

Behaving Responsibly Towards the Environment



BEHAVING RESPONSIBLY TOWARDS THE ENVIRONMENT

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 minimise any adverse impact on the environments in which we work, without affecting our commitment to safety.

BUSINESS PRINCIPLES

- We take a precautionary approach to our effect on the environment.
- We strive to prevent and minimise our impact on the environment.

This year, the following environmental issues were identified as being of high materiality:

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[Read more about identifying material corporate responsibility issues on p15](#)

CONTRIBUTION TO SDGS



Impacts

Produced oil and gas to meet energy demand.

Contributed to energy security for host nations.

Promoted development in Senegal that aims to contribute to the domestic gas supply, replacing higher-carbon electricity generation sources.

Provided funding to Heriot-Watt University to support clean energy research.



Impacts

Promoted human rights, environmental and safety standards through contracts and audits.

Continued to apply robust waste and chemical management plans throughout our operations.



Impacts

Launched an initiative to benchmark the energy efficiency of projects and developed mechanisms for improving and promoting energy efficiency in operated projects.

Developed carbon intensity methodologies to support our commitment to reducing emissions.

Endorsed the World Bank's Zero Routine Flaring initiative and committed to avoiding associated emissions in our operated and non-operated projects.

Continued to challenge partners to reduce emissions and avoid flaring, including the assessment of potential opportunities to reduce fuel usage.

Contributed to climate change adaptation projects through social investment.



Impacts

Assessed prospective new ventures and opportunities for environmental and biodiversity risk.

Implemented robust programmes for accident prevention, preparedness and response.

Completed drilling programmes without significant impact.

Conducted habitat studies in Mexico and supported endangered sea turtles.

Completed post-drilling environmental survey in Mexico, which demonstrated no adverse impact on the environment in line with government criteria.



Impacts

Endorsed the World Bank's Zero Routine Flaring initiative, which seeks to phase out routine flaring by 2030.

Joined the Proteus Partnership, a global initiative that supports the development, dissemination and analysis of global data on protected areas, threatened species, and critical marine and coastal ecosystems.

Energy Use

We commit to promoting the efficient use of energy, with the aim of conserving natural resources, reducing atmospheric emissions and mitigating the impacts of our activities. We aim to design our exploration projects to minimise time in the field through efficient working and planning for potential delays due to environmental and climatic conditions.

Direct energy use across the Group mainly comprises diesel fuel combustion in our field operations, as well as some minor electricity consumption in our offices. Consumption varies with the level of activity and, in 2020, our energy use was relatively modest (351,608 GJ), having completed our drilling campaign in Mexico and sold off our interests in planned Norwegian activities.

Our indirect energy use (2,491 GJ), arising largely from travel in support of our operations and New Venture activities, was also limited due to COVID-19 restrictions.

Energy-Efficient Assets and Equipment

We continue to identify and implement measures to reduce energy use associated with our operations, in line with our BRINDEX commitment and in support of UK Government aspirations.

In 2020, we initiated a systematic way to benchmark the energy efficiency and associated emissions of the vessels, rigs and helicopters we contract, and build such criteria into our tendering and selection processes. If all other technical and commercial considerations are equal, energy use and emissions could prove to be points of differentiation for selection.

Greenhouse Gas (GHG) Emissions

GHG emissions – mainly from the combustion of fuels such as marine diesel used by rigs and transport vessels – form a relatively modest part of our operational footprint. We monitor and manage the emissions from our operated assets, disclosing them in accordance with industry requirements and standards. Complying with national regulatory requirements across our global operations is also an important priority.

Around 95% of the GHG emissions associated with our operations occur in the supply chain, which largely limits our influence to the selection of energy-efficient contractors,





on freshwater and enhancing our reporting of water management. In 2020, we completed CDP's Water Security questionnaire at the basic level.

With discharges during the year largely limited to domestic sources and one offshore campaign in Mexico, we generated 51.47 tonnes of hazardous waste and 90.10 tonnes of non-hazardous waste in total. An environmental sampling programme conducted after the project completed confirmed that no significant impact or environmental damage occurred.

For further information, please see our Corporate Responsibility Report: www.cairnenergy.com/working-responsibly

Product Stewardship

The crude oil produced from our Catcher and Kraken North Sea assets is sold to buyers who blend or refine it into fuels, lubricants and chemicals used in everyday items. It is our responsibility to ensure all production operations and transportation comply with regulatory requirements, as well as our own Code of Ethics and Corporate Environment Policy.

We continue to engage our partners to ensure proper stewardship is in place via Operator Committee meetings and Technical Committee meetings on a routine basis. Hydrocarbon sales are carried out by marketing agents on Cairn's behalf, although we are closely involved in the process.

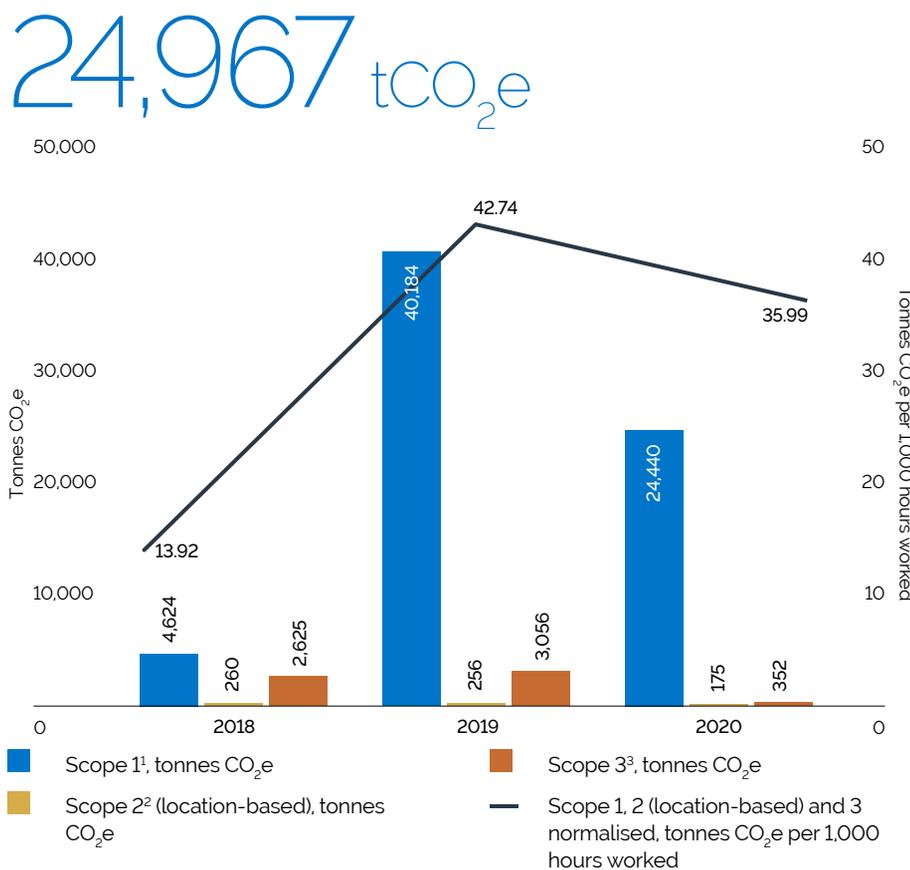
Protecting Biodiversity and the Environment

We have always recognised the risks to the habitats, ecosystems and species that sustain our planet, and their importance to the communities relying on them. We work hard to minimise the biodiversity risks associated with both operated and non-operated opportunities, and commit not to operate in World Heritage sites.

Where our current or potential activities might affect critical habitats, protected areas or the welfare of communities relying on ecosystem services, such as in Suriname and Mexico, we undertake environmental and social assessments of their potential biodiversity impacts. We then work with technical specialists, government departments, NGOs and other local stakeholders on any mitigation required.

Our Biodiversity Framework is set out in our CRMS, and we use the latest industry guidance to integrate biodiversity into our CR management processes. All relevant commitments are covered by our Business Principles and our Environment Policy, which was reviewed and reissued in October 2020. We also include biodiversity aspects in investment proposals to identify critical risks before any work commences.

Total and normalised GHG emissions (Scopes 1, 2 and 3)



Footnotes on our GHG emissions data are available on page 192.

assets and equipment, and their carbon and energy management during projects.

We also endorsed the World Bank's Zero Routine Flaring initiative, which seeks to phase out routine flaring by 2030.

In absolute terms, our GHG emissions vary with the duration and nature of our projects during the year. Compared to the previous year, 2020 was a year of low operational activity for Cairn.

In Mexico, operations largely ended in March, other than post-drilling, sampling and wellhead recovery. We also completed the sale and divestment of our interests in Senegal. This meant that our total GHG emissions decreased to 24,967.35 tonnes CO₂e in 2020, while normalised emissions

also fell to 35.99 tonnes CO₂e per 1,000 hours worked.

Details about our data, methodologies and calculations can be found in the data appendix of our Corporate Responsibility Report and on our website www.cairnenergy.com/working-responsibly

Water, Effluents and Pollution

Informed by regulatory compliance and industry best practice, we seek to minimise the environmental impact of our operations by carefully managing our water use, limiting discharges into the sea and reducing waste.

Water resilience in the face of climate change and water use are areas of increasing focus for our industry. Our approach involves assessing the need for abstracting freshwater, managing freshwater more efficiently, reducing our operational impacts

Case study

KEMP'S RIDLEY SEA TURTLE PROTECTION

In 2020, we carried out a Critical Habitat Assessment and a Biodiversity Impact Assessment for Block 9 offshore Mexico, with our joint venture partner CITLA Energy. This identified that the project is located within an area assessed to be Critical Habitat¹ for the endangered Kemp's Ridley sea turtle and noted possible impacts on them arising from our planned activities.

Having already taken mitigation measures identified through our ESIA – minimising contact with wildlife, avoiding sudden changes in vessel direction and soft starts for operating equipment – an observer undertook additional monitoring of all sea turtles and marine mammals for our offshore drilling unit. Support vessels were restricted to speeds below 10 knots.

Although our activities were judged to have no impact on the species, we looked to achieve a 'net gain' by contributing to the efforts of a local turtle conservation group, Vida Milenaria. With the group patrolling 35 kilometres of beach, protecting the turtles' nests from poachers and natural predators during nesting and hatching, we donated US\$12,000 to enable the purchase of a new all-terrain vehicle and associated fuel for one year to support their efforts.

Hatchlings released in 2020

93,193



Specific Biodiversity Action Plans (BAPs) are developed where there is either a significant risk to biodiversity or a clear benefit for targeted conservation. In 2020, we developed a BAP for our operations within Block 9 offshore Mexico, with an emphasis on protecting a critically endangered species of sea turtle (see above). The BAP forms part

of the management approach for future work, in line with Good International Industry Practice.

In November 2020, Cairn signed an agreement to join the Proteus Partnership. This global collaboration between the conservation community and 13 businesses from the extractive industries provides

members with access to biodiversity data, assessment tools, briefings, technical assistance and training resources. Led by the UNEP World Conservation Monitoring Centre, the initiative supports the development, dissemination and analysis of global data on protected areas, threatened species, and critical marine and coastal ecosystems.

This data will inform policy developments, underpin effective action and provide opportunities for engagement and dialogue, as well as support some of our key business processes including investment proposals for new ventures, Environmental and Social Impact Assessments (ESIAs) and reporting. We held a training session in November 2020 to inform our geologists about the new data at their disposal.

Environmental Baseline Surveys

Environmental baseline (EBL) surveys use photography, seabed sampling and physicochemical analysis to define existing biodiversity, environmental and other conditions near our activities. They help us to determine the extent of existing damage from the previous activities of others. Repeating them upon exiting a location helps to delineate our impact and avoid liability for the impacts caused by others. We are starting to evaluate the potential of environmental DNA profiling for enhancing environmental surveys.

We conducted no new baseline surveys in 2020 as most planned operational work was deferred, in part due to the COVID-19 situation.

- Mexico: In tying up work on our two wells in Mexico, we conducted a post-drilling survey in 2020 for Block 9, which confirmed the absence of environmental damage against Mexican regulatory criteria.
- Côte d'Ivoire: On assuming operatorship of Blocks 301 and 302, both shore and shallow water locations, we conducted a thorough review of the environmental and social baseline work already undertaken by the previous operator. We also needed to facilitate future seismic survey work.
- The UK: Surveying will commence in 2021 in advance of environmental impact assessment work for the future drilling programmes, which include a planned 2022 well in the UK Continental Shelf (UKCS).
- Senegal: Since the transfer of operatorship, we have collaborated with the new operator to ensure ESIAs were conducted as part of the development planning and legislative approvals. We sold our interests in December 2020.

More detail on biodiversity is available in our Corporate Responsibility Report www.cairnenergy.com/working-responsibly

1 Term from the IFC's Performance Standard 6. Biodiversity Conservation and Sustainable Management of Living Natural Resources. IFC, 2012 used to describe any area of the planet with high biodiversity value, including habitat of significant importance to critically endangered species.