating office data as a proportion of the whole building, using volume-to-mass conversion factors to calculate waste, calculating GHG emissions). We highlight these methodologies with our data.

Targets

We recognise the importance of both lagging and leading indicators, as well as targets, in driving positive behaviours and improved performance. These are linked to mechanisms for assessing both Company and individual performance, including incentives for our personnel. The greatest weight is given to leading indicators, as they provide proactive measures to actively improve performance; if implemented correctly, these also help drive good performance as shown by lagging indicators.

We set lagging targets to exceed the industry norms published annually by the IOGP. Some parameters, such as GHG reduction targets, have proven to be less meaningful in our business because our levels of activity and production can vary substantially from year to year. We look at normalising GHG emissions against hours worked but this too varies substantially with the type of equipment used in different locations and under differing environmental conditions.

Supporting data

A full set of CR data is available in our Data Appendix. This document includes methodology notes and KPI definitions, with a particular focus on KPIs from subject areas that were assessed in our materiality process to be the most important to our business and our stakeholders.

External assurance

An independent environmental data assurer, ITPEnergised, verified our 2019 GHG emissions, as stated in our Annual Report and Accounts and this CR report. Within the scope of the limited assurance engagement, the GHG statements made are found to be materially correct. ITPEnergised found that Cairn’s data collection process and the data reporting platform CR360 are robust and provide consistent and accurate output data when tested. ITPEnergised is satisfied the GHG data is reliable and has been prepared in accordance with Cairn’s reporting methodology.

A full assurance statement, with details of the assurance scope, independence of ITPEnergised and recommendations, is available online.
**Glossary**

2C  Denotes best estimate scenario of contingent resources

2D  two dimensional

3D  three dimensional

2P  Proved plus probable reserves, denotes best estimate scenario

P10  Value with a 10% probability of being equal or exceeded, low degree of certainty

P50  Value with a 50% probability of being equal or exceeded, medium degree of certainty

P90  Value with a 90% probability of being equal or exceeded, high degree of certainty

3Rs  Cairn core values: Respect, Relationships and Responsibility

ABC  anti bribery and corruption

AGM  annual general meeting

ALARP  as low as reasonably practicable

APA  Awards in Predefined Areas

API  American Petroleum Institute

AQI  Audit Quality Inspection

bbl  barrel

bbls  barrels

BIA  biodiversity impact assessment

bn  billion

boe  barrels of oil equivalent

boepd  barrels of oil equivalent per day

bopd  barrels of oil per day

bps  basis points

BRINDEX  the Association of British Independent Oil Exploration Companies

BST  British Standard Time

Capex  capital expenditure

CCO  Corporate Criminal Offence

CDS  credit default swap

CEO  Chief Executive Officer

CERT  Crisis and Emergency Response Team

CFO  Chief Financial Officer

CHA  critical habitat assessment

CIL  Cairn India Limited

CMAPP  Corporate Major Accident Prevention Policy

CO2  carbon dioxide

COO  Chief Operating Officer

COP21  2015 Paris Climate Conference

COS  Cairn Operating Standards

CR  corporate responsibility

CRMS  Corporate Responsibility Management System

CSL  Capricorn Senegal Limited

CSR  corporate social responsibility

CUHL  Cairn UK Holdings Limited

Defra  Department for Environment, Food and Rural Affairs

E&A  exploration and appraisal

EBL  environmental baseline

EIA  Environmental Impact Assessment

ETI  Extractive Industries Transparency Initiative

ELT  Exploration Leadership Team

ERP  enterprise resource platform

ESG  Environmental, Social and Governance

ESIA  Environmental and Social Impact Assessment

ESOP  employee share option plan

ESOS  Energy Savings Opportunity Scheme

EU  European Union

EU ETS  EU Emissions Trading Scheme

EY  Ernst & Young LLP

FAN  FAN oil discovery, Senegal

FDP  field development plan

FEED  front end engineering design

FID  Field Investment Decision

FLOWSTREAM  FlowStream Thruer Ltd

FPSO  floating production storage and offloading

FRC  Financial Reporting Council

Ft  foot

G&G  geology and geophysics

GAAP  Generally Accepted Accounting Principles

GBP  Great British Pound

GDPR  General Data Protection Regulation

GHGs  greenhouse gases

GRI  Global Reporting Initiative

GWP  global warming potential

H1/2  first/second half of a year

HR  Human Resources

HIRA  human rights impact assessment

HSE  health, safety and environment

HSSE  health, safety, security and environment

IAS  International Accounting Standards

IASB  International Accounting Standards Board

ICSA  The Chartered Governance Institute

IEA  International Energy Agency

IFC  International Finance Corporation

IFRS  International Financial Reporting Standards

IIP  Investors in People

IIID  Indian Income Tax Department

IMT  Incident Management Team

INDC  intended national determined contribution

INPG  National Institute for Oil and Gas (Senegal)

INR  Indian rupee

IOPC  International Oil Pollution Compensation

IP  Investment proposal

IPCC  International Panel on Climate Change

IPIECA  International Petroleum Industry Environmental Conservation Association