HORIZON

2023 Sustainability Report

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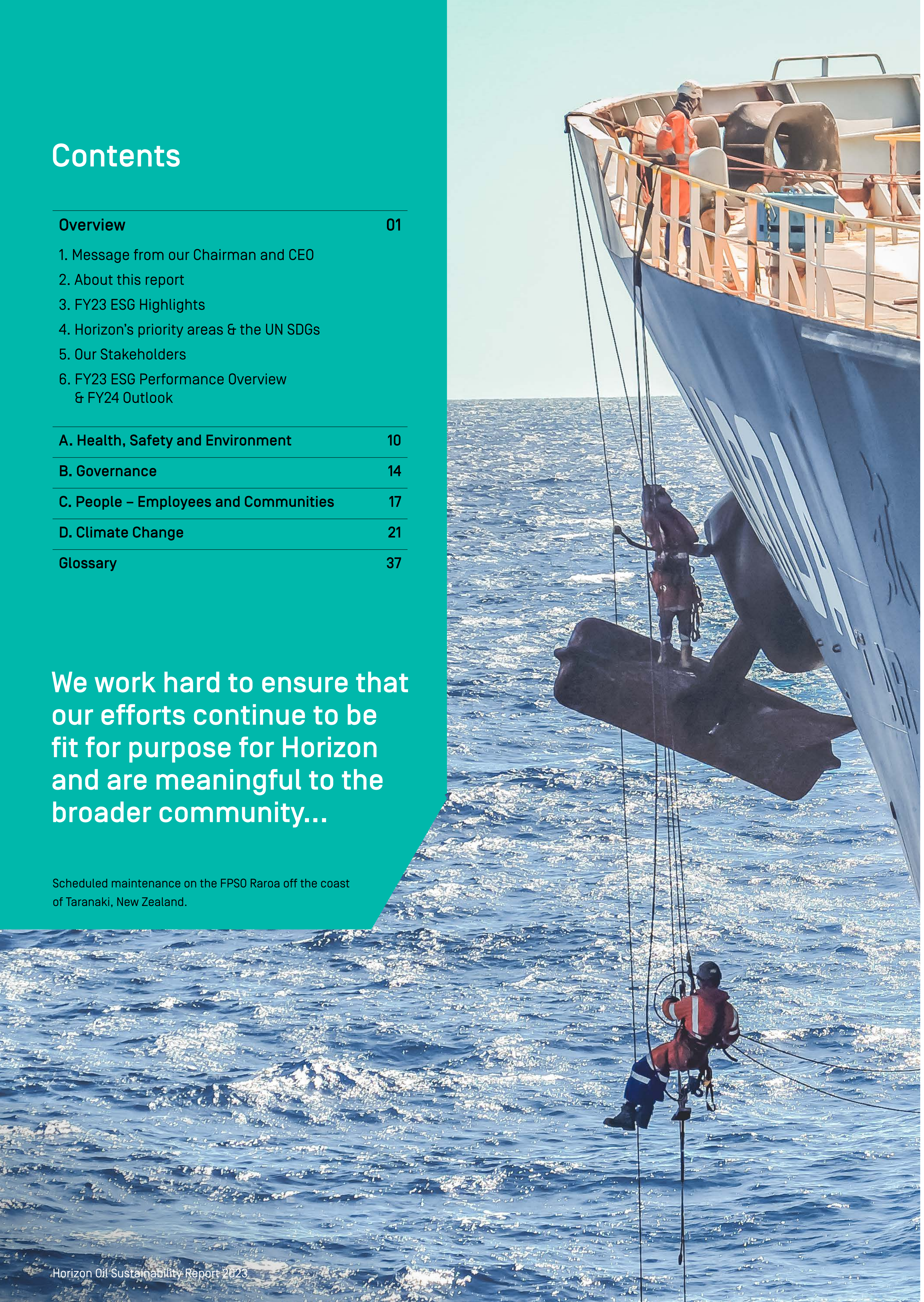


Contents

We work hard to ensure that our efforts continue to be fit for purpose for Horizon and are meaningful to the broader community...

Scheduled maintenance on the FPSO Raroa off the coast of Taranaki, New Zealand.

1. Message from our Chairman and CEO

Sustainability continues to be an important focus for Horizon with progress made across several fronts in Horizon's Environmental Social Governance (ESG) Action Plan, as discussed in this report.

Notable achievements over the past year include HSE metrics below industry benchmarks, 5-year life extension of the Raroa FPSO, completion of a marine ecological survey around the Maari wellhead platform, seed capital investment in a potentially large-scale carbon removal business, ongoing progress in emission reduction initiatives and the roll out of an initiative to support employees in purchasing electric vehicles.

All our employees and the Board are involved in progressing the various components that comprise Sustainability. We work hard to ensure that our efforts continue to be fit for purpose for Horizon and are meaningful to the broader community – and that we have achieved the right balance between community expectations, responsibility to our shareholders and our pivotal role in ensuring a smooth global energy transition.

Mike Harding
Chairman

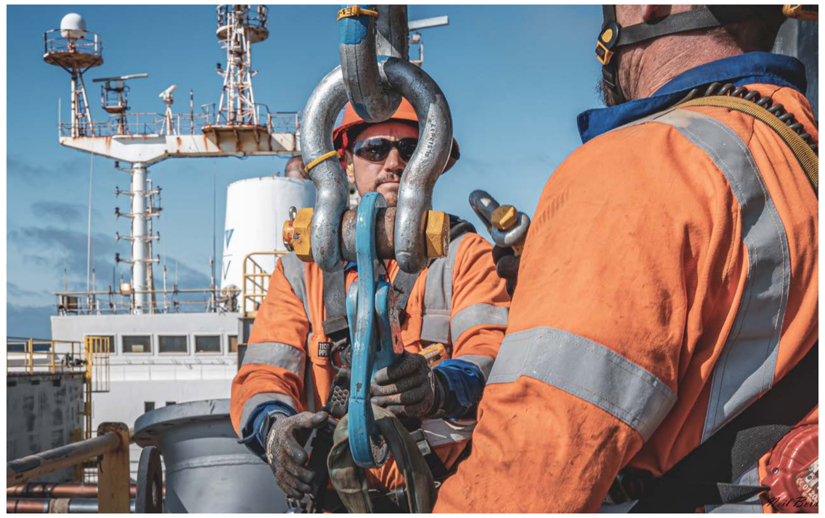
Richard Beament
CEO

Horizon CEO Richard Beament (pictured third from right) visiting PUQB platform in the Beibu Gulf, China.

2. About this Report

Throughout the reporting period, Horizon produced oil from two global locations: the Beibu Gulf, China, which was sold into the Chinese domestic market; and the Taranaki Basin, New Zealand, where the oil was primarily sold in the Australian market. Horizon participates in these operations through Joint Venture (JV) agreements, with the assets being operated by CNOOC Weizhou Operating Company for Block 22/12, and OMV New Zealand for Maari. Therefore, in relation to this Sustainability Report, all asset-related activities, targets and metrics are viewed from and calculated based on Horizon's equity position, since Horizon has no operational control over the Beibu Gulf nor the Taranaki Basin assets. At a corporate level, Horizon has full operational control of its Head Office in Sydney.

This report has been approved by the Horizon Board. It provides an overview of Horizon's ESG performance for the 1st July 2022 to 30th June 2023 reporting period. For climate-related reporting this is the fourth year Horizon has used the recommendations in the Taskforce on Climate-related Financial Disclosure (TCFD) to guide our climate change disclosures. A reconciliation table indicating our progress with the TCFD recommendations is located at the end of this report. While the company does not formally report under the standard, Horizon uses the National Greenhouse and Energy Reporting (NGER) framework methodology to calculate its GHG emissions.



From the FY25 reporting period, Horizon expects to replace the TCFD for climate-related disclosures with International Sustainability Standards Board (ISSB) IFRS S1 and S2, developed under the IFRS Foundation.

This Sustainability Report is structured around Horizon's Environmental Social Governance (ESG) Priority Areas, which are: Health, Safety and Environment, Governance, Our People and Communities, and Climate Change, with each aligned to relevant UN SDGs. Each Priority Area covers our corporate operations and sites: corporate office and equity-interest activities in China and New Zealand.

Horizon has made progress against its 3-year ESG Action Plan, developed in FY21. The ESG Action Plan provides the Company with a continual improvement, accountable framework around our sustainability-related actions, strategy, risk management and reporting. During FY23, we have added actions to the ESG action plan and intend to maintain it as a live document.

This report has not been independently assured.

Horizon welcomes your feedback on this report via info@horizonoil.com.au

3. FY23 ESG Highlights

Safety and Environment

LTI / TRIFR results were below the NOPSEMA** benchmark.

New Safety campaign on Maari asset.

Successful completion of 12-8E trial production period and hand-over of operations from our JV partner Roc Oil to CNOOC's Weizhou Operating Company.

Performed an ecological survey around the Maari Wellhead platform. See page 13 for further details.

**NOPSEMA : National Offshore Petroleum Safety & Environmental Management Authority

Governance

Incorporated sustainability into our Operations Report to the Board, enhancing Board oversight of ESG strategy and performance.

Board approval of seed capital investment in carbon removal company, Nobrac.

Carried out Cybersecurity audit of Horizon online systems and networks.

Our People and Communities

Company roll-out of initiative to support employees in purchasing electric vehicles. See page 17 for further details.

Flexible working arrangement is retained post Covid-19 lockdowns, which has shown a great beneficial impact on staff productivity and morale.

Continued to support staff health and wellbeing by financially supporting regular gym and fitness participation.

Climate Change

More than three initiatives implemented that have resulted in approx. 2,500 TCO_2e of annual emissions reduction (net). Key initiatives include the installation of reverse osmosis units and flare nitrogen purge on Maari. See page 32 for further details.

Seed capital investment in start-up carbon removal company, Nobrac. See page 34 for further details.

4. Horizon's Priority Areas & the UN SDGs

Our Sustainability Vision

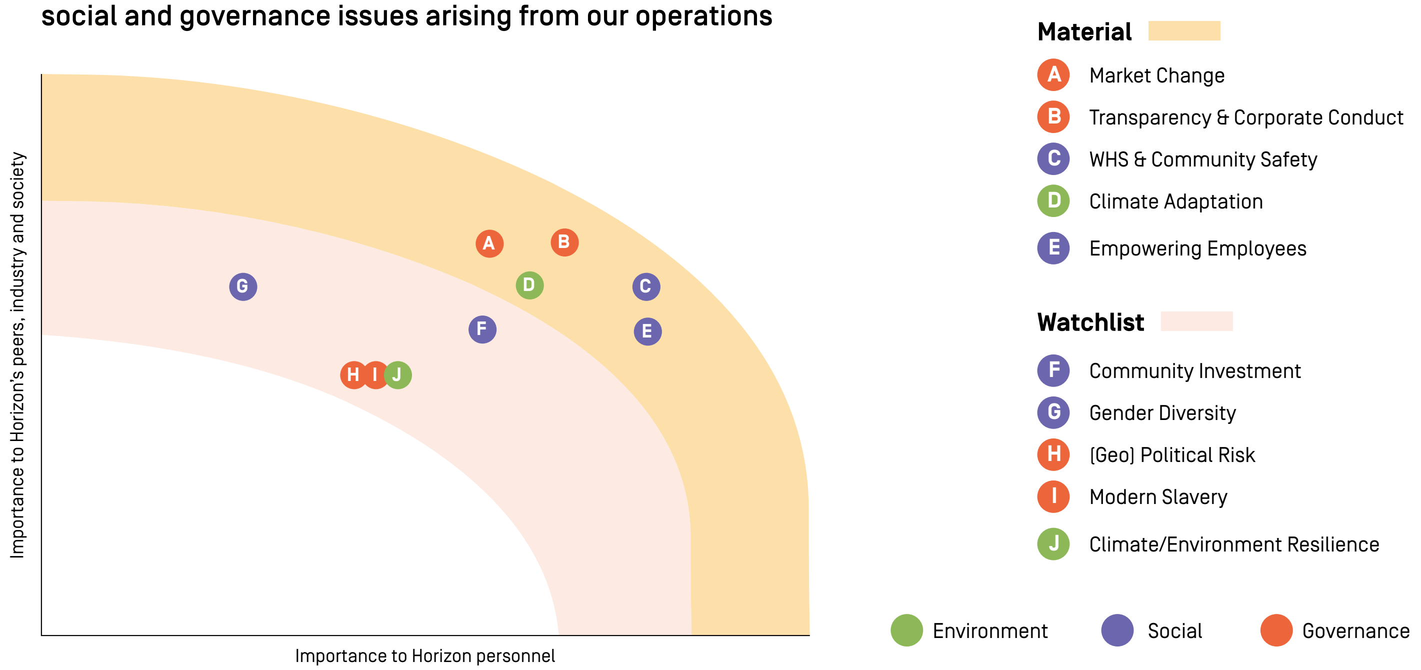
We have a role to play in the World's energy transition and we are committed to making the right kind of impact; through excellence in health and safety, reducing our emissions, and enhancing the communities where we operate.

Materiality Review

In 2020, Horizon engaged an independent sustainability consultant to undertake a materiality review of the environmental, social and governance issues that present risks or opportunities to the Company. The Materiality Review was conducted applying principles of AA1000 Accountability Principal Standards.

Horizon's Materiality Matrix is illustrated below. The vertical axis represents material issues identified by our peers, industry and the society in which we operate. The horizontal axis represents material issues identified by a cross-section of Horizon personnel. In last year's report we advised that the review would be carried out every three years. Horizon's Sustainability Steering Committee has assessed the need for an update to the Materiality Review and has decided that further updates will be carried out as and when new topics of importance to the business have been identified and/or if there is a significant change in the company's areas of operation. However, given the new ISSB Standards are coming into effect in January 2024, Horizon will consider the need to update our materiality review in FY24.

Materiality: Horizon's key material environmental, social and governance issues arising from our operations



4. Horizon's Priority Areas & the UN SDGs (cont'd.)

PRIORITY AREAS	OUR COMMITMENT	UN Sustainable Development Goals
Health, Safety and Environment	Horizon's first priority is the health and safety of our workforce and communities, and the protection of the environment in which we operate. We work closely with our operators in China and New Zealand to maintain asset integrity and have in place appropriate workplace management systems that reflect our high expectations for health, safety and environmental performance. Horizon proactively engages in our operators' programs to maintain focus on safety.	8 Decent work and economic growth; 12 Responsible consumption and production; 14 Life below water
Governance	Horizon is committed to making the right kind of impact and applying best practice consistently to what we do, whether in-country or in our overseas operations, such as China, and New Zealand. We promote, and are committed to a high standard of integrity, ethical and transparent behaviour in business.	8 Decent work and economic growth; 16 Peace, justice and strong institutions
Our People – Employees and Communities	Our employees will deliver Horizon's future and so we want our employees to be proud to work for Horizon. Horizon recognises that it must empower employees and promote diversity so that its people can achieve their personal best. We also acknowledge the communities that we work in, and that our social license comes from investing in our communities.	5 Gender equality; 8 Decent work and economic growth
Climate Change	Horizon recognises the responsibility and role it has to play to advance clean, affordable energy for all by 2030 and reach net zero emissions by 2050. Horizon is using the TCFD recommendations to guide our disclosures and is monitoring the requirements to implement ISSB standards in the jurisdictions that we operate.	7 Affordable and clean energy; 13 Climate action

5. Our Stakeholders

STAKEHOLDER ENGAGEMENT

Joint Venture Participant

Horizon is a non-operating JV participant in its oil fields in China and New Zealand. We proactively engage with our operators through regular commercial / technical meetings and correspondence.

Investor Community

As an ASX public listed company, Horizon regularly communicates with its shareholders through market announcements, periodic reporting, webcasts and meetings.

Employees

Horizon continues to engage with staff to implement the company's ESG Action Plan, which is a live document undergoing regular reviews and updates with new actions added where required. The SSC has established regular internal communications to share Horizon's ESG goals and the path to achieving these goals. Horizon's commitment to working towards the SDGs is communicated to all staff.

Banks/Financiers

Horizon's has a Syndicated Finance Facility which matures at the end of July 2023, and maintains ongoing relationships with banks for hedging lines and other financing needs.

Regulators

Horizon is an Australian company and complies with Australian corporate laws and corporate governance principles. We publish a Corporate Governance Statement each year against the recommendations in the ASX Corporate Governance Principles. We annually publish our Modern Slavery Statement in accordance with the Modern Slavery Act 2018. We also work with the relevant regulators in China and New Zealand.

Public

We benchmark the health and safety performance of our non-operated operations against the Australian NOPSEMA benchmark. Our climate-related financial disclosures which guided by the TCFD recommendations are driven by Australian corporate governance recommendations.

Horizon is committed to making the right kind of impact and to do that we work together with our operators, JV partners and other stakeholders.

6. FY23 ESG Performance Overview & FY24 Outlook

Target met   Target partially met   Target not met

	FY23 TARGET		FY23 PERFORMANCE
Health and Safety	1. Achieve zero fatalities.	Target met	Achieved, page 11.
Health and Safety	2. Achieve a TRIFR less than the NOPSEMA industry average for the reporting period.	Target met	Achieved, page 11.
Health and Safety	3. Achieve a LTIFR less than the NOPSEMA industry average for the reporting period.	Target met	Achieved, page 11.
Environ-ment	1. Achieve zero material or significant reportable environmental incidents.	Target met	Achieved, page 12.
Environ-ment	2. Zero spills to the environment.	Target met	Zero reported oil spills.
Governance	1. Our employees are trained in relevant policies and procedures.	Target met	Employees are trained in Horizon policies and procedures.
Governance	2. Conduct annual assessments on our value and supply chain for incidences of modern slavery.	Target met	Annual assessment carried out; Horizon published its FY22's Modern Slavery Statement in Dec-22. (FY23's Modern Slavery Statement will be published towards the end of 2023).
Governance	3. Greater Board oversight of ESG strategy and performance.	Target met	We have incorporated sustainability into the Operations Reports as part of Board papers. Board approved a seed capital investment in Nobrac (a company developing biochar project), which is the first standalone climate-change related capital investment for Horizon.
People – Our Employees and Communities	1. Maintain at least 20% women employees in senior executive roles.	Target partially met	No new management position appointments in the past year, page 18.
People – Our Employees and Communities	2. Target 30% women directors on the Board by 2022.	Target partially met	The number of women directors on the Board remains at 1 in 6 (16.7%), page 18.
People – Our Employees and Communities	3. Our employees to undertake performance reviews to evaluate and develop our people each year.	Target met	Achieved, page 18.
People – Our Employees and Communities	4. Promote flexible working arrangements to encourage employees to return to work after parental leave.	Target met	Achieved, page 18.
People – Our Employees and Communities	5. Staff participation in development and training programs to support career growth.	Target met	Achieved, page 18.
People – Our Employees and Communities	6. Work with our operators to promote community-based projects.	Target met	Achieved – Material progress has been made with our operators and new projects are expected in FY24, page 20.
Climate Change	1. Support operator emissions reduction initiatives.	Target met	Horizon proactively engages with the operators to reduce field emissions. New emission reduction initiatives have been implemented in FY23 and Horizon's engineering resources are currently being used to support maturing a concept, page 32.
Climate Change	2. Apply an internal carbon price to help guide business decisions and viability of future projects and to ensure that the project is economic should a carbon price be imposed in the future.	Target met	Carbon price forecasts are included in our assessments for potential new projects.
Climate Change	3. Develop a climate transition roadmap for inclusion in the FY23 Sustainability Report to be released in August 2023.	Target not met	The decarbonisation road map has been placed on hold for the time being. Given the Company's position as non-operator in its current assets, the Group's focus has shifted to tangible carbon reduction initiatives as a priority over setting nearer term emission reduction targets. Our focus is on pursuing a strategy that is resilient to a broad range of energy and market scenarios, which allows the flexibility of growth in more oil and gas (at increasing efficiency) and also investment in carbon removal business such as our recent Nobrac investment.
Climate Change	4. Offset 100% of Scope 1 and 2 emissions of current asset portfolio and corporate office by June 2023.	Target partially met	Horizon is a participant in the NZ ETS. Our focus and preference has shifted to tangible emission reduction initiatives in our assets over the purchase of carbon offsets. We have also invested in a carbon removal company (Nobrac) and continue to evaluate investment in other projects generating carbon credits, page 34.
Climate Change	5. Continued improvements in Horizon's climate disclosures across the four thematic areas of the TCFD (governance, strategy, risk management and metrics/targets).	Target partially met	Progress continues to be made in more accurate emissions reporting and forecasting.
Climate Change	6. Continued participation in the Carbon Disclosure Project (CDP).	Target partially met	Performed in July 2022 but will not be done going forward for the following reasons. Being a non-operator with assets in different jurisdictions, not all operational data is available to us to enable full quantitative disclosures. The important climate-related metric for our assets, being GHG emissions are reported and will continue to be reported in our annual Sustainability Report. Our limited resources will focus on progressing emission reduction initiatives instead.

6. FY23 ESG Performance Overview & FY24 Outlook (cont'd.)

	FY24 TARGETS
Health and Safety	Unchanged from FY23.
Environ-ment	Unchanged from FY23.
Governance	Unchanged from FY23. The current level of Board oversight on ESG is considered fit for purpose for Horizon and FY24 target is to maintain Board oversight of ESG strategy and performance.
People – Our Employees and Communities	The company will maintain current gender diversity targets. However, these targets may be difficult to achieve given the small size of the company. Item 3 (annual performance review) has already been included in Corporate work processes, and is therefore no longer a target. All other targets from FY23 remains unchanged.
Climate Change	Unchanged from FY23.
Climate Change	Unchanged from FY23.
Climate Change	Removed. Requirement will be assessed on an ongoing basis.
Climate Change	Removed. Voluntary carbon offset will be assessed on an ongoing basis.
Climate Change	Unchanged from FY23. Horizon is reviewing the recently issued IFRS Sustainability Disclosure Standard S1 and S2 and in due course will assess the need for any changes in future disclosures.
Climate Change	Removed. Horizon is reviewing the recently issued IFRS Sustainability Disclosure Standard S1 and S2 and in due course will assess the need for any changes in future disclosures. CDP's global environmental disclosure platform will incorporate the ISSB's IFRS climate-related disclosures.

A. Health, Safety And Environment

Health and Safety

OUR GOAL	OUR TARGETS FOR FY24
We will continue to outperform our peers and industry benchmarks through ongoing and active engagement with our operators	Achieve zero fatalities Achieve a TRIFR less than the NOPSEMA industry average for the reporting period Achieve a LTIFR less than the NOPSEMA industry average for the reporting period

During FY23, the Beibu Operator continued to demonstrate strong HSE leadership and performance with a high level of personnel engagement from all levels in the operation, one example being the active use of STOP Cards (including observations of both positives and negatives).

SAFETY STARTS WITH US

Ka timata te haumaru ki a tatou

The Maari Operator rolled out the "Back to Basics" campaign, which is focused on supporting behaviours, leadership and culture, and ensuring the processes are fit for purpose. The aim is to continue to grow responsibility and accountability for safety, environment, health and security in all activities carried out at Maari. In addition, the operators have rolled out various other HSSE initiative during FY23, such as crew fatigue analysis and job intervention awareness.

Health, Safety and Security Engagement

Horizon actively engages with our JV partners and operators through monthly meetings to discuss health, safety and security (HSS) issues and operators report monthly to Horizon on agreed metrics. For management of change projects, we carry out technical oversight to ensure that process safety reviews demonstrate that ALARP criteria are met.

Horizon's Board have oversight of HSSE performance trends and all material HSSE incidents, through regular incident reporting. Horizon's HSSE Policy is available on our website.

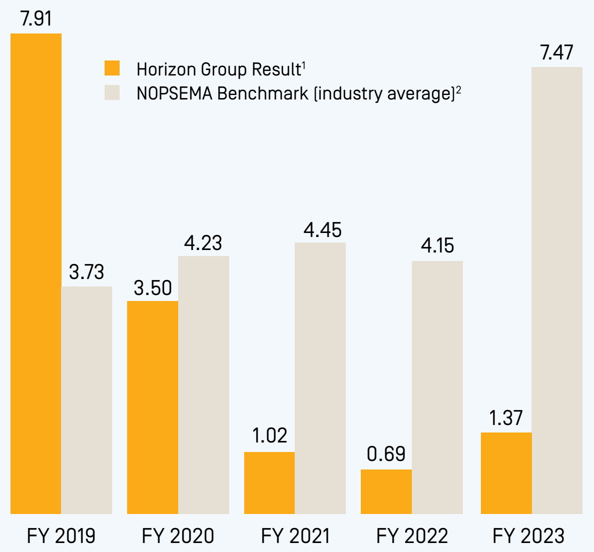
To ensure all employees are prepared to support their peers and colleagues in an emergency, a first aid training and refresher course is offered to all employees. The majority of employees completed the course during FY23. Further Offshore Emergency Training (FOET) is provided to staff with OPITO approved BOSIET certification.

The Operators for Beibu and Maari have maintained COVID protection frameworks and business continuity plans to minimise disruptions, as well as to minimise health risks to their workforces.

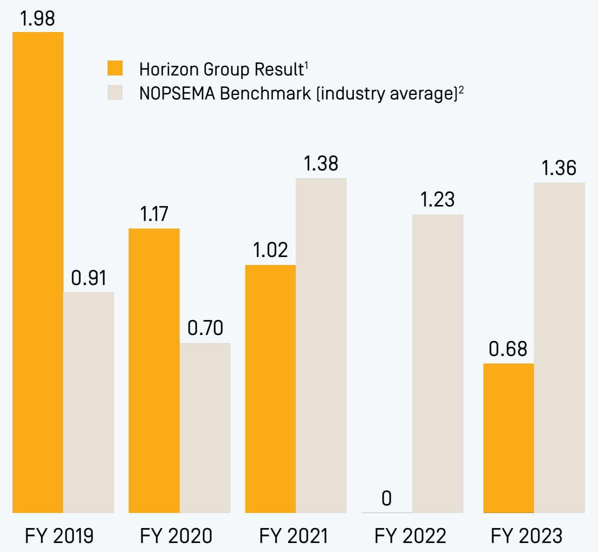
Occupational Injury and Illness Incidents

Both Beibu and Maari have continued their strong safety performance, despite significant drilling, production and development activities, as illustrated in the metrics below.

Total Recordable Injury Frequency Rate (TRIFR)



Lost Time Injury Frequency Rate (LTIFR)



1 Includes all hours (contractor and operator) worked offshore for our two assets and Horizon corporate staff hours.
2 The NOPSEMA benchmarks are derived from injury and hours worked data provided in quarterly reports. Horizon performance for any particular financial year is benchmarked against NOPSEMA average for the preceding financial year.

Environment

OUR GOAL	OUR TARGETS FOR FY24
We are committed to working with our operators to protect the environment in which we work	Achieve zero material[3] or significant reportable[4] environmental incidents Zero spills to the environment

Photo of Pygmy Blue Whale taken near the Maari wellhead platform.

The Group is subject to significant environmental regulation in respect of exploration, development and production activities in the countries in which it operates – China and New Zealand. Horizon is committed to undertaking all its exploration, development and production activities in an environmentally responsible manner. The Directors believe the Group has adequate systems in place for managing its environmental requirements and is not aware of any breach of those environmental requirements as they apply to the Group.

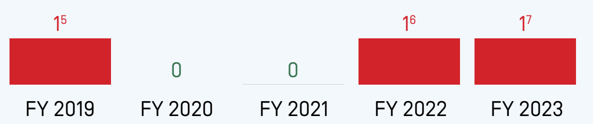
Our New Zealand and China asset operators are members of the International Petroleum Industry Environmental Conservation Association (IPIECA), and maintain robust Environmental, Health and Safety (EHS) management systems aligned or certified to ISO 14001, ensuring there are processes and practices in place to manage environmental impacts, risks and performance.

Marine discharge consents are issued by regulators in accordance with relevant laws. Our operators ensure that quantities, quality, and dosage restrictions are adhered to through accurate measurement and record keeping. Any nonconformities are notified to the relevant regulator.

Reportable environmental incidents are summarised in the table below. In FY23, there was one notifiable incident which did not involve any hydrocarbons.

Reported environmental incidents

Horizon Group Result



3 IPIECA defines a 'material issue' as any topic, that in the view of management or stakeholders, affects a company's performance significantly and informs external opinion. They tend to be issues that most affect value creation and the economic and reputation resilience of a company in a positive or negative way.
4 'Reportable' incidents are any environmental incidents that are reported to regulatory authorities.
5 Maari - Small lube oil system leak to sea (80-600 mls) reported to regulator.
6 Beibu - Notifiable environmental incident on 12-8E, with 30 litres of oil spilt to sea during well back-wash operation. Emergency response plan was initiated, the regulator was notified, incident investigation was carried out and corrective actions implemented.
7 Maari – spill with no hydrocarbons involved.

Ecological survey around the Maari Wellhead Platform

Video footage was collected around the Tiro Tiro Moana Wellhead Platform in November 2022. Cameras were mounted on an ROV which was piloted up and down the platform, providing ten hours of footage. A qualitative ecological assessment of the flora and fauna captured in the video imagery was carried out by a specialist environmental consultant. The survey demonstrates that the wellhead platform supports a wide variety of species, the diversity and frequency/abundance of which is far greater than that typically observed in the surrounding area (based on historical benthic monitoring surveys). Species covered under the Wildlife Act 1953 were observed; however, without further examination, it is not possible to confirm whether the observed species are specifically covered by the Wildlife Acts protection.

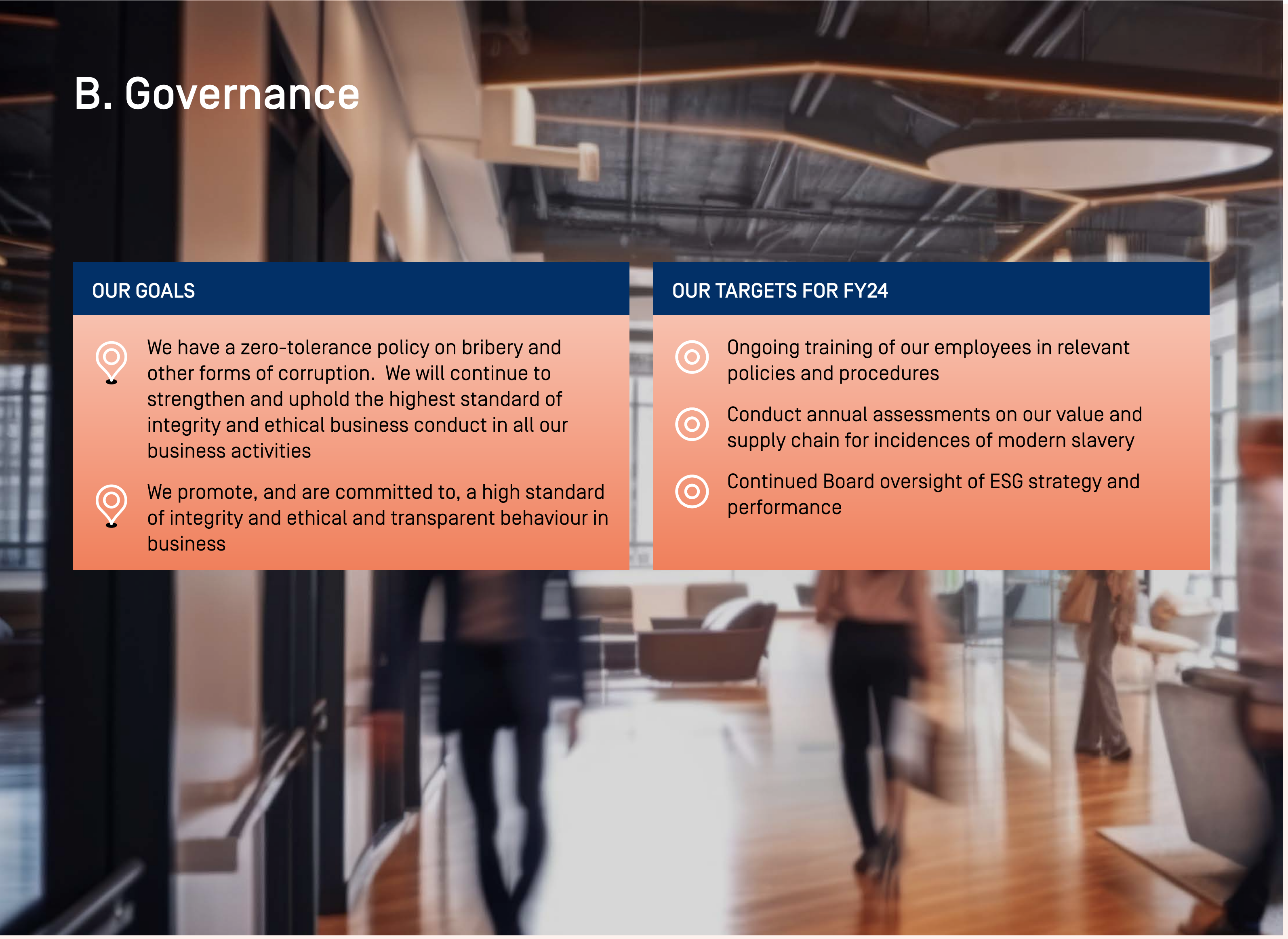
Decommissioning

Decommissioning is a planned activity, which refers to the plugging and abandonment of wells, the safe removal of, or the plan to leave in-situ, production related infrastructure and restoration of the environment. The platform installations, FPSO, equipment, subsea pipelines and other related subsea infrastructure will be removed or abandoned in-situ in a safe and environmentally responsible manner at the end of the field life, consistent with the requirements of the relevant country government authorities.

In FY 23, Horizon and its JV partners updated the Maari asset register, decommissioning plan and cost estimates. The deliverables have been lodged with the NZ regulator and will be evaluated for the purpose of determining the level of financial security which will likely be needed to be provided by the Maari JV over the coming years under New Zealand's Crown Minerals (Decommissioning and Other Matters) Amendment Act (December 2021). Whilst the guidance and regulations surrounding decommissioning security are still being finalised, Horizon has committed to set aside funds judiciously over the coming years to ensure it can meet these obligations. Horizon has also built decommissioning planning costs into cash flow forecasts. We fully understand the importance of having an approved decommissioning plan, ahead of cessation of production, to ensure that the company will be financially and technically ready to take on decommissioning activities when required. The Operator has made provision for decommissioning planning work from now to end of field life, including consent preparation for the Maari field and subsea well, comparative assessment work and various studies to support decommissioning.

For Beibu, China, preliminary decommissioning plans, safety and environmental assessments and cost estimates are available for all assets, including the recently installed 12-8E facilities. A decommissioning fund was established at the commencement of Beibu production and has been fully funded for the 12-8W and 6-12 facilities (wellhead platforms and subsea pipelines) and PUQB central processing facility. Production based progressive contributions are being made towards 12-8E (new development project consisting of a standalone platform with flowline tie-back to 12-8W).

B. Governance



OUR GOALS

- We have a zero-tolerance policy on bribery and other forms of corruption. We will continue to strengthen and uphold the highest standard of integrity and ethical business conduct in all our business activities
- We promote, and are committed to, a high standard of integrity and ethical and transparent behaviour in business

OUR TARGETS FOR FY24

- Ongoing training of our employees in relevant policies and procedures
- Conduct annual assessments on our value and supply chain for incidences of modern slavery
- Continued Board oversight of ESG strategy and performance

Our Commitment to Ethical Business Conduct

Horizon is committed to making the right kind of impact and applying best practice to what we do. We promote and expect from our people a high standard of integrity, and ethical and transparent behaviour in business. Horizon has an anti-bribery policy and whistleblower policy which are disseminated to all its employees. During the year, Horizon published its 2023 Corporate Governance Statement as the Board continues to review its policies and practices to reflect any applicable changes to governance standards and practice.

We also published our third Modern Slavery Statement (for FY22) during the year in accordance with Australia's Modern Slavery Act 2018. We apply our risk management framework to assess the risk of modern slavery practices in our operations and supply chains and work with our JV partners to continue to identify and manage modern slavery risks in their operations. Horizon is working on our Modern Slavery Statement for FY23 and will publish it during the first half of FY24.

Corporate Governance

As at the end of the reporting period, Horizon's Board consisted of six members, three of which are independent.

Horizon reports on an 'if not, why not' basis against the ASX Corporate Governance Principles and Recommendations. Our 2023 Corporate Governance Statement is available on horizonoil.com.au, along with corporate governance charters and policies. Horizon's Board approved a Sustainability Steering Committee (SSC) Charter in FY22, formalising the role, scope and responsibilities of the committee to support Horizon's ESG governance.

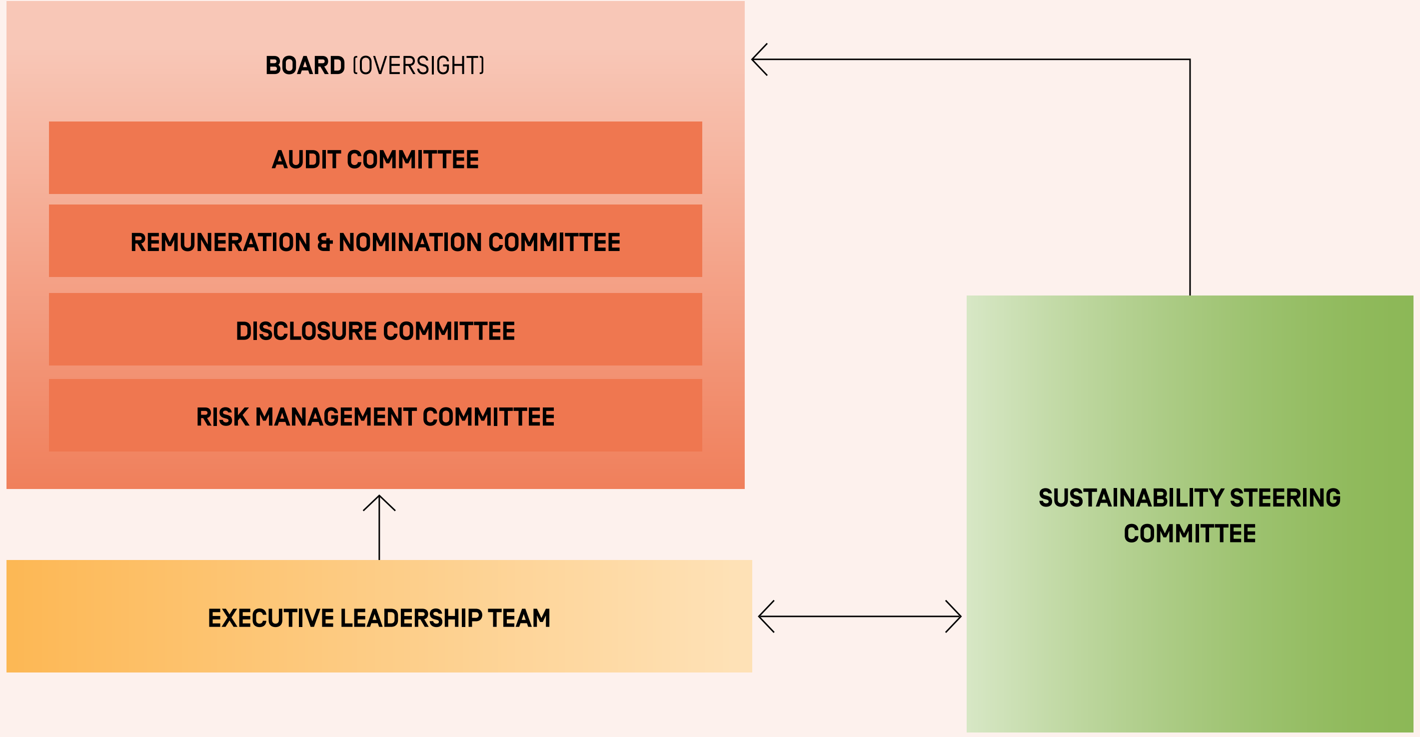
ESG Governance

The Board oversees sustainability opportunities and risks through our strategic planning and risk management frameworks. The Sustainability Steering Committee (SSC) assists the Board and the Risk Management Committee in fulfilling its oversight of Horizon's ESG Action Plan, policies, practices and performance. The SSC is represented by at least one member of Horizon's Risk Management Committee, two members from executive management and senior leaders and staff from Finance, Production and Engineering. Horizon's CEO is the chairman of the Committee and reports to the Board on all ESG matters, including strategic business decisions. The Committee is authorised, on approval from the Chairman, to obtain independent advice and institute investigations if necessary. Updates to sustainability-related issues and development is provided to the Board and Risk Management Committee at each scheduled Board Meeting. The Charter of the Sustainability Steering Committee is available on Horizon's website.

The role of the SSC is to support Horizon's Executive Leadership Team in integrating ESG into decision making and long-term planning and facilitate the implementation of the ESG Action Plan. The minutes from SSC meetings is distributed to the executive management team. In relation to greenhouse gas emissions from Horizon's activities, these are tracked by the SSC and presented to the executive management regularly, along with any update to emissions forecast. The Executive Leadership Team is accountable for ESG strategy management, through active management of identified functional risks and opportunities. They are also responsible with identifying and escalating risks and opportunities, and communicating Horizon's ESG goals, targets and performance to employees.

The Board is ultimately accountable for ESG strategy management, including climate-related matters. The Board ensures that management has in place appropriate processes for risk assessment, management, internal controls, monitoring and reporting the Company's performance against agreed benchmarks. The Board ensures material ESG risks and opportunities are identified and incorporated into Horizon's overall corporate strategy.

The chart below depicts the relationships between the Board, its sub-committees, the Executive Leadership Team and Sustainability Steering Committee.



Risk Management

The Risk Management Committee is a subset of the Horizon Board. It is responsible for all material operations and financial risks. The Committee advises the Board in fulfilling its responsibilities to identify, assess, monitor and manage risks and, as appropriate, escalate and communicate identified material risks and their corresponding mitigation strategies and controls.

Horizon's Risk Management Standard applies a robust bottom-up approach to assess the below risk categories, applying the principles of AS31000. This framework effectively identifies short-, medium-, and long-term financial and operational risks to the company.

- Financial
- Operational
- Health and safety
- Environmental
- Climate change
- Legal and social

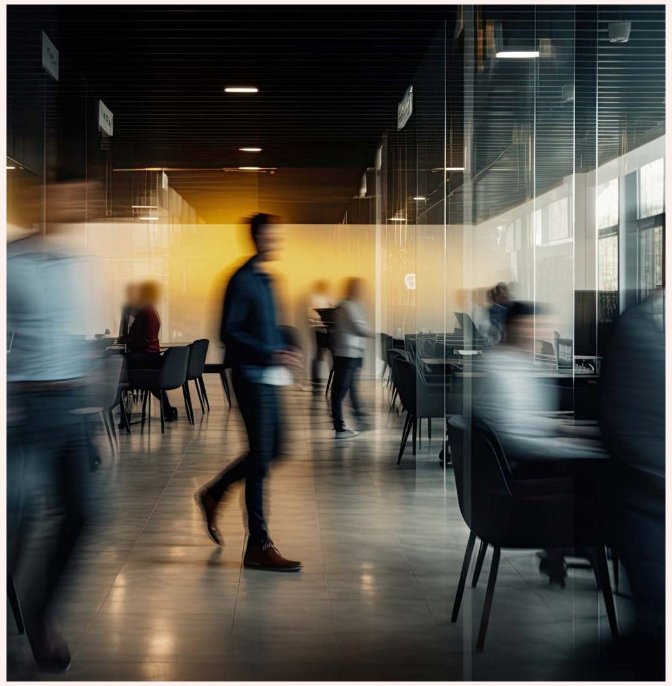
The Company's Executive Management Team update the risk register and report no less than twice a year. The reports are formally reviewed by the Risk Management Committee. Horizon also assesses strategic risks and opportunities annually using a top-down analysis which is focused on the medium term and long term. Together with the bottom-up approach to risk assessment, this provides a complete check and balance to Horizon's risk management process.

The Climate Change section of this report provides further information on corporate risk management work flows and how they pertain to climate change.

Cyber Security

At Horizon, we are committed to the protection of our people, assets, brand and reputation through the use of various cybersecurity measures, with a continued focus on improving our cyber security in the ever-increasing challenging online environment.

2023 was an important year for Horizon in the cybersecurity landscape. Given the increasing incidence of cyber-attacks on corporates and individuals, Horizon undertook an audit of its online systems and networks under the Australian Cyber Security Centre's ("ACSC") Essential Eight security model as outlined below.



Essential Eight is the ACSC's development of mitigation strategies to protect an entity's data, application and users by keeping adversaries from inserting malware into the entity's network to minimise the impact of incidents and data loss.

Under the current Essential Eight assessment, undertaken by our independent IT services provider, we are currently placed ahead of our industry peers on the Essential Eight maturity model. With implementation of several simple mitigation strategies, we will be able to increase our level of progress on the maturity scale.

Aside from our Essential Eight analysis, Horizon has a number of cybersecurity strategies and programs in place, such as advanced email filtering, multi factor authentication for access to our systems as well as the use of sophisticated virtual private networks for any remote access to our systems.

C. People - Employees and Communities

Our People

OUR GOALS	OUR TARGETS FOR FY24
We support our team to excel and are committed to diversity, innovation, teamwork and being an employer of choice We strive to make a positive impact in the communities we operate	At least 20% women employees in senior executive roles through any future recruitment initiatives* 30% women directors on the Board* Promote flexible working arrangements to encourage employees to return to work after parental leave Equal opportunity to participate in development and training programs to support career growth Work with our operators and partners to identify and participate in community-based projects *Horizon is maintaining its gender diversity targets although it is noted that these may be difficult to achieve given the size of the company.

Employee Support

Whilst the impact of the COVID-19 pandemic continued to subside during the period, and as a result of the reduction in headcount over the past 3 years, the Company relocated to a fresh new smaller office in Sydney which offers a more collaborative and enticing space for employees after the long periods of remote working over the past few years. Notwithstanding the office move, the Company continues to provide flexibility for employees with some staff electing to work remotely a few days a week to enhance productivity and staff morale.

The Australian government recently passed new legislation which exempts companies from having to pay fringe benefit tax (FBT) on novated leases for certain types of electric vehicles (EV's) and Plug in Hybrid (PHEV's). The company has rolled out a scheme allowing all employees to participate in this arrangement. The novated lease allows for employees to pay for the vehicles from their pre-tax income and in the instance of an EV/PHEV the employee does not need to distinguish between business and private use. The novated lease places no obligation on the Company and the financing of the vehicle is the responsibility of each employee.

To promote the health and wellbeing of staff the Company continues to encourage and financially support staff in active participation at gyms and other fitness programs.

C. People – Employees and Communities (cont'd.)

Workforce Diversity

Horizon is proud of the diversity of its workplace – not just in terms of gender, but also ethnic background, skills and education. Horizon provides all employees with parental leave that offers entitlements exceeding Australian statutory obligations. This year, Horizon continued its commitment to promoting gender and other forms of diversity by working towards the FY23 measurable objectives set by the Board through the ESG Action Plan. Progress against the measurable objectives is summarised below.

FY23 MEASURABLE OBJECTIVE	PROGRESS IN FY23
Maintain a target of at least 20% women employees in senior executive roles (same as FY22).	Horizon maintained at least 20% women at management level until the resignation of the Group's General Counsel and Company Secretary in FY22. Due to a continued effort to manage corporate costs, these roles were absorbed into the existing executive team with no additional recruitment undertaken. This objective may be difficult to achieve given the small size of the company, however Horizon remains committed to have this as an ongoing goal.
Achieve a target of 30% women directors on the Board (same as FY22).	The number of women directors on the Board remains at 1 in 6 (or 16.7%). The company remains committed to increasing the representation of women on its Board and whilst difficult to achieve in the nearer term, given the current board composition, this is retained on an ongoing basis.
Implement structured annual performance review processes to provide all employees with the opportunity for review and discussion of their performance, remuneration and opportunities for development and training.	Horizon is committed to continue supporting the development of its employees. All employees are encouraged to bring up development courses that they wish to attend to benefit their development. Given that this has been included in our Corporate work processes, it will no longer be a target going forward.
Promote flexible working arrangements to encourage employees to return to work after parental leave.	The company continued to offer flexible working arrangements to employees returning after parental leave, allowing them to work from home on various days to help them transition back to work. During FY23, we welcomed one staff who returned to work after parental leave and has utilised the flexible working arrangements made available.
Equal opportunity to participate in development and training programs to support career growth	The company offered equal opportunity to participate in development and training programs during the year.

For FY23, the Remuneration and Nomination Committee has re-iterated most of the above objectives and will maintain the same objectives for FY24.

The proportion of women in Horizon's workforce (as at 30 June 2023) is 50% of permanent employees, 0% of senior executives and 16.7% of directors.

Recent photo of the Horizon team.

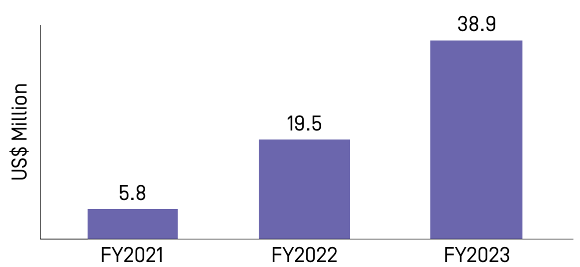
Our Communities

We continue to work with our operators and partners to identify and participate in meaningful community-based projects, with preference given to the local areas where our assets are based. During FY23, on the joint venture's behalf, the Maari Operator has investigated available opportunities in the Taranaki region that would benefit the local communities. We are currently working with the Operator to select the projects that align with our SDG priorities. The selected project cost will be rolled into the 2024 budget for the joint venture.

During the year, the 12-8E project launched an ecological fishery compensation activity, a selection of fish was released to the ocean. Our China Block 22/12 has also reached a milestone of ten years operation. Horizon has attended the celebration ceremony in April 2023 to congratulate the Operator and everyone that was involved in making the last ten years of operation a success.

Horizon's assets and the operation of these assets can be an important source of income for local communities and the region. The procurement practices and labour forces have a positive impact on the communities at large. Our Maari Operator has started a programme of training 'green hats' into the workover programmes, with the aim of offering more local employment. Our Beibu Operator has a preference for domestic procurement, which has positive impacts on local and domestic businesses.

Local payment of taxes and royalties is another way of supporting local economies. The below chart shows Horizon's payments for the last three years to the local governments where our assets are based.



Fishery compensation.

"Ten years journey rain or shine we are building the same dream, together to achieve win-win cooperation." Block 22/12 ten year anniversary.

D. Climate Change

OUR GOALS	OUR TARGETS FOR FY24
We have a role to play in the world's energy transition and we're committed 'to going beyond easy' in tackling climate change We are committed to integrating climate risks and opportunities into our business decisions and organisational strategy	Support operator emissions reduction initiatives Apply an internal carbon price to help guide business decisions and viability of future projects and to ensure that the project is economic should a carbon price be imposed in the future Continued improvements in Horizon's climate disclosures across the four thematic areas of the TCFD (governance, strategy, risk management and metrics/targets)

Horizon has an ambition to reach Net Zero Emissions by 2050, consistent with the Paris Agreement on Climate Change. Horizon considers that the oil and gas industry has a critical role to play in the energy mix over the next few decades to ensure sustained economic development, improvements in the quality of life and the eradication of poverty. We are focused on delivering reliable and affordable oil (and possible future gas) production over the transition period whilst minimising the impact on the environment. We have made a tangible contribution to global decarbonisation efforts in FY23, investing in an emissions abatement project in South Australia (see section below on Nobrac). We aim to pursue a strategy that provides market resilience going forward, but with the flexibility to allow for growth in oil and gas, where we can initiate energy efficiency and emissions reduction projects. This strategy ensures that we add value in responding to climate change, while meeting interim energy demand during this critical period of global energy transition.

Carbon Disclosure Project

The Company responded to the full Climate Change Questionnaire in July 2022, which is fully aligned with the TCFD framework. Horizon scored a B ranking, falling into the "Management Band" (classified as taking coordinated action on climate issues). The CDP score report helped Horizon to improve its environmental stewardship through benchmarking and comparison with industry peers. This has been demonstrated in continued improvement on our CDP score since our first participation in 2020, where we achieved an overall score of C, sitting in the "Awareness Band" (classified as knowledge of impacts on, and of, climate issues), and a score of B- in 2021 (also in the "Management Band" but at a lower level than the 2022 score of B).

During the year, we have decided not to participate in CDP's Climate Change Questionnaire 2023. Instead, our limited resources will focus on progressing emissions reduction initiatives for our existing assets and evaluating new low carbon or climate-change related projects. Being a non-operator with assets in jurisdictions outside Australia, not all operational data is available for us to provide a full quantitative disclosure. However, GHG emissions will continue to be reported in the Sustainability Report, along with other disclosures as guided by the TCFD framework. For metrics where we do not have quantitative information, we aim to use all reasonable and supportive information to provide qualitative disclosures.

Taskforce on Climate-related Financial Disclosure (TCFD)

This Climate Change section of Horizon's Sustainability Report reflects the four thematic areas of TCFD. The report disclosures are reconciled with the TCFDs in the table on page 36.

Governance

For climate-related Governance, please refer to the **ESG Governance**, on page 15.

Strategy

Taking into consideration the economic life of our current asset portfolio, Horizon has applied the following time horizons to the identification of climate-related risks and opportunities:

Short	Medium	Long
1 to 3 years	3 to 8 years	8 years plus

Risk and Opportunity Categories

Transition Risk

Transitioning to a lower-carbon economy will involve extensive regulation, legal, technological, and market changes.

Physical Risk

Physical risk can be both acute and chronic. Acute physical risks are event-driven, including increased severity of extreme weather events, such as cyclones, hurricanes, or floods. Chronic physical risks are longer-term shifts in climate patterns (e.g., sustained higher temperatures) that may cause sea level rise or hotter, more frequent heat waves and drought.

Resource Efficiency & Energy Source Opportunity

Reduction of operating costs by reducing crude oil consumed as fuel and GHG emissions, improving efficiency across production processes.

Products, Services & Markets Opportunity

Increased revenues through access to new and emerging markets, such as generation and sale of carbon credits and biogas into existing infrastructure networks. Increased opportunity to diversify business activities and investment.

[a] Climate-related Risks and Opportunities

Horizon identifies, assesses and mitigates its climate-related risks and opportunities in accordance with its risk management framework. The bottom-up assessment process considers the climate-related risks by geographic region, covering our producing assets in China and New Zealand. The process has identified similar risks and opportunities for both regions but our approach to mitigate these risks have some subtle differences due to government regulation and local requirements.

Horizon Climate-related Risks

	Risk Type	Description	Potential Financial Impacts	Time Horizon
PHYSICAL RISKS	Acute	Climate change increases the severity, duration and frequency of extreme weather events in the Beibu Gulf (Block 22/12) and/or offshore Taranaki (Maari).	Declining revenue due to disruptions to operations and supply chains, reduced labour productivity, increase costs to repair or replace equipment damaged by severe weather events, unable to meet operational budgets and KPIs leading to a decline in expected shareholder returns.	Short, medium, and long term
PHYSICAL RISKS	Chronic	Rising ambient temperature in the Beibu Gulf and/or Taranaki.	Impacting Block 22/12 and Maari installations, reducing operating envelope buffer, requiring upgrade or retrofit of operating equipment and reduced labour productivity.	Long term
TRANSITION RISKS	Policy & Legal	Changes in legislation and regulation in response to climate change and risks associated with policy-driven transitions.	Increased compliance costs, insurance premiums, taxes, carbon pricing, changes in demand and pricing, and potential litigation arising from non-compliance. Onerous operating conditions for late-life assets, reducing revenue and profitability, leading to early retirement of existing assets.	Short, medium and long term
TRANSITION RISKS	Technology	Technological improvements or innovations support and accelerate the substitution of existing high emission products with lower carbon emissions options.	The development of non-conventional energy systems could ultimately reduce demand for petroleum products (greater impact on liquid fuels than gas is anticipated) that are produced by Horizon's assets, leading to reduced revenue.	Long term
TRANSITION RISKS	Reputational	Market and public perception of the oil and gas sector.	Targeted operator or shareholder activism, assets divestment, and reduction of shareholder value.	Medium to long term
TRANSITION RISKS	Reputational	Institutional investors looking to manage ESG factors.	More onerous ESG requirements to qualify for financing, potentially impacting company growth and access to and cost of capital.	Short, medium, and long term
TRANSITION RISKS	Market	Changes in demand for carbon-intensive assets and increased costs of materials.	Declining revenues, early retirement of assets and reduction of shareholder value.	Long term

Horizon Climate-Related Opportunities

Opportunity	Description	Potential Financial Impacts	Time Horizon
Resource Efficiency and Energy Use	Plant modifications and capital projects to reduce energy consumption and asset field emissions.	Improved operating efficiency and reduced use of liquid fuel and Scope 1 emissions, resulting in lower operating costs for the business.	Short, medium and long term
Products & Markets	Diversify business activities.	Increased revenues through access to new and emerging markets. One example is Horizon's recent seed capital investment in start-up carbon removal company, Nobrac.	Medium to long term

[b] Resilience of our Portfolio

Horizon's current asset portfolio shows resilience to climate change-related financial risk through its economic life in a range of decarbonisation scenarios. The Maari and Beibu production assets remain NPV positive in each of the IEA decarbonisation scenarios, and the economic life of the production assets is not shortened. The risk of our low-cost Beibu and Maari production assets being stranded in a carbon-constrained world is low. Both fields are expected to remain economic until at least the end of the existing licence periods in 2027/2028.

Asset	Scenarios	FY24 & 25 NPV	Project NPV	Economic Life	Comment
Maari	IEA STEPS	🟢	🟢	🟢	Positive oil prices impact partially mitigated by higher CO_2 prices.
Maari	IEA APS	🟢	🟢	🟢	Positive oil prices impact partially mitigated by significantly higher CO_2 prices.
Maari	IEA NZE 2050	🟢	🟠	🟢	Asset economics impacted by lower oil prices and significantly higher CO_2 prices.
Beibu	IEA STEPS	🟢	🟢	🟢	Positive oil prices impact.
Beibu	IEA APS	🟢	🟢	🟢	Positive oil prices impact partially mitigated by higher CO_2 prices.
Beibu	IEA NZE 2050	🟢	🟢	🟢	Asset still shows robust economics with significantly lower oil prices and higher CO_2 prices.

🟢 Positive/negligible impact 🟠 Moderate negative impact 🔴 Significant negative impact

Refer to the below table - 2022 IEA Climate Scenarios for more information on IEA scenarios.

2022 IEA Climate Scenarios

Key Features	IEA Scenarios: Stated Policies (STEPS)	Announced Pledges (APS)	Net Zero Emissions by 2050 (NZE 2050)
Overview	Reflect current policy settings and explores how the energy system evolves without additional policy implementation.	Assume that all climate targets set by governments around the world will be met in full and on time.	Set out a pathway to achieve the 1.5 °C outcome by reducing annual emissions to 23 Gt by 2030 and to net zero by 2050.
World Oil Demand	Oil demand levels off at 103 mb/d in the mid-2030s	Oil demand peaks in the mid-2020 and start to decline to 93 mb/d in 2030 and 57 mb/d in 2050.	Oil demand falls sharply to 75 mb/d in 2030 and continues to fall to 23 mb/d in 2050.
Global Oil Prices	US$82/bbl in 2030; US$95/bbl in 2050.	US$64/bbl in 2030; US$60/bbl in 2050.	US$35/bbl in 2030; US$24/bbl in 2050.
World CO_2 Emissions	36.2Gt in 2030; 33.9Gt in 2040; 32.0Gt in 2050.	31.5Gt in 2030; 20.5Gt in 2040; 12.4Gt in 2050.	22.9Gt in 2030; 5.8Gt in 2040; 0Gt in 2050.
China Carbon Price Forecast	US$28/t CO_2 in 2030; US$43/t CO_2 in 2040; US$53/t CO_2 in 2050.	US$40/t CO_2 in 2030; US$110/t CO_2 in 2040; US$160/t CO_2 in 2050.	US$90/t CO_2 in 2030; US$160/t CO_2 in 2040; US$200/t CO_2 in 2050.
New Zealand Carbon Price Forecast	US$90/t CO_2 in 2030[8]; US$98/t CO_2 in 2040; US$113/t CO_2 in 2050.	US$135/t CO_2 in 2030; US$175/t CO_2 in 2040; US$200/t CO_2 in 2050.	US$140/t CO_2 in 2030; US$205/t CO_2 in 2040; US$250/t CO_2 in 2050.

Source: IEA

8 The New Zealand carbon price forecast under the STEPS scenario is assumed to be the same as the European Union's price.

Climate Scenario Analysis

A. Methodology

We have applied each of the IEA scenarios to Horizon's base case modelling to evaluate the potential impact on the Net Present Value (NPV) of our assets, with our forecast carbon emission volumes, IEA forecast commodity pricing[9] and carbon pricing[10]. We have compared the NPV impact for each IEA scenario with Horizon's base case to determine the resilience of Horizon's current asset portfolio. Resilience was assessed based on whether the IEA scenarios resulted in a material impact to the asset NPV or the current forecast economic life of each project or asset. We also examined the impact over the short and medium term. Horizon's base case assumptions demonstrate that the Beibu and Maari projects are economic until at least the end of the existing licence periods in 2028 and 2027, respectively.

Importantly, Horizon already models carbon pricing in its base case portfolio analysis. Horizon's base case modelling applies a carbon price of US$50/t CO2e (real 2023) across its producing asset in New Zealand, and applied the IEA STEPS CO2 pricing across its producing assets in China. This is based on the assumptions that: (a) New Zealand maintains its current Emission Trading Scheme and (b) that an offset regime applies in China.

B. IEA scenarios

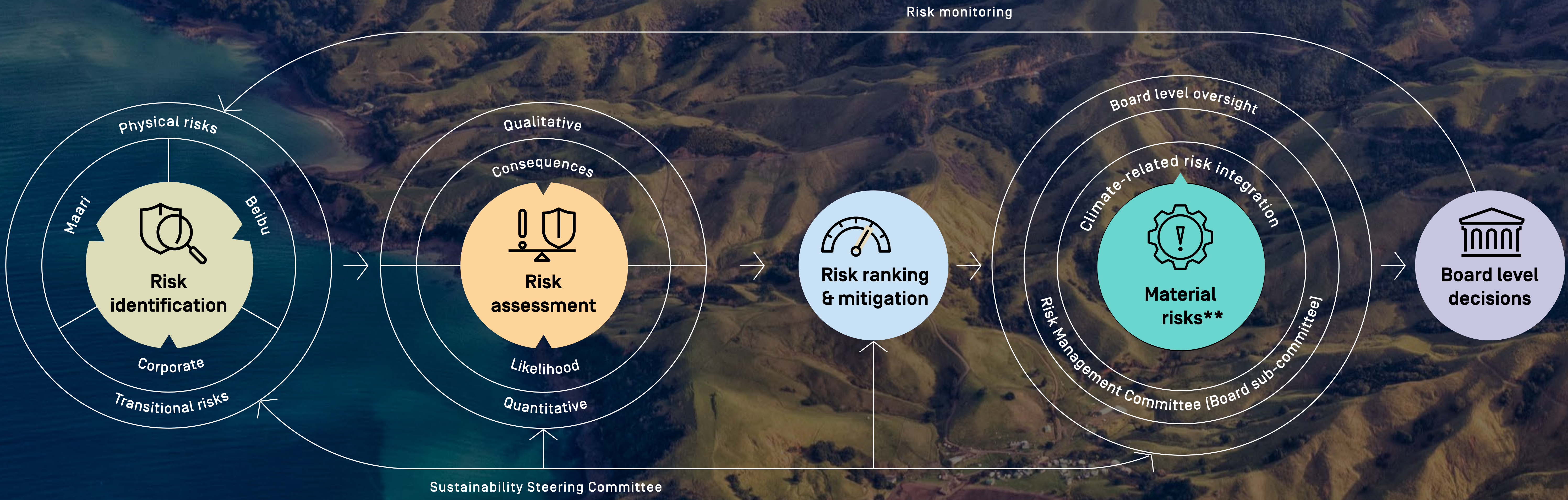
Horizon's scenario analysis utilises the IEA's commodity demand and supply data, and associated commodity and carbon price forecasts for the three scenarios, as summarised in the table on page 25.

C. Limitations of our analysis

The IEA scenarios are based on reported 2022 data. As a result, the commodity price forecasts do not consider the prices currently being realised in the market. Our current climate scenario analysis also does not include detailed consideration of geopolitical tensions or Gross Domestic Product (GDP) implications that are likely to escalate in cases where decarbonisation is accelerated. Detailed analysis of physical climate risk scenarios is ongoing and will further evolve over future years.

9 Oil price forecasts are based on Horizon's internal assumptions and IEA's oil price forecasts in 2030 and 2050. Inflation has been assumed to be minimal.
10 CO_2 prices are based on a linear extrapolation from the 2022 CO2 price and the CO2 price forecasts in World Energy Outlook 2022 in 2030, 2040, and 2050.

Risk Management



Risks are reviewed regularly for any potential change and changes are promptly communicated within the organisation. Material risks are continuously monitored through several channels and a variety of reports.

Risk identification

The identification process considers climate-related risks by the business units in different geographic regions. For each business unit (Corporate in Sydney, Maari in New Zealand and Beibu in China) we follow the climate-related risk categories as recommended in the TCFD implementing guidance. We consider both physical risks and transition risks are relevant to our business units, as demonstrated in the previous sections. As our business units operate in different geographic regions, we take local regulation and market conditions into consideration when identifying climate-related risks for that business unit.

Risk assessment

The identified risks are assessed applying qualitative and quantitative methods to determine how likely the scenario is to occur and the potential consequences to our business. The likelihood and severity will determine the risk level, following Horizon's risk matrix.

Risk ranking & mitigation

For each identified risk, we consider the mitigation measures that could effectively reduce the risk and assign a risk owner. All identified risks are reviewed holistically, guided by the risk level, to identify material risks from climate change that would expose Horizon's business. For all risks, possible mitigation measures are considered to reduce Horizon's risk exposure. While all climate-related risks are of importance, we prioritise those risks that are considered to have a material impact to the business.

Material risks**

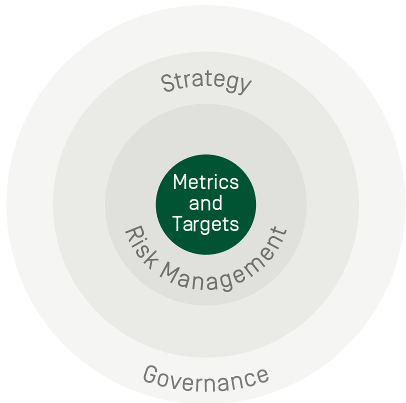
Climate-related risks that are considered material are integrated into Horizon's overall risk management. The material risks, and mitigation measures are included in Horizon's risk report, together with all other material risks to the business. These risks are also highlighted in the internal Sustainability Report to the Board, and are discussed at the Risk Management Committee.

** Refer to Glossary for definition of material risks

Board Level Decisions

Board level decisions with specific actions are developed to manage the material risks. The actions may not necessarily reduce the risk immediately but a process to address the risks and position Horizon to be resilient to those risks in the medium to long term.

Metrics



A. GHG Emissions

The NGER scheme, established by the *National Greenhouse and Energy Reporting Act 2007*, is Australia's national framework for reporting greenhouse gas emissions. The NGER scheme requires companies with operational control over facilities, which emit greenhouse gases above specified thresholds, report their Scope 1 and Scope 2 emissions. Horizon has no oil and gas operations in Australia nor has operational control of its oil operations in China and New Zealand. Accordingly, Horizon is not required to report under the NGER scheme. However, Horizon applies the NGER methodology to calculate Beibu's Scope 1 and Scope 3 emissions, Maari's Scope 3 emissions and Corporate Scope 2 and Scope 3 emissions. There are no Scope 2 emissions from Beibu or Maari as energy consumed on the facilities falls into Scope 1.

For Beibu, the calculated Scope 1 emissions are comparable to the Operator supplied annual (calendar year) emissions, with the reconciled variances largely attributable to the use of different emissions factors and the fuel gas allocation. During FY22, we reached alignment by using the Operator's fuel gas allocation for the joint venture system on the central processing facility (PUQB) and the Operator reported gas production from our fields.

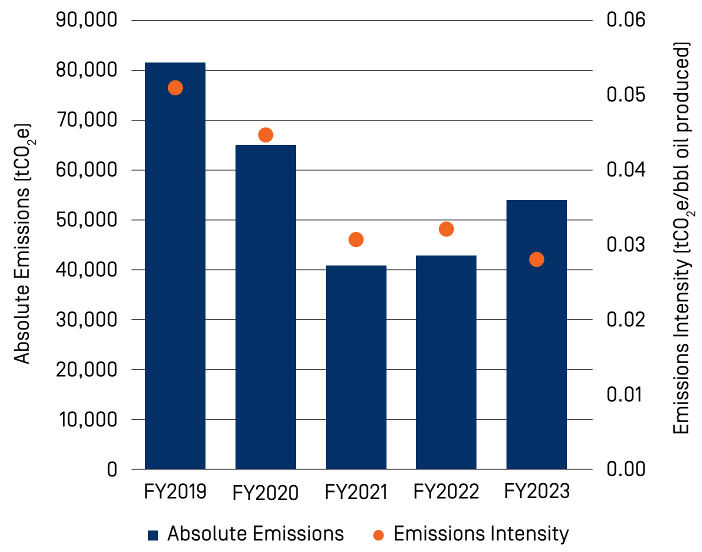
For Maari, the Operator supplied Scope 1 emissions are the basis for carbon units purchased and surrendered to the New Zealand government.

Scope 3 emissions are largely the end-use of produced crude oil, and a small percentage from transportation, refining and storage of crude oil, services to support field operations, business travels and staff commuting. Due to the lack of visibility of our full upstream and downstream value chain, there are limitations in our Scope 3 estimates. Our Scope 3 emissions are estimated with a set of assumptions following the National Greenhouse Account Factors. Emissions accounted for include crude oil product used as fuel, allowances have also been made for fugitive emissions during transportation, refining and storage of crude oil, and estimated helicopter fuels, corporate business travels and staff commuting.

Scope	Description (Primary Category)	Accounting Basis	FY23 Emissions (tCO_2e)
Scope 1	Emissions related to the consumption of fuel gas and crude fuel (Maari only) to produce electricity and the flaring of gas at our non-operated producing fields in China and New Zealand	Equity	54,041
Scope 2	Emissions related to purchased electricity at our office facilities in Sydney.	Equity	19
Scope 3	Emissions related to the final use of produced oil from our non-operated producing fields in China and New Zealand.	Equity	822,812
Total Emissions Intensity (Scope 1 + Scope 2)		Equity	**0.028 tCO_2e/bbl**
Total Emissions Intensity (Scope 1 + Scope 2 + Scope 3)		Equity	**0.460 tCO_2e/bbl**

The below graph shows the absolute GHG emissions and emissions intensity from FY19 (July 2018). In 2018 Horizon's interest in Maari increased from 10% to 26%, therefore 2019 is used as the base year to allow for a comparable trend analysis on an equity basis. Horizon's internal process updates the GHG emissions trending every month, and a review is carried out for changes in GHG emissions relating to field activities. This process provides visibility on our emissions performance, allows an understanding of the drivers for emissions variation and is one of the tools to determine possible ways to reduce field Scope 1 emissions.

Horizon Scope 1 GHG Historical Emissions and Emissions Intensity



The reduction in emissions from FY19 to FY21 is mainly contributed by the reduction in associated gas, which declines as reservoirs deplete. Notwithstanding gas depletion and high gas producing well shutdown, our operators also implemented various carbon reduction measures during FY21 resulting in an approx. 6,000 tCO_2e (on an equity basis) absolute decrease. The Scope 1 absolute emissions for Horizon's assets in FY23 has increased by approx. 26% compared to FY22. This increase was due to the 65% increase in Beibu production, largely contributed by field optimisation, workovers and WZ12-8E phase 2 development. Production increase naturally comes with an increase in produced gas, which for the case of Beibu, is flared at the platforms. The scope 1 emissions intensity in FY23 has reduced by approx. 12% compared to FY22, which reflects the work completed throughout the year to reduce field emissions and the relatively low quantities of gas associated with 12-8E production recently brought onstream. The emissions generated for each barrel of oil produced have reduced for the year. However, our assets require a minimum amount of gas for fuel use to support operations. Horizon's Beibu asset is already importing gas from nearby fields. Maari field gas is currently insufficient and is supplemented with crude oil as fuel. Emissions associated with flared gas may reduce but the demand for fuel gas / crude for process heating and power generation may remain relatively constant. Therefore, it is not expected that there will be any significant reduction in Scope 1 emissions for the remaining useful life of the assets. In addition, as production declines towards the end of field life, emissions intensity is expected to increase for the same reason that heating and power generation is unlikely to reduce at the same rate of production decline. Although limited, there are some Scope 1 emission reduction opportunities to pursue, and Horizon, together with our operators, continue to investigate these opportunities. Refer to the section "C. Initiative to reduce scope 1 emissions" on page 32 for further details.

B. Energy Use

Direct energy use on Horizon's assets arises from the combustion of natural gas or crude oil for fuel to generate steam and/or power, and a small amount of diesel to support the day-to-day operations. A small amount of energy is also required for our operators' onshore warehouses and Horizon's corporate office.

The overall energy use for Beibu has increased from Q2 2022, compared to previous years due to production from the new WZ12-8E field. Power is supplied to the 12-8E platform from existing power generators on the central processing facility (PUQB). As we aim to maximise value from the existing fields, annual workovers may require a change-out to larger downhole pumps, which would increase overall power demand. Our Operator is transparent on any changes made on the facilities and subsurface, and always looks for energy conservation opportunities. Our China Operator has an Energy Saving Work Plan and holds regular Energy Conservation weeks to raise awareness within the staff working on the facilities.

For Maari, the Operator always aims to keep steam consumption and energy use at a minimum, including implementing energy efficiency measures, minimising heating requirements to the process and heat losses. In the last three years, there have been a lot of activities pursued to optimise the steam demand during normal operation. This includes intermittent heating of the FPSO cargo, in lieu of the previous continuous mode, and relying on heat recovery from the steam condensers for sea water injection heating. Steam demand increases significantly during the cargo offtake period due to operating two cargo offloading pumps and heating of cargo. Offtake generally occurs every three – four months, an optimum offtake frequency is determined by the Operator following careful planning according to production levels. Our Operator is committed to continue minimising fuel gas, crude oil and diesel use, as well as improving boiler combustion efficiency. These optimisations will not only help to reduce energy use but also reduce Scope 1 emissions, given the declining gas rates.

C. Initiatives to Reduce Scope 1 Emissions

Horizon proactively engages with the operators of its production assets in China and New Zealand to reduce Scope 1 emissions.

Our Beibu field in China sits within the Weizhou oil production area, where gas from various fields is combined for power generation and excess gas is flared. Although gas from our field is flared, this integrated gas utilisation approach minimises overall energy use and flaring from the Weizhou area. Over the years, energy saving and carbon reduction measures within the scope of the oilfield installations have been implemented, and whilst further immediate opportunities for reductions in Scope 1 emissions is currently limited, opportunities may become available with project changes and enhanced technology. We have expressed our willingness to participate in the Operator's energy efficiency and emissions reduction initiatives, within our specific permit or in the wider Weizhou area.

For our Maari field in New Zealand, improved frequency of gas, diesel and crude oil sampling has resulted in more accurate emissions reporting. In addition, the JV has developed a plan under which it considers initiatives to reduce Scope 1 emissions. The following initiatives have been implemented prior to FY23, resulting in over 6,000 tCO_2e annual reduction net to Horizon:

- Minimise flaring, especially with the reduction in gas production, optimise the utilisation of the available gas for fuel.
- Minimise condensate and steam losses.
- Reduce steam demand and energy from the facilities, thus minimising crude oil use as fuel when produced gas cannot meet fuel gas demand.
- Fuel gas and crude fuel optimisation, combustion efficiency review.
- Single turbine operation to maximise efficiency.

During FY23, the Operator has implemented various facilities modifications to reduce Scope 1 emissions, as described below. The modifications demonstrate the joint venture's commitment to a continuous system review.

Reverse Osmosis Unit

The onboard boiler freshwater generators were replaced with two Reverse Osmosis (RO) units in April 2023, which continue to produce boiler feed quality water to drive the steam turbines and generate process heat on the FPSO, without the consumption of steam. The previous freshwater generators required high amounts of process heat to heat up seawater, removing these has resulted in less process heat demand, in turn reducing steam hence boiler fuel demand. This modification has resulted in an emissions reduction in the order of 1,560 tCO_2e, net to Horizon, from the reduced use of crude oil as fuel. Given the successful implementation of RO units on the FPSO, the Operator is currently evaluating the feasibility of installing RO units on the wellhead platform for generating service and potable water.

Nitrogen purge

Purge gas is required on flare systems to prevent oxygen ingress. This is typically achieved by continuously flowing a small process gas stream. For Maari, the flare headers were designed to normally purge with fuel gas but facilities are available to purge with nitrogen during process shutdowns, when fuel gas is not available. During FY23, fuel gas has been switched off and nitrogen is used to purge the flare headers, as an emissions reduction initiative. This modification has resulted in an emissions reduction in the order of 800 tCO_2e, net to Horizon, mainly from reducing flared gas (purge gas).

Production separator pressure optimisation

The Operator reviewed and optimised the back pressure control valve set point at which the gas to flare valve opens, allowing more buffer capacity in system to reduce gas to flare. This modification has resulted in an emissions reduction in the order of 200 tCO_2e, net to Horizon, mainly from reducing flared gas. The Operator continues to review additional control system tuning opportunities for periods of severe slugging.

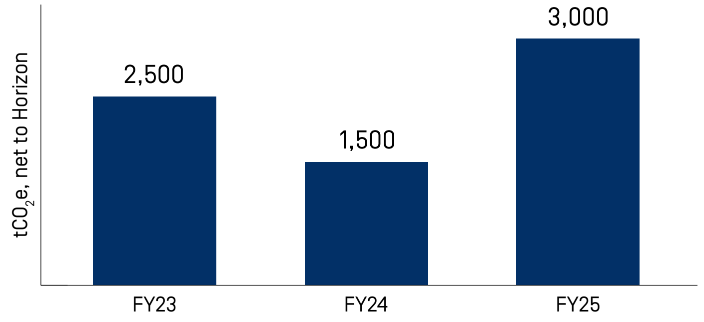
Future initiatives

The joint venture continues to identify and evaluate medium to long term initiatives to reduce emissions. The boiler combustion efficiency review completed to date has identified some possible modifications, which are being progressed under the Management of Change system. The Operator plans to engage the vendor for a site visit to conduct more detailed review of combustion efficiency, with the plan to further optimise.

Horizon is working with the Operator to progress a concept to recover the low pressure gas flashed from the process separator and feed it to the fuel gas system. This will reduce flaring and Scope 1 emissions with the added benefit of reducing crude oil used as fuel. The current work is to take the concept through the Assess phase during FY24.

Horizon maintains a log of emission reduction initiatives. All actions have a priority ranking and assigned a lead responsible person. The carbon initiative register is reviewed and updated regularly by the Sustainability Steering Committee. Estimated emission reductions associated with these initiatives are summarised in the table below from FY23 to FY25.

Estimated emissions reduction quantities for initiatives implemented and currently being progressed, tCO_2e, net to Horizon.



D. NZ ETS and Carbon Offsets

Horizon is a participant in the New Zealand Emissions Trading Scheme (NZ ETS). Under the Scheme, we purchase New Zealand Units (NZUs) and surrender the equivalent NZUs corresponding to 100% of Maari's field emissions annually (on an equity basis). Our purchase and surrender of NZUs under NZ ETS are completely aligned with and are a key component of New Zealand's Net Zero by 2050 commitment. The majority of the NZUs surrendered by Horizon to date have been forestry and carbon sequestration related.

For our Sydney-based corporate office we chose a carbon neutral energy plan during FY22 at our previous office premise, which offsets our office electricity use. The carbon neutral energy plan is certified under the Australian Government's Climate Active Carbon Neutral Standard. Since moving to the new office in FY23, we have again signed up for a plan with the electricity provider, which is part of the Climate Active Network. The Climate Active Network is an Australian network of organisations committed to the delivery of high integrity actions across emissions reduction and the use of accredited offsets.

Horizon is a subscriber to a carbon offset scheme for all domestic and international corporate flights. The automated platform purchases carbon credit units through verified projects.

E. Nobrac

To contribute to global decarbonisation efforts and to build resilience to climate-change transition risks, Horizon is continuing to evaluate new business opportunities, including those in renewables, carbon removal and offsets.

Following extensive evaluation, Horizon made an AUD2 million (USD1.4 million) seed capital investment, in H1 FY23, to acquire an approximate 3.5% interest in Nobrac Limited, a subsidiary of ASX listed company, Kiland Limited (KIL). Nobrac has plans to develop the Flinders Biochar project on Kangaroo Island in South Australia to sequester the carbon embodied in approximately 4.5 million tonnes of the fire damaged biomass (standing timber) into approximately 960,000 tonnes of biochar over 10 years.

Kiland own 18,600 hectares of land on Kangaroo Island, South Australia. A bushfire in early 2020 damaged over 95% of Kiland's forestry plantation, covering an area of approximately 14,500 hectares, creating a major potential carbon emission legacy. Kiland intends to transition its land from forestry to agriculture, mostly lamb production. In normal circumstances the damaged trees would be allowed to rot, emitting methane, or would be burnt releasing methane and C02 to the atmosphere. Kiland has decided to take a different approach, to sequester the carbon embodied in the fire-damaged biomass.

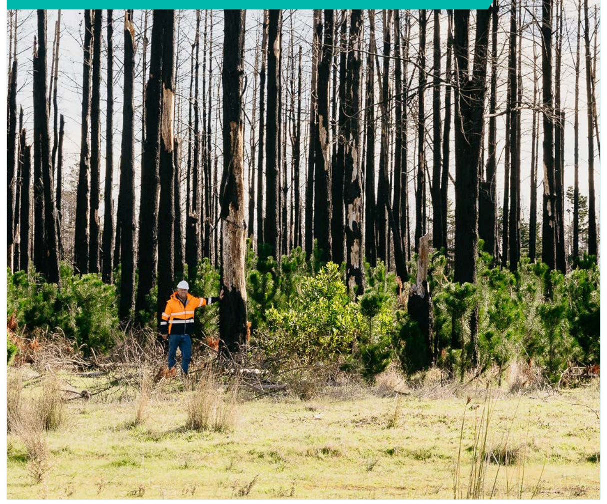
Biochar is a stable form of carbon, made from biomass, that can endure in soil for hundreds to thousands of years. Using biochar to bury carbon in the ground is a large-scale method to tackle global warming and, at the same time, significantly boost the soil productivity reducing the use of fertiliser and increasing soil water retention. Other agricultural benefits of Biochar include improving animal health through use as feedstock.

Horizon's seed capital investment in Nobrac Limited in H1 FY23 totalled:

AUD $2m

(USD$1.4m)

This investment equals an approximate 3.5% interest in Nobrac Limited, a subsidiary of ASX listed company, Kiland Limited (KIL).



Biochar production, is now an approved method for generating Carbon Removal Credits (CRCs) in the global voluntary market. Vera VCS and Puro, international verification authorities, have now published verification methods for biochar generated CRCs. It is estimated that the Kangaroo Island project will generate approximately 2 million CRC's over the project lifetime. CRC represent the long-term removal of carbon. 1 CRC represents 1 tonne of C02 removed from the atmosphere. While the CRC unit price fluctuates rapidly, the spot price of a CRC was €155 per tonne, in June 2023.

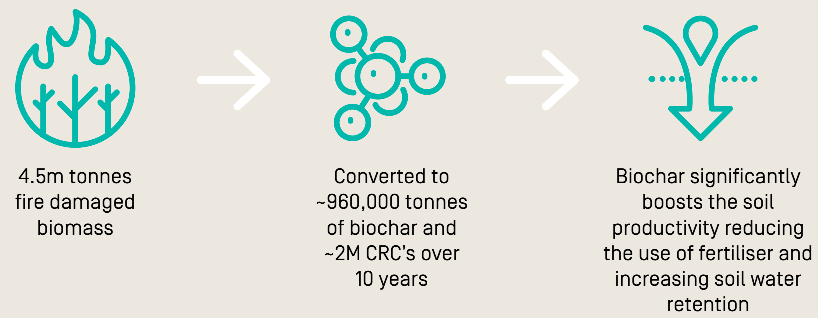
It is estimated that the Kangaroo Island project will generate

~2m CRC's

over the project lifetime.
1 CRC represents 1 tonne of CO_2 removed from the atmosphere.

Kiland own 18,600 hectares of land on Kangaroo Island, South Australia.

Example of a mobile pyrolysis unit.



Nobrac's Flinders Biochar project is a potentially large scale, institutional-grade carbon removal business that is expected to lead to real reduction and sequestration of carbon, at the same time presenting a long-term opportunity to deliver cashflow and value for shareholders from CRC's, biochar product sales and company growth.

Commercial production of biochar and CRC's is planned to start in late 2023 and will continue for a ten-year period. In April 2023 Kiland announced that Nobrac had ordered the first mobile pyrolysis unit that will operate at ½ tonne input per hour of woodchip to produce biochar. The production of the first biochar will facilitate registration of the project for voluntary CRC's as soon as possible. Registration of the project and CRC production will enable Nobrac to make further acquisitions of larger capacity pyrolysis units to scale up biochar production over the coming months. The pyrolysis unit is expected on site in Q3 2023.

The biochar will, amongst various benefits, be used to improve soil health on Kangaroo Island and on the mainland. The project will provide employment on Kangaroo Island and contribute to the development of Australia's industrial design, fabrication and engineering industries.

Through the Flinders Biochar project Nobrac will seek to diversify into other projects, capitalising on rapidly developing global carbon opportunities, to emerge as an institutional-grade carbon removal credit developer and to make a meaningful contribution to global decarbonisation targets.

The project has the potential to provide strong returns for Horizon shareholders. We expect that demand for carbon offsets will only increase such that an investment of this nature has the potential to be value accretive.

Reconciliation against TCFD Recommendations

GOVERNANCE *Disclose the organisation's governance around climate-related risks and opportunities*	
Board oversight of climate-related risks and opportunities.	Horizon discloses its governance and management framework for climate-related risks and opportunities on page 15.
Management role in assessing and managing climate-related risks and opportunities.	
STRATEGY *Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's business, strategy and financial planning where such information is material*	
Climate-related risks (opportunities and threats) identified over short, medium and long term.	Horizon discloses and defines climate-related risks and opportunities over the short, medium and long term on pages 23 to 24.
Impacts of climate-related risks, (opportunities and threats) on organisation's businesses, strategy and financial planning.	
Resilience of organisation's strategy taking into account different climate scenarios, including a 2°C scenario.	Horizon has modelled the resilience of its current asset portfolio applying three IEA published scenarios. The results of our modelling are on page 25.
RISK MANAGEMENT *Disclose how the organisation identifies, assesses and manages climate-related risks*	
Processes for identifying and assessing climate-related risks.	Horizon sets out how it identifies, assesses and manages climate-related risks on pages 28 and 29.
Processes for managing climate-related risks.	
How processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	
METRICS AND TARGETS *Disclose the metrics and targets used to assess and manage the relevant climate related risks and opportunities where such information is material*	
Metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Horizon uses global oil price, carbon price and our own forecast of oil production and carbon emissions to assess climate-related risks and opportunities in line with its strategy as described on page 26.
Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Horizon reports its GHG emissions, and steps it is taking to reduce its emissions, on pages 30 to 33.
Targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Given Horizon's position as non-operator in its current assets, our focus is to implement carbon reduction initiatives, rather than setting nearer term emission reduction targets.

4. Glossary

ALARP	As low as reasonably practicable
bbl	Barrel of oil produced
Beibu	Offshore oil production operation in the Beibu Gulf China, of which Horizon has a working interest
BOSIET	Basic Offshore Safety Induction and Emergency Training
CDP	Formerly, the Carbon Disclosure Project. CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. CDP's website address is: https://www.cdp.net/en
CRC	Carbon Removal Credit
ESG	Environmental, social and corporate governance
FPSO	Floating Production Storage and Offloading. A term that references a floating vessel near an offshore oil field where oil is processed and stored until it can be transferred to a tanker
GHS Scope 1	Direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organization
GHS Scope 2	Indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling
GHG Scope 3	Emissions which are the result of activities from assets not owned or controlled by the reporting organization, but that the organization indirectly impacts in its value chain
IEA	International Energy Agency
IEA APS	IEA's Announced Pledges Scenario (APS) takes account of all climate commitments made by governments around the world including Nationally Determined Contributions (NDCs) as well as longer-term net-zero targets and assumes they will be met in full and on time. The global emissions difference between the APS and the NZE represents the "ambition gap" that needs to be closed for governments to achieve the goals agreed in the 2015 Paris Agreement
IEA NZE 2050	IEA's Net Zero by 2050 scenario presents a roadmap for the energy sector to transition to a net zero energy system by 2050. It assumes that advanced economies will reach net zero in advance of 2050 and sets out an emissions trajectory consistent with a 50% chance of limiting the global temperature rise to 1.5°C without a temperature overshoot
IEA STEPS	IEA's Stated Policies Scenario (STEPS) does not take for granted that governments will meet all announced goals. It instead looks at where the energy system might go without additional policy implementation, looking at existing policies and measures and those under development. The global emissions difference between the STEPS and the APS represents the "implementation gap" that needs to be closed for governments to achieve their announced decarbonisation targets
IFRS	International Financial Reporting Standards
ISSB	International Sustainability Standards Board

LTI	Lost Time Injury - defined as the occurrences that result in a fatality, permanent disability or time lost from work of one day/shift or more. These exclude medical treatment cases, restricted work cases and first aid cases
LTIFR	Lost Time Injury Frequency Rate = Lost Time Injuries per million hours
Maari	Offshore oil production operation in the Taranaki Basin New Zealand, of which Horizon has a working interest
Material Risks	IPIECA defines a 'material Risk' as any risk, that in the view of management or stakeholders, affects a company's performance significantly and informs external opinion. They tend to be issues that most affect value creation and the economic and reputation resilience of a company in a positive or negative way
Medical Treatment Injury	Any work-related loss of consciousness, injury or disease requiring more than minor first aid treatment by medical practitioner or registered medical personnel but not resulting in lost time or restricted work duties
NGER	National Greenhouse and Energy Reporting
NOPSEMA	The National Offshore Petroleum Safety and Environmental Management Authority
NZ ETS	New Zealand Emissions Trading Scheme
OPITO	The Offshore Petroleum Industry Training Organisation
Recordable Injuries	Lost Time Injuries + Medical Treatment Injuries + Restricted Work Injuries
Restricted Work Injury	An injury or occupational illness that results in the injured person being assigned to a work assignment after the day the accident occurred, where this assignment does not include all the other normal duties of the person's regular job
ROV	Remote Operated Vehicle
SSC	Sustainability Steering Committee
TCFD	Taskforce on climate-related disclosures
TRIFR	Total Recordable Injury Frequency Rate = Total Recordable Injuries per million hours
UN SDG	United Nations Sustainable Development Goals
WHS	Work Health and Safety

For more information or to see past Sustainability Reports, please visit **horizonoil.com.au**

HORIZON

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