Sustainability, social responsibility and climate change report

New Zealand Oil & Gas Compass & Values

WHO WE ARE

We are a New Zealand oil and gas business with a global outlook. We are ethical, values-based, and nimble.

WHERE WE ARE GOING

We are creating a lean, Wellington-based exploration and production business, managing a portfolio of oil and gas assets, mostly as a non-operated partner in production that has development upside, and exploration that fits our asset base, in markets where our expertise can add value.

HOW WE WILL GET THERE

We use our technical capability, relationships, values, shareholder support and flexibility to create opportunities, execute reliably and in a way that makes us proud so that high quality people want to work with us.

OUR VALUES

Respect

- We operate safely without harm to people or environment
- We display respect and understanding for other people, opinions and cultures
- We respect the values, laws and tikanga of the places where we work
- We are reliable. We do what we say we will do

Collaboration & Communication

- We listen, we are open, honest and transparent
- We collaborate actively
- We provide constructive feedback and accept feedback graciously
- We put big issues on the table so they can be resolved

People & Passion

- We are inclusive
- We encourage, care for, and motivate each other
- We actively seek out and deliver ways to pitch in or help
- We have fun and work with passion

Commercial Focus

- We are flexible and nimble
- We work with initiative and imagination
- We develop mutually beneficial relationships with key stakeholders and partners
- Our technical competencies are a source of advantage that we continually seek to improve

Sustainability Framework 2020 – Value Creation Process

FINANCIAL CAPITAL

Our strong financial position, prudent financial management and ability to attract investment.

HUMAN CAPITAL

Expertise, skills and engagement of our people.

FIXED CAPITAL

Our physical infrastructure and assets, primarily owned and operated through joint venture or other commercial arrangements, are fundamental to the delivery of our purpose.

INTELLECTUAL CAPITAL

Our technical expertise, data, models, brand and reputation.

NATURAL CAPITAL

Inputs from the natural world including access to oil and gas reserves, water, land and minerals/materials required to support infrastructure required in production.

SOCIAL & RELATIONSHIP CAPITAL

Relationships are crucial to our success. Within NZOG, with our existing joint venture partners, with our communities, regulators and prospective commercial partners, our social license to operate is key.

OUR MAGIC

Bringing Energy

Helping to meet the world's energy needs in a safe & responsible way

OUR VALUES

Respect | **Collaboration & Communication** | **People & Passion** | **Commercial Focus**

Our team of technical and commercial experts add value to exploration and production opportunities, to deliver energy under safe, environmentally sound and commercially successful terms, with long-term values-driven partnerships

OUR INPUTS

VALUE THROUGH OUTCOMES

OUTPUTS

$37.4 million revenue

2,214 TJ of **NATURAL GAS**

146,000 barrels of **oil**

$40,000 for **COMMUNITY PROJECTS**

3,564 Trees Planted

UN Sustainable Development Goals (UNSDGs)

ENERGY SECURITY AND AFFORDABILITY

We help deliver energy value through the supply of natural gas in New Zealand, which supports renewable energy electricity (especially in dry years), and internationally, by providing supply, price stability, and affordability.

- Leadership through industry, policy and regulatory forums
- Delivering gas to market, in NZ, Australia and beyond

A CLEAN AND LOWER-CARBON ECONOMY

We help deliver gas and light oil into the energy system, bringing health and lower carbon benefits.

- Reporting commercial and non-commercial value transparently

WEALTH CREATION & PRODUCTIVITY

Gas and light oil energy inputs help to produce goods and services society needs to prosper.

We contribute to New Zealand's wealth and productivity through royalties and tax contributions that help to fund hospitals, schools and other essential social services.

- Delivering commercial value via annual taxes and royalties, job creation, shareholder value

COMMUNITY WELLBEING

Local environments and communities are strengthened through open engagement and contributions particularly relating to science education, energy efficiency and conservation.

- Community and Iwi Engagement
- Community Partnerships and Investment

A GREAT PLACE TO WORK

We are a highly engaged, skilled, safe, sustainable, diverse and inclusive workplace

- Proactive diversity and inclusion practices
- Greater environmental contributions

Materiality

How Materiality was Determined.

We sought feedback from a range of stakeholders to identify our material issues.

COMMUNITY PANELS

Our Southern Community Panels members are drawn from a cross-section of the southern community where we have an interest in two offshore permits and bring perspectives from their networks to the table. No work is progressing in those permits, but we discussed our activities and current issues with Panel members to gain an understanding of community perspectives.

INVESTORS

Our board conducted a listening tour with larger shareholders during the year.

STAFF

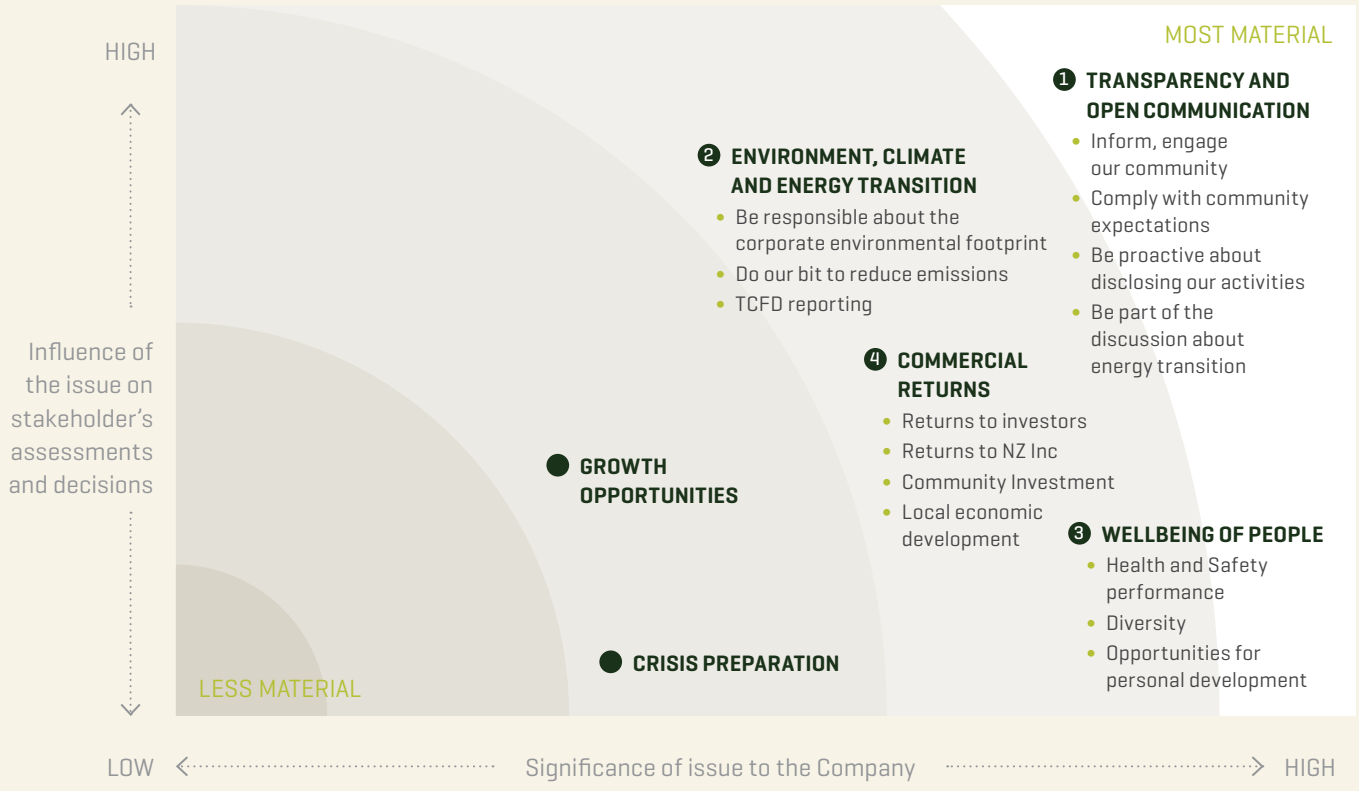
The Company surveyed staff to measure engagement and attitudes to key issues, including sustainability.

STAKEHOLDERS

We considered feedback received from industry groups, officials, business representatives at national and regional level, and community groups. We participated in industry and business interactions with government and political leaders. We also have signed relationship agreements with a range of community organisations and we periodically meet them to determine key issues.

For this report we provide more detailed responses to the top four material issues: Transparency and open communication; Environment, climate and energy transition; Wellbeing of People; Commercial opportunities.

Materiality Matrix



1

Transparency And Open Communication

- Inform, engage our community
- Comply with community expectations
- Be proactive about disclosing our activities
- Be part of the discussion about energy transition.

Informing and engaging

We are proud of our activities and how we go about them, and we invest in open dialogue and relationships. We understand communities where we are active legitimately want to know what impacts our activities have, what steps we take to manage risk, and how the benefits will be felt.

Our activities in New Zealand are currently limited. In the South Island, no further progress is being made on two deepwater permits there, but we keep in touch with community interests there, including through our Community Panel. We have formalised relationship agreements with many community interests. These agreements commit us to respectful engagement and to learning from each other. In addition, we engage directly and early with iwi, with mana whenua and mana moana, in our common areas of interest as they arise.

We report openly on all of our activities, both to investors and to the wider community, and we seek opportunities to keep the industry, investors and the public informed.

We participate in discussions about energy transition in business and industry forums, as well as directly with government and political parties at ministerial and officials levels. We make submissions on relevant legislation and policy. We are members of reputable national business representative groups such as Business New Zealand and PEPANZ. We pay for research and analysis on transition issues. All of our advocacy documents are published on our website.

2

Environment, Climate and Energy Transition

- Be responsible about the corporate environmental footprint
- Do our bit to reduce emissions
- TCFD reporting

See our TCFD report on Page 27 for detailed reporting.

In summary: We support carbon budgets and emissions pricing as the most efficient and effective tools to manage carbon emissions. In our view, an economy-wide response to the global issue of climate is more effective than enterprise-level response, but we are responsible about our own carbon footprint, supporting initiatives such as recycling in our head office. The Company has reduced or offset our emissions from corporate travel and certain other office-related activities at our corporate HQ. We have participated in a carbon-reducing tree planting programme to offset our head office emissions.

In this year's annual report, we have responded to shareholder and community expectations of comprehensive TCFD reporting, and we have arranged training for executive management in TCFD compliance.

We are committed to responsible management practices that minimise adverse environmental impacts from our activities, using soundly-based science as the basis for all our environmental decisions.

Excellence in environmental performance is essential to our business success. We comply with all applicable environmental laws and regulations and good practice industry standards. We apply reasonable standards where regulatory legislative requirements and standards do not exist. We work to minimise pollution and the cumulative environmental impact of our activities at a local, regional and global level, and try to reduce waste and improve resource use.

Our environmental management plans for all our activities identify, assess and manage environmental risks as low as is reasonably practical.

3

Wellbeing of People

— Health and Safety performance

— Diversity

— Opportunities for personal development

Well-being of people regularly features higher in internal materiality surveys than in feedback from outside. Nevertheless, we make safe operating and the health of our workforce our top priority.

Staff incentives are linked directly to corporate health and safety performance. Health and safety reporting includes both our own sites, and non-operated sites where we have an interest, and our supplier code sets out requirements for companies that do business with us. Performance is monitored daily and reported through to an HSE weekly meeting, as well as to weekly executive management meetings. The ORS committee reviews performance and policies and reports on performance to the board.

During the pandemic lockdown, we quickly implemented initiatives to keep people safe. Our corporate office adjusted successfully to working from home. On returning to the office we adopted bespoke protocols complying with the guidelines for each alert level that involved social distancing measures, hand sanitising, and travel restrictions. We have had no exposure to Covid-19. The Kupe production station maintained operations through lockdown as an essential service, and had no incidences.

We have a diversity committee focused on improving diversity in our workplace. We have achieved a Rainbow Tick, diversity initiatives are reported at all staff meetings, staff attitudes to diversity initiatives are surveyed, and we regularly engage in cultural activities that are meaningful to our staff.

We invest in the development of all our staff. Certain training activities were cancelled or postponed because of the pandemic this year, however some were able to proceed online or re-scheduled. Regular coaching and training opportunities continue to be provided across the business.

4

Commercial returns

- Returns to investors
- Returns to NZ Inc
- Community Investment
- Local economic development

Returns to investors are set out in the financial statement in this report, from page 84.

Our social investment is guided by our community, following recommendations by our Community Panel. We ask for advice about high priority projects, and we report publicly on our performance in meeting the Panel's expectations.

Through our social investment we live our values as good partners, committed to enduring relationships with our neighbours and wider community. We make social investments that make a sustainable difference. Unlike some companies, we don't do social investment as marketing in disguise.

Examples of community investment by New Zealand Oil & Gas as a result of Panel recommendations include:

- The Cosy Homes Trust
- Dunedin Curtain Bank
- School Science Fairs.

We report in more detail about our community investment on pages 24–25.

The best investment we can make in the community is economic activity. The upstream oil and gas sector contributes over $2.5 billion to New Zealand's Gross Domestic Product (GDP), the Government collects approximately $500 million in royalties and income tax from the sector annually, and oil exports are worth approximately $1.5 billion a year. Oil and gas workers earn twice the national average salary and create seven times the average value earned per year, money that is spent in local communities.

The Company adopted a policy on Capturing Local Economic Benefits in response to an earlier materiality survey.

The policy commits us to promoting local content and capturing local benefits. We commit to studying opportunities for the wider community to participate commercially in our projects, and to producing a local content plan for significant developments. We also believe our expertise in areas such as health & safety and international business processes can help local enterprise compete on a commercial basis.

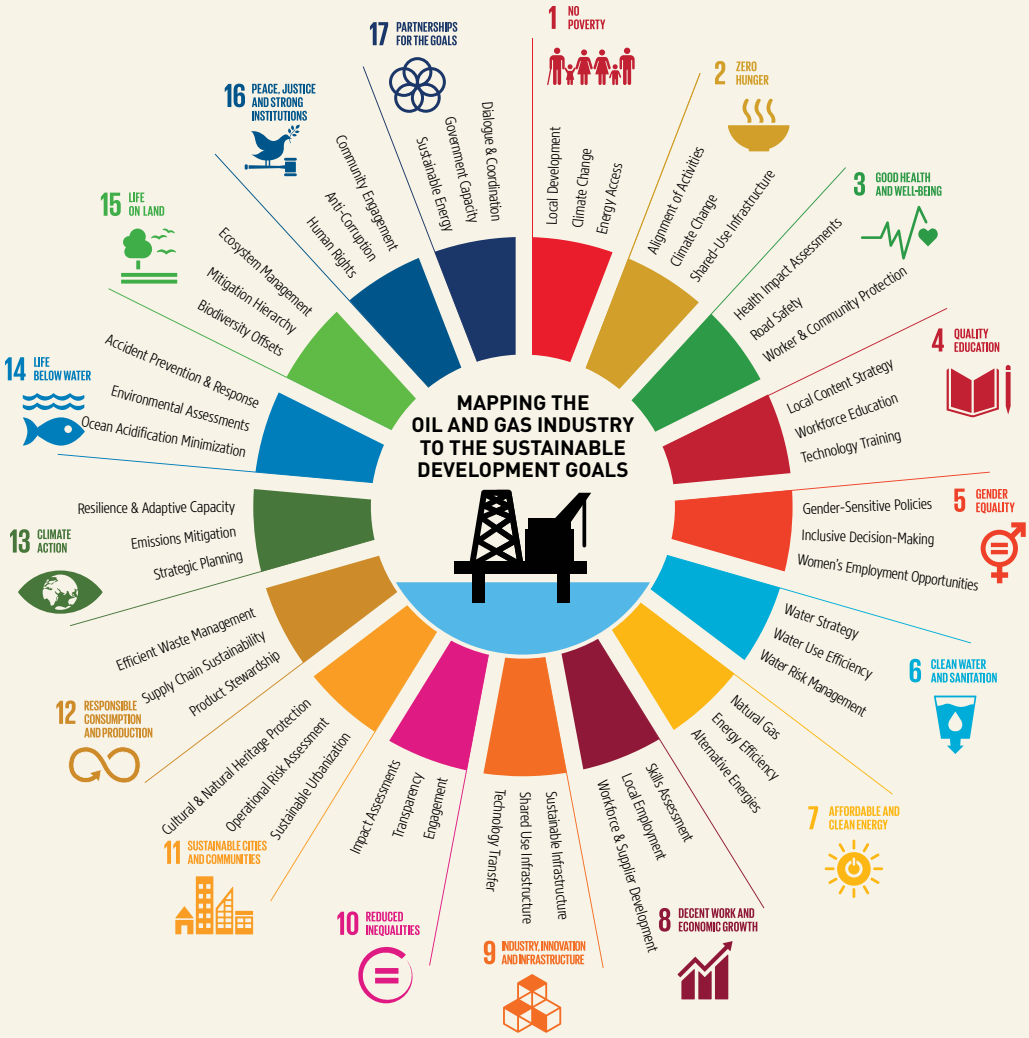
We want to find ways to improve entry to our industry for people from diverse backgrounds, including women, and people from cultural and social backgrounds that are under represented in the industry.

Sustainable Development Goals

The UN's 2030 Agenda for Sustainable Development represents the world's plan of action to end poverty, protect the planet and ensure prosperity for all. Its 17 Sustainable Development Goals has specific targets to be achieved by 2030.

IPIECA – the Global Oil and Gas Industry Association for Environmental and Social Issues — produced a report in 2017: ***Mapping the Oil and Gas industry to the Sustainable Development Goals: An Atlas***. It encourages oil and gas companies to incorporate SDGs into their business and operations, and investigate how the industry can help to achieve the SDGs.

The 17 SDGs relevant to our sector are illustrated below and our activity related to them is shown in the following table.



Our business strategy of responsibly delivering energy to help meet society's energy needs supports the SDGs

Development Goal	Initiatives by New Zealand Oil & Gas	More Information
1 NO POVERTY	The taxes and royalties we pay help the government fund essential social services. Natural gas helps to keep energy costs affordable, and produces less carbon than many alternatives in the global energy system	Pages 84–112
2 ZERO HUNGER	Affordable energy security is a crucial part of New Zealand's agricultural exports to the world	Pages 6–11
3 GOOD HEALTH AND WELL-BEING	Support for warm homes. Employee health and well-being checks, safety focus	Pages 20, 24–25, 65, 76 www.nzog.com/dmsdocument/492
4 QUALITY EDUCATION	Support for primary and tertiary Science Fairs in Otago and Southland. Working with O.G. Oil & Gas to deliver scholarships and support industry research in 2019.	www.nzog.com/our-story/communities/nzog-scholarships/the-eyal-and-marilyn-ofer-family-foundation-scholarship-program/
5 GENDER EQUALITY	Inclusive decision making through community engagement. Diversity Policy, family-friendly and flexible work place focus. Seeking Rainbow Tick	Pages 58–59
7 AFFORDABLE AND CLEAN ENERGY	Commercial opportunities to help deliver energy to meet societies changing needs	Pages 28–31
8 DECENT WORK AND ECONOMIC GROWTH	Our values - Ethics and Transparency Capturing Local Economic Content Policy	Pages 14–15 www.nzog.com/dmsdocument/486
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Socially responsible production Advocate for regulatory change to support a price on carbon and carbon capture and storage	Pages 12–47
13 CLIMATE ACTION	Support for a price on carbon TCFD reporting Corporate office emissions reductions and offsets	Page 38 Pages 27–47 Pages 44–46
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Our values - Ethics and Transparency Corporate Governance Materiality Matrix and Stakeholder engagement	Pages 14–15 Pages 48–81 Page 18
17 PARTNERSHIPS FOR THE GOALS	Promote industry sustainability reporting, and industry use of SDGs and IPIECA material	This page and section from page 18

Supporting Our Community

Southland
Warm Homes Trust

$70,000

over past four years
towards insulating

150+ houses

Dunedin
Curtain Bank

$10,000

to date, and

$40,000

more over the next 2 years

Southern
Wildlife Hospital

$10,000

Dog Island
Motu Piu Trust

$10,000

Support for annual

Science fairs

in Dunedin and Invercargill

We funded the planting of

3,564 trees

Dunedin Curtain Bank

warmth · support · sustainability

Warmer homes through

Curtains in Dunedin

The Dunedin Curtain Bank up-cycles unwanted and unused curtains, lines them, and distributes them to those in need in our community.

Curtains make a significant difference to the warmth of a home. A third of all heat loss in an uninsulated home occurs through windows.

Over 7 years Dunedin Curtain Bank has given out 3,000 pairs of curtains. Last year it provided more than 450 pairs of curtains throughout Dunedin and its greater area.

On the recommendation of the Southern Community Panel, New Zealand Oil & Gas proudly supported the curtain bank with a grant of $10,000 with another $40,000 committed over the next two years.

COSY HOMES

Southland Warm Homes Trust

creating healthy homes

Warmer homes through

Cosy Homes Trusts

Many New Zealanders are living in cold, damp houses and experience associated health issues.

Since 2015 New Zealand Oil & Gas has been helping South Island warm homes trusts, after a recommendation from our Southern Community Panel.

The trusts are delivering more energy efficient homes and healthier living environments.

Our support was matched by the Energy Efficiency and Conservation Authority (EECA) and other third-party funding to provide insulation for over 150 homes across Otago and Southland.

Supporting science education through

School Science Fairs

Since 2016 New Zealand Oil & Gas has supported southern science fairs to help students understand more about earth science, energy efficiency, Mātauranga Māori, marine science, and much more.

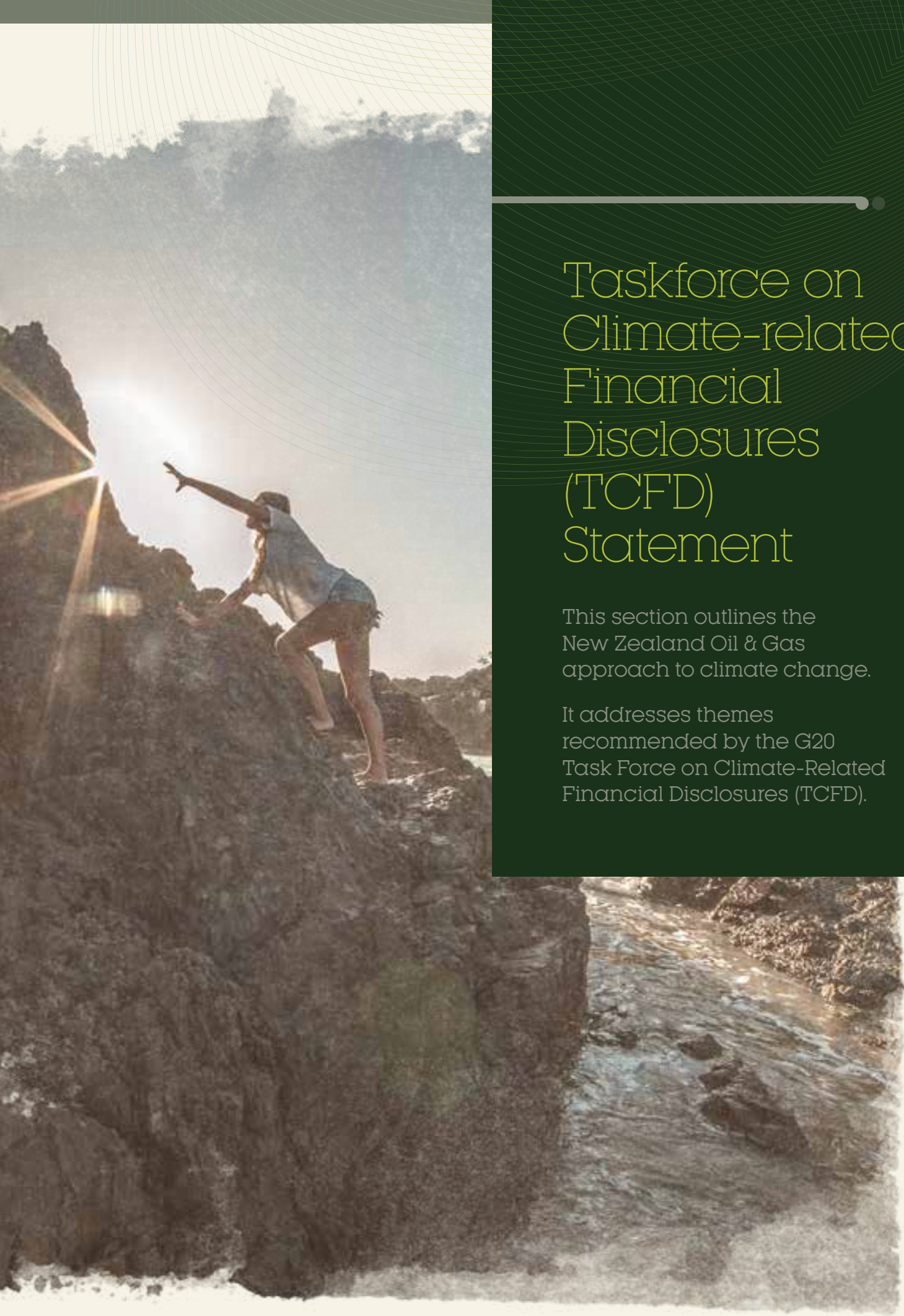
Recognition for our staff

New Zealand Oil & Gas congratulates Paris Bree, New Zealand young in-house lawyer of the year.

New Zealand Oil & Gas General Counsel Paris Bree was recognised at the 2019 New Zealand Law Awards for New Zealand Young In-House Lawyer of the Year.

In a busy year of achievement, her work included pulling together the complex Ironbark joint venture. Supporting her nomination, Nick Baker, from leading Australian firm Herbert Smith Freehills, said: "The transaction involved a number of complex features and counter-parties working across jurisdictions (including two ASX-listed companies and UK-based BP, one of the world's energy super-majors). Paris Bree led the legal work and significant components of the commercial negotiations. Her strong understanding of commercial drivers, knowledge of the full range of material issues, and her ability to negotiate delicate and intricate issues with multiple counter-parties set her apart. In our view Paris rates among the best in- house lawyers we deal with at any age and stage of their careers."

All this, and much more, was accomplished while taking time out from parental leave with her baby, then aged seven months.



Taskforce on Climate-related Financial Disclosures (TCFD) Statement

This section outlines the New Zealand Oil & Gas approach to climate change.

It addresses themes recommended by the G20 Task Force on Climate-Related Financial Disclosures (TCFD).

Statement from the managing director on TCFD and sustainability

New Zealand Oil & Gas is guided in everything we do by our values. We believe we can help to meet New Zealand's energy needs and run our business in a responsible, ethical way.

We are proud to set a standard for our industry among smaller cap companies, responding to climate challenges, and working on relationships in our community to develop our energy needs for the future.

This report sets out our progress.

In 2019 we completed a review of Taskforce on Climate related Financial Disclosures (TCFD) recommendations. As result, we have made changes to our governance approach to climate-related risks and opportunities. These changes have resulted in key climate risks and opportunities being considered in a structured way. We now provide for review at board-level through the board Operational Risk and Sustainability Committee (ORS).

Specific changes made as a result of this review include:

- Staff regularly consider climate issues in monthly HSSE meetings;
- Executive management received TCFD specific training
- We made reporting more transparent by changing to follow the TCFD structure where applicable.
- Climate risk and opportunities are a standing item on the ORS Committee agenda;
- Changes were made to the corporate risk register to more clearly identify climate-related risk.

The changes are outlined in more detail below following the TCFD structure: Governance, Strategy, Risk Management and Metrics and Targets. The structure is set out in the accompanying table.

New Zealand Oil & Gas accepts the science of climate change, and the role we have in helping to reduce global emissions. The world needs us to reduce the emission of carbon dioxide and methane from human activity.

In our own operations, we are taking steps to reduce our environmental footprint, but there is limited difference we can make. Direct emissions are produced from our small head office in Wellington, where we have reduced our carbon footprint, and we paid for 3,564 trees to be planted - enough to remove about 811 tonnes of carbon.

The broader challenge is around emissions from production of oil and gas, and use of the products themselves. The division between our use, and use by others are known in climate policy as Scope 1, 2 and 3 emissions. We can affect our Scope 1 emissions; we have less influence over ultimate uses, and less visibility over whether emissions are offset by the consumer and which alternative fuels are displaced. For example, gas exported to Asia as methanol may substitute for coal in the manufacture of petrochemicals or electricity generation, or it might be purchased because it provides cheaper baseload than a renewable alternative. Some of our production is re-sold in international markets, which sets a boundary to emissions reporting in this document.

We are pleased to set out in this section of our annual report the targets we adopted this year for climate-related performance and our performance metrics.

Our review of climate risk indicated that relevant risks were already carefully considered as part of our previous risk management framework. For example, risks of increasingly severe and frequent weather events are routinely considered in asset management risk plans. Risks of long term changes in demand and prices, access to investment capital and risks of regulatory responses to climate, have long been a standard feature of sensitivity testing in our economic models. However, as a result of the TCFD process, we have explicitly identified these risks as climate-related.

Caution is needed in giving undue weight to specific causes of risk. A couple of examples

— A pandemic was a predictable (and predicted) event, even if the particular covid-19 outbreak was not. The resulting general impact on demand is predictable as well. However, unlike climate-related risk, there is no clamour to highlight health-related risks within our risk reporting.

— As there is no feasible path to transition without gas substituting for coal in global energy systems, this strategy offsets financial risk, if any, from disinvestment in the sector.

We weigh risks methodically, and we caution readers that the introduction of a special section emphasising climate-related risk in this report reflects regulatory trends more than changes in the underlying weighting of particular categories of risk for our Company.

We have responded to climate risk also by supporting our industry and business groups to promote economically efficient carbon trading because a trading scheme is the fairest, most effective and responsible policy for reducing carbon emissions.

In forecasting demand, we have been guided by International Energy Agency reports, which find the demand for natural gas is growing and will reach a market share of about a quarter of all global energy demand.

Natural gas and LNG are crucial to reducing carbon emissions. Emerging economies are looking to substitute lower carbon alternatives like natural gas for higher emission coal. To illustrate: If we can locate more natural gas at Ironbark in Western Australia later this year, and develop a discovery, we may be able to export LNG into Asian markets. Experts believe Australian LNG exports could reduce global emissions of CO^2 by up to 300 million tonnes a year. That's three times as much as Australia's annual emissions reduction target under the Paris Agreement. A big natural gas discovery could materially reduce global carbon emissions.

Natural gas is the best form of thermal back up for renewables - renewable energy systems literally cannot meet modern energy needs without them.

Just as importantly, plants such as Kupe in south Taranaki, New Zealand, produce natural gas as ethically as just about anywhere on Earth. Labour standards and environmental performance compare favourably to third world coal mines, or the world's lithium and cobalt sources (key ingredients in batteries).

Unlike some of the oil that comes from the world's largest producing jurisdictions, revenues from Kupe do not fund terrorism, criminal enterprises or political corruption. We pay our taxes and we observe the rules and laws of the places we work.

Our activities help to make the world a better place. We do our work by a set of values that make us proud, and which contribute to a healthier, wealthier, more sustainable world. I am pleased to commend our activities to you and set out our approach below.

Andrew Jefferies
Chief Executive

Executive Summary

TCFD report

Our Climate Commitment

We recognise that climate change is a significant issue affecting society, which demands a transition to a low-carbon economy, global political collaboration and citizen action.

We believe that we help the world move towards a low-carbon economy by being part of the energy mix that is required to deliver secure, reliable, sustainable and affordable energy.

We recognise and support global efforts to reduce climate change through clear and meaningful policy and market settings.

Our Climate Change policy

</> www.nzog.com/dmsdocument/493

Our Action

WE WILL

Actively identify, manage and mitigate material climate risk to our business, and report our governance, strategy, risk management and targets and metrics transparently

Meet the carbon reporting requirements of the regions we operate in

Actively promote the benefits of gas as a lower-emitting transition fuel that supports energy reliability and affordability, and is a strong companion for the uptake of renewables

Actively review and implement opportunities to reduce the carbon impact of our own operations

Support our joint venture partners to look for and implement low carbon solutions

Respond meaningfully to stakeholder views and expectations around climate change as it pertains to our activities

WHAT WE HAVE DONE

Aligned risk management processes, governance and reporting with Taskforce for Climate Financial Disclosures framework. Include TCFD statements in Sustainability/ Annual Report

Commenced analysis of an internal price on carbon to inform TCFD risk and commercial decisions

Developed and adopted a climate policy

We planted 3,564 trees to offset our Scope 1 emissions

Governance

Disclose the organisation's governance around climate-related risks and opportunities.

Recommended Disclosures

A Describe the board's oversight of climate-related risks and opportunities.

B Describe management's role in assessing and managing climate-related risks and opportunities.

See our response **pages 36—37** →

Strategy

Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.

Recommended Disclosures

A Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.

B Describe the impact of climate-related risks and opportunities on the organisation's business, strategy, and financial planning.

C Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Our responses **pages 38—40** →

Risk Management

Disclose how the organisation identifies, assesses, and manages climate-related risks.

Recommended Disclosures

A Describe the organisation's processes for identifying and assessing climate-related risks.

B Describe the organisation's processes for managing climate-related risks.

C Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.

See **pages 41—43** →

Metrics & Targets

Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunitieswhere such information is material.

Recommended Disclosures

A Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.

B Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.

C Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

Pages 44—47 →

Governance

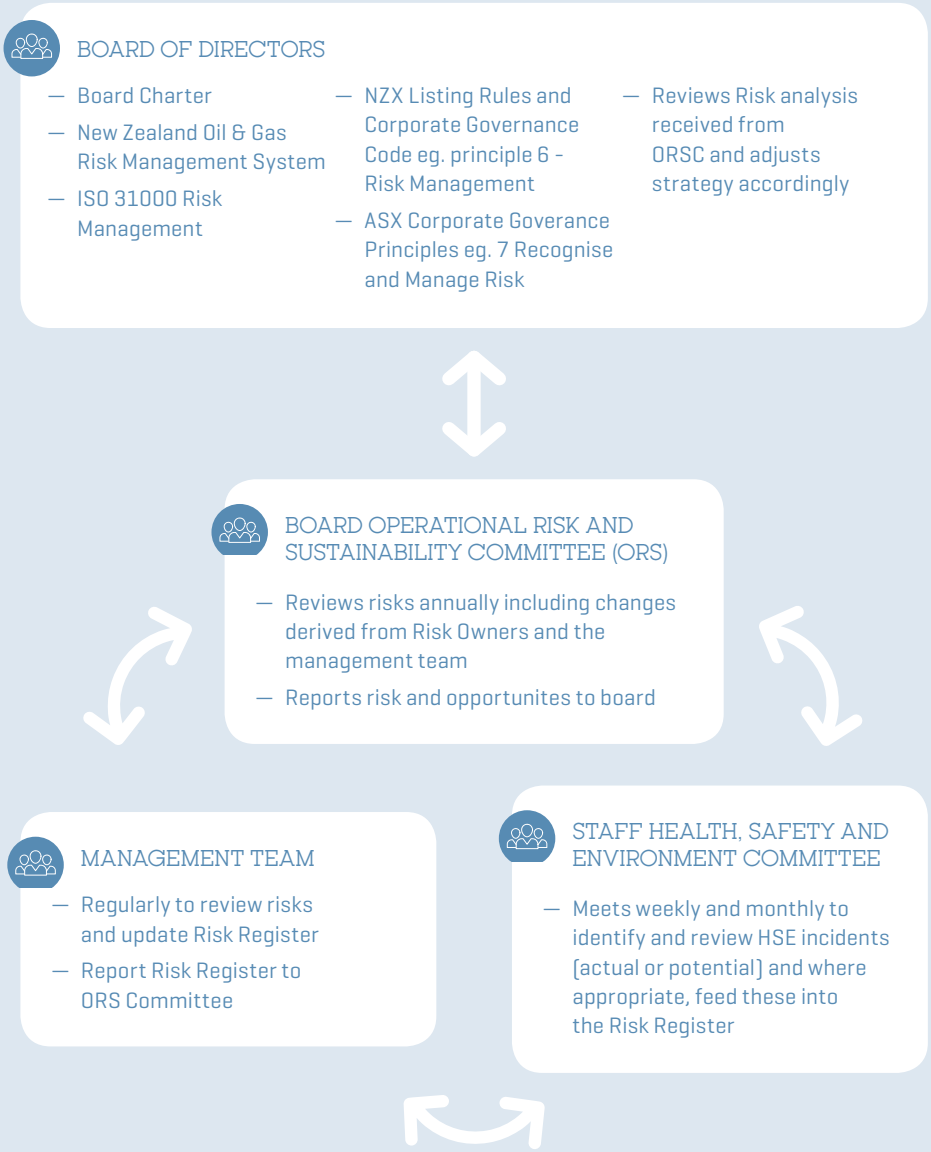
Climate risks are understood and managed.

Ultimately, the board has responsibility for reviewing all risks, including climate-related risk and opportunities, and ensuring these are appropriately managed to support delivery of our business strategy. The board's charter requires it to:

"Understand the material risks faced by the Company and ensure the Company has appropriate risk management strategies and control measures in place and is actively managing these."

The process for considering risks is set out in the risk management system framework. The framework aligns with International Standard ISO 31000 Risk Management - Principles and Guidelines and meets the requirements of the ASX Corporate Governance Principles and Recommendations, Principle 7: Recognise and Manage Risk.

This governance process is outlined in the graphic below.



The board Operational Risk and Sustainability Committee monitors risk and reviews the Company's policies, including its response to climate change, and climate-related risk.

A series of formal policies and risk management processes relate to climate issues, including the climate change policy, environment policy, risk management framework and sustainability framework.

The Company's risk register assesses climate impacts, both as stand alone risks, and as risks embedded in individual management plans. For example, asset management plans assess risks of increased severe weather impacts and coastal erosion effects that are forecast effects of climate change.

As outlined here, the Company adopted specific measurable targets in support of climate policy. These include:

- Making climate risks that were implicit in the risk register identifiable as climate-related risks.
- Assessing the Company's emissions and purchasing trees that offset carbon emitted by the Company's activities.
- Emphasising natural gas and LPG in its strategy. As gas emits much less carbon than coal, the IEA and other forecasters expect robust demand for gas for decades.

Management is responsible for identifying, assessing and managing risk and reporting this to the board through the ORS committee. Management risk owners continuously identify and manage risks. Management reviews the corporate risk framework including the risk register, regularly. The ORS committee receives a report on updates to the register.

The Company Health, Safety and Environment committee meets weekly and more formally monthly to identify and review actual or potential HSE incidents, including those at partner operated facilities. These reviews are integrated into the risk register, where appropriate. Climate-related risks may be raised in these processes.

Members of the Management Team, including the Chief Financial Officer and General Counsel undertook TCFD training in 2019.

At an operational level, responsibility for day-to-day oversight of climate risk and opportunity (including managing climate objectives and targets that sit within the Sustainability Framework), rests with the General Counsel.

All corporate charters and policies are available in the corporate governance section of the Company's website.

The Operational Risk and Sustainability Committee charter

</> www.nzog.com/dmsdocument/370

Environment policy

</> www.nzog.com/dmsdocument/491

The risk management system framework

</> www.nzog.com/dmsdocument/1-risk-management-procedure

Checklist

Recommendation	✔ I ✗	Explanation of non-compliance
Disclose the organisation's governance around climate-related risks and opportunities	✔	
Describe the board's oversight of climate related risks and opportunities	✔	
Describe management's role in assessing and managing climate-related risks and opportunities	✔	

Strategy

Low carbon opportunity for the Company.

The TCFD requires a description of climate-related risks and opportunities that the organisation has identified over the short, medium and long term, and a description of the impact of these risks on businesses, strategy and financial planning;

The relevant risks are shown in the table below, on Pages 42–43.

The main strategic impact of the risks and opportunities identified is that the Company has a preference for natural gas in its strategic planning processes. There is consensus across reputable modelling and projections, including the well-regarded World Energy Outlook produced by the International Energy Agency (IEA), that global energy demand will increase by a quarter to a third over the next 20 years. This demand will be met by renewables increasing quickly, along with a slower, but still increasing, supply of gas in the global energy supply.

The IEA World Energy Outlook projects more than two-thirds of global oil and gas imports will flow to Asia by 2040. The market for natural gas exported from New Zealand or Australia would be expected to be Asia. Imports of gas into China, India, Japan and South Korea will replace coal-fuelled electricity, or coal used to create methanol. A large gap in energy supply for Asia will not be filled with renewables, even with massive growth expected in renewable energy. Natural gas is therefore likely to avoid an expansion of coal use, which would be likely in the absence of natural gas availability.

This opportunity is a strategic focus for the Company. We anticipate increasing regulation, a higher price on carbon, and other limits to emissions and incentives for renewable energy uptake.

In anticipation of higher carbon prices, the Company is looking at these measures:

1. Applying a shadow carbon price to understand the potential impact of a carbon charge; and
2. The application of an internal levy to fund carbon mitigation projects

Initial investigation of a shadow carbon price appears to offer little analytical advantage, as price sensitivity is already a fundamental feature of the Company's economic models.

Some carbon mitigation is underway. The Company is offsetting its own travel emissions and some other office-related emissions. Few efficient policy mechanisms exist for offsetting Scope 3 emissions, which are emissions of carbon from use of the oil and gas that the Company sells. As carbon prices are applied to production of hydrocarbons (or to the import of oil in destination markets), further emissions offsets would double count the emissions impact.

Resilience of the organisation's strategy in different climate related scenarios.

The TCFD requires a description of the resilience of the Company's strategy, taking into consideration different climate related scenarios including a 2°C or lower scenario.

The Company keeps up to date with the International Energy Agency's World Energy Outlook, and models produced by other industry leaders such as the BP Energy Outlook. To further support our modelling assumptions, we seek information from our JV partners and potential commercial opportunities relating to management of climate change risk, including scenario analysis where undertaken, following the structure of TCFD. This investigation should alert us to climate change risk and opportunities across the jurisdictions we are active in.

Domestically, the Company applies analysis from the Business Energy Council of New Zealand's energy outlook scenarios.

Sensitivity testing is applied by checking outlooks against the IEA 'sustainable energy' scenario. In that model, policy mechanisms would be sufficient to reduce carbon emissions to a point where temperature increases would be limited to 1.5 degrees above long term natural averages). It states:

> *The Sustainable Development Scenario maps out a way to meet sustainable energy goals in full, requiring rapid and widespread changes across all parts of the energy system. This scenario charts a path fully aligned with the Paris Agreement by holding the rise in global temperatures to "well below 2°C … and pursuing efforts to limit [it] to 1.5°C", and meets objectives related to universal energy access and cleaner air. The breadth of the world's energy needs means that there are no simple or single solutions. Sharp emission cuts are achieved across the board thanks to multiple fuels and technologies providing efficient and cost-effective energy services for all.*
>
> *…*
>
> *In the Sustainable Development Scenario, natural gas consumption increases over the next decade at an annual average rate of 0.9% before reaching a high point by the end of the 2020s. After this, accelerated deployment of renewables and energy efficiency measures, together with a pickup in production of biomethane and later of hydrogen, begins to reduce consumption.*
>
> *By 2040, natural gas demand in advanced economies is lower than current levels in all sectors apart from transport, where demand remains broadly similar to the level reached in the Stated Policies Scenario. In developing economies, gas growth in the power sector rises to 2030 but falls back due to a growing share of renewables, while growth in industrial demand is half the level of the Stated Policies Scenario. Although absolute consumption falls, natural gas gains market share at the expense of both coal and oil in sectors that are difficult to decarbonise, such as heavy-duty transport and the use of heat in industry. Even though natural gas-fired power generation declines, capacity grows compared with today as a consequence of the role of gas in providing power system flexibility.*

Future demand for gas exported from the Company's areas of interest is heavily dependent on likely future demand for LNG. The IEA comments:

> *Developing economies in Asia are the main engines of LNG growth, with the market share of LNG in total gas demand growing from 20% in 2018 to 40% by 2040. By 2040, the average gas molecule travels over 5 000 kilometres to reach consumers in developing Asian markets, nearly twice as far as today.*
>
> *There is significant uncertainty, however, as to the scale and the durability of demand for imported LNG. Emerging markets in Asia face higher costs for imports than for domestically produced gas. Even though spot gas prices fell to record lows in 2019 on the back of ample LNG supplies, over the long-term end-user prices generally seem set to rise.*

The World Energy Outlook

</> www.iea.org/reports/world-energy-outlook-2019

The Company's strategy, which focuses on natural gas, aligns with this modelling.

By delivering gas and condensate into Asian markets, the Company is helping provide security of supply and downward price pressure that is contributing to reduced use of coal, and the poorer health outcomes and higher emissions that go with coal.

Checklist

Recommendation	✔ / ✗	Explanation of non-compliance
Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material.	✔	
Describe the climate related risks and opportunities the organisation has identified over the short, medium and long term.	✔	
Describe the impact of these risks on businesses, strategy and financial planning.	✔	
Describe the resilience of the organisation's strategy, taking into consideration different climate related scenarios including a 2°C or lower scenario.	✔	

Risk Management

An integrated and active risk management approach

The TCFD requires the Company to disclose how climate-related risks are identified, assessed, and managed, and how the processes for climate risk are integrated into wider risk management processes.

The Company's Risk Management System Framework applies consistent and comprehensive risk management practices.

Risks, including climate risks, are recorded in the central risk register, which considers the risks, reviews the controls, assigns ownership of a risk and tracks treatment plans. Risk assurance and oversight of climate risk management is provided through internal review by the board Operational Risk and Sustainability Committee. The full climate risks are considered as part of the normal risk management process. See the discussion under Governance, at page 36–37 in this section, and the discussion of the Risk Management System Framework in the corporate governance section on page 76.

Responsibility for identifying, documenting and managing risks and opportunities is delegated to the appropriate level of management. The General Counsel has responsibility for climate risk. Asset managers are responsbile for risks to individual assets, and the Chief Financial Officer has management responsibility for financial and investment risks associated with climate change.

Climate risks are identified on an ongoing basis. Consideration is given to industry and peer discussion, shareholder and community feedback, regulatory changes, and expertise of our own staff.

Primary risks to New Zealand Oil & Gas from climate change fall into the following broad categories: Policy and Legal, Physical (acute and chronic), Financial, Social/Political/Regulatory, and Technological. All these risks have potential financial and operational implications due to lost profitability and increased delays.

A summary of the main risks and mitigations, their time horizon (categorised as short, medium or long-term), and the strategy response to these is included in table on the following page.

The table uses the following time horizon categroies (S) short 0-5 years (M) medium 5-10 years (L) long 10+ years

Risk Type		Description	Time	Control
Non physical risks	Policy and legal risks	Litigation against companies and/or directors on climate grounds (claiming causation or seeking greater action to mitigate effects) could have reputational, development and operating cost impacts. Changing regulations including bans and restrictive regulations, taxes and emissions limits across all jurisdictions risk viability of projects	S M L	Robust internal processes. Ensure board and management understand their fiduciary duties around climate change risk. Update internal processes, including due diligence of commercial opportunities and joint venture processes to identify and manage climate risk. Monitor the jurisdictions where we undertake activities. Look to invest in a number of jurisdictions to mitigate changes to any individual regulatory environment. Actively participate in New Zealand's environmental regulation framework through our industry advocacy bodies PEPANZ, Business New Zealand and the Business Energy Council. Develop evidence for environmental business cases, including the role of natural gas in a net carbon-zero future.
	Reputational and social license risks	Increased stakeholder disengagement and oppositional activism. Loss of social license, leading to project delays or stoppages. Recruitment and retention risk. Risk of partner misalignment from divergent approaches to carbon management.	S M L	Strengthen corporate environmental performance through sustainability framework. Report value-add prominently, and engage skilled energy professionals in carbon response. Due diligence screening of commercial opportunities and joint venture processes to identify and manage climate risk.
	Financial risks	Divestment movement increases, affecting availability and cost of capital. Insurance premiums increase. Potential for classes of assets and locations to become uninsurable. Capital cost increases if new environmental standards require more expensive supplies relative to alternatives). Carbon pricing adopted across jurisdictions, or inconsistently between them. Changes to price and cost forecasts result in stranded assets or reserves.	S M L S M L M L S M L S M L	Consider whether an internal shadow price on carbon helps to mitigate carbon price changes, or affects investment decisions. Seek to align with JV partner approaches to achieve consistency in analysis. Due diligence screening of commercial opportunities and joint venture processes to identify and manage climate risk. Undertake assurance relating to insurance forecasts. Have access to a range of funding options, including strong relationships with lending institutions, and access to liquid capital markets. Robust reporting on ESG matters, including TCFD compliant reporting. Jurisdictional diversification to avoid impact of sudden, unilateral changes, confiscation or value destruction by regulation.

Risk Type		Description	Time	Control
Physical risks	Acute & Chronic	Physical assets, especially our coastally-located gas production plant, may be subject to increased frequency and intensity of extreme weather events such as storms, flooding, coastal inundation, lack of water availability, or slips. Offshore drilling and production delayed or shut in by increased weather events.	M L	Robust engineering for anticipated environmental conditions. Embedding internal procedures to ensure potential climate impacts are considered in development design. Carbon policy provides for review of climate issues in strategic and operational decisions. Examples include mitigation of operational emissions (flaring, fugitive emissions, use of renewable sources on site).
Opportunities	Commercial	Global reduction in high carbon sources such as coal is increasing demand for natural gas as a lower carbon partner to renewables.	S M L	Strategic preference for natural gas. Our role as non-operator but active JV partner presents opportunities to partner with and provide greater support for our joint venture partners in pursuing low carbon innovations on site, including addressing fugitive emissions. Review opportunity set to broaden exposure to lower emission possibilities, where New Zealand Oil & Gas has, or could realistically develop, competitive strengths. Further develop, evidence and communicate the environmental business case for gas displacing coal in Asia.
	Reputational	Partnering with local communities to support low carbon initiatives.	S M L	Maintain local relationships and discussions about contributing to socially desirable low carbon outcomes.

Checklist

Recommendation	✔ I ✗	Explanation of non-compliance
Disclose how the organisation identifies, assesses and manages climate-related risks	✔	
Describe the process for identifying and assessing climate risks.	✔	
Describe processes for managing climate risks.	✔	
Describe how processes for identifying, assessing and managing are integrated into overall risk management.	✔	

Metrics & Targets

Our targets reflect our current level of activity and the current size of the business

The TCFD requirement is to disclose the measures we use to assess climate-related risks and measure them, disclose emissions (by Scope 1,2 and 3), and describe the targets that we use to manage climate-related risk.

Risk management systems are described above.

Scope 1 emissions relate to New Zealand Oil & Gas-operated activities. Currently these include corporate office activities only.

Kupe emissions are included because they are material. Cue Energy emissions are the subject of Cue's reporting, and are not included in this statement.

Scope 2 emissions from power purchased for our head office are at such a low scale we consider a reduction target for this aspect would not be a meaningful use of resources. The Company intends to review an appropriate basis for an emissions targets if it commences significant exploration or other operational activity.

The Company has not reported **Scope 3** emissions.

However, air travel by our people prior to covid-19 was significant. Accordingly, we attempt to offset emissions from corporate air travel.

Read about tree planting carbon offsets

</> grow.treesthatcount.co.nz/funders/nzog#plantings

At reporting date

NEW ZEALAND OIL & GAS

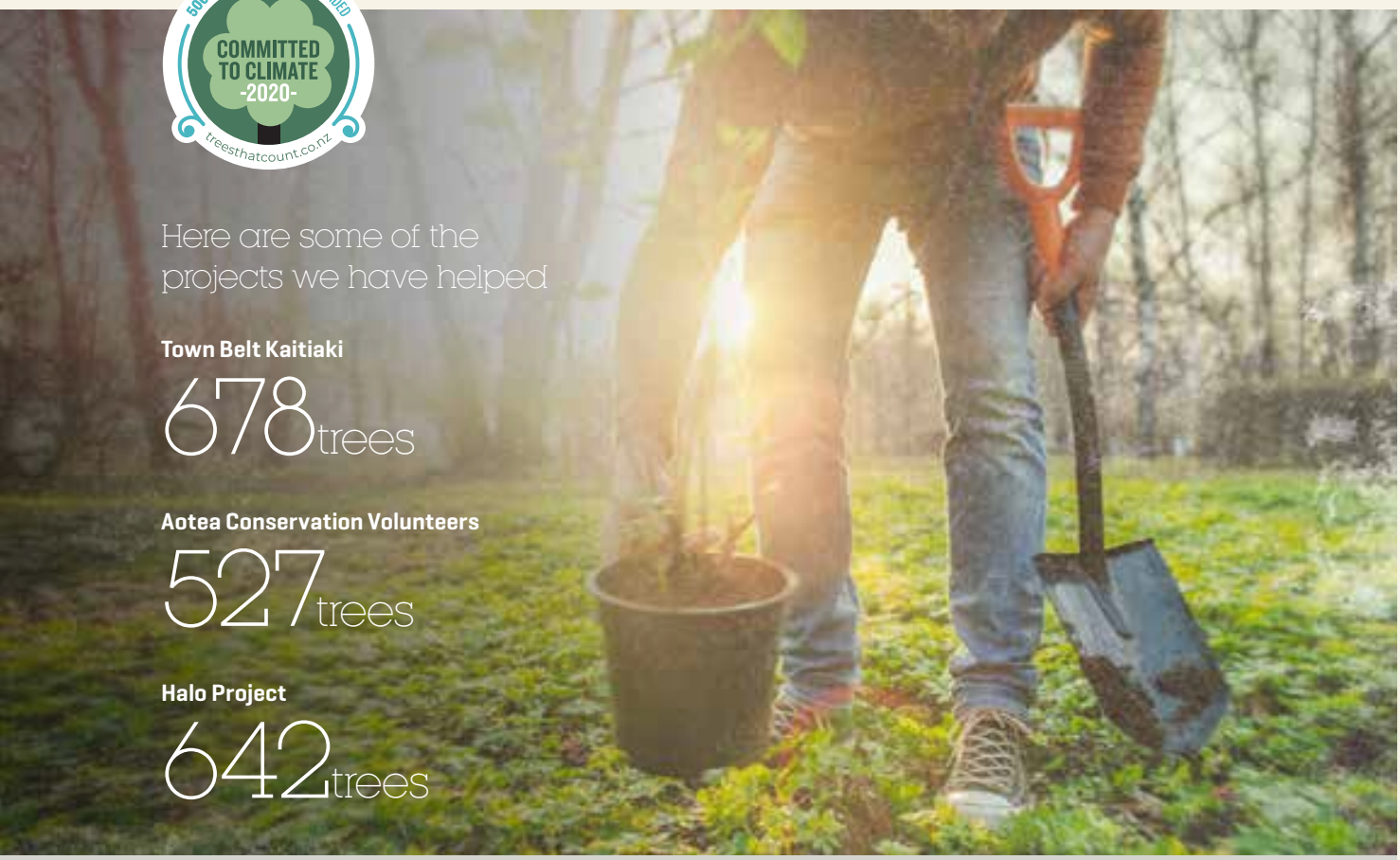
TREES THAT COUNT
TE RAHI O TĀNE

funded **10** planters

to plant **3,564** trees

estimates **811** tonnes of carbon will be removed

The Trees That Count marketplace provides a place for all New Zealanders to fund or gift native trees. This support is matched with planters throughout the country who are restoring, and growing, precious wildlife corridors or pockets of native forest, turning small projects into mighty ones.



Here are some of the projects we have helped

Town Belt Kaitiaki

678 trees

Aotea Conservation Volunteers

527 trees

Halo Project

642 trees

Town Belt Kaitiaki is a long-term, student-led education programme currently involving 14 Dunedin schools and early childhood centres (over 5000 young people). The space they have adopted is the 204 ha Dunedin Town Belt. The aim is to engage, inspire and empower young people so that they can make an active difference in their local community right now. Schools are involved in planting, predator control and raising the profile of the Town Belt, a vision that was set by the Student Leadership Team that runs the programme.

Read more about this project

</> grow.treesthatcount.co.nz/planters/townbeltkaitiaki#funding

Aotea Conservation Volunteers are retired active senior suburban residents transforming reserves from weeds to natives near Porirua in Wellington.

Read more about this project

</> grow.treesthatcount.co.nz/planters/aoteaconservationvolunteers#funding

The **Halo Project**, administered by the Landscape Connections Trust (LCT), is an umbrella project for a range of community-driven conservation and environmentally focused initiatives. Some of these include a predator control program, healthy streams educational program, and the Forest Restoration Project (FRP).

The FRP aims to increase the quantity, quality and connectivity of forest in the coastal Otago landscape from North Dunedin through to Karitane by working with both private and public landowners. Current restoration sites are highly varied and include bare pastureland, coastal ngaio forest, dryland kowhai forest and mature podocarp forest, among others. By increasing the number, size and connectivity of forest fragments, we are aiming to provide more habitat for indigenous species and allow them to move through the landscape more easily. In turn, this will integrate indigenous biodiversity into agricultural and residential landscapes, and into the daily lives of local residents.

Read more about this project

</> grow.treesthatcount.co.nz/planters/jamestweed#funding

Focus Area	Target	Impact	Measured by
Ensure internal processes account for carbon risk [1]	Investigate applying a shadow carbon price to understand the potential impact of a carbon charge. Investigate applying an internal levy to fund carbon mitigation projects. Undertake regular scan of regulatory and market impacts of climate change across operational jurisdictions, reported to the Operational Risk and Sustainability board committee. Ensure board and management understand duties around climate change risk.	Risks of carbon pricing reflected in financing and investment decisions.	Management reporting to Operational Risk and Sustainability board committee. Delivery of TCFD training module to ORS and Management in 2020
Ensure internal processes account for carbon risk [2]	Review risk management processes and governance.	Align risk management reporting with TCFD framework.	TCFD statements in Annual Report and posted online.
Mitigate the Company's operational emissions [3]	Environmental contribution through tree planting programme.	Helps to offset Scope 1 emissions from corporate air travel	Reporting of offset of annual emissions from flights. Carbon mititgation through Trees That Count methodology.
Provide alternative to energy sources associated with high emissions and poor human health outcomes (eg coal, heavy oil), especially in Asia. [4]	Deliver natural gas, LPG and condensate energy into New Zealand, Australia and Asian markets.	Baseload stability to support the uptake of renewables.	Public reporting of production, quarterly and annually.

[1] The potential purpose of an internal carbon price is to make more transparent the risks of long term changes in demand and prices, access to investment capital and risks of regulatory responses to climate such as carbon pricing. Risks to these factors are a standard part of the Company's economic modelling, which apply sensitivity testing to long-term prices, and market forecasts. Jurisdictional risk is a standard part of due diligence and risk management. Consequently, the Company has been able to identify little advantage from labelling a component of these risks as an internal carbon price. The issue is being kept under review, however, because further information is being collected.

[2] This report. Alignment commenced 9 March 2020, with the upload of initial TCFD statement, available here: www.nzog.com/assets/Uploads/TCFD-statement-NZOG.pdf

[3] See pages 44–45

[4] See Production data, pages 6–10

Checklist

Recommendation	✔ / ✗	Explanation of non-compliance
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	✔	
Disclose the metrics used by the organisation to assess climate related risks and opportunities in line with its strategy and risk management process.	✔	
Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas emissions, and the related risks.	✔	The Company does not disclose Scope 3 emissions, as the information is not obtainable.
Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	✔	