

HORIZON

SUSTAINABILITY  
REPORT

2024

[horizonoil.com.au](http://horizonoil.com.au)

Photo of Pygmy Blue Whale taken near the Maari wellhead platform

WE WORK HARD TO ACHIEVE THE RIGHT BALANCE BETWEEN COMMUNITY EXPECTATIONS, RESPONSIBILITY TO OUR SHAREHOLDERS AND OUR IMPORTANT ROLE IN HELPING TO DELIVER A SMOOTH GLOBAL ENERGY TRANSITION.



CONTENTS

1. Message from our Chairman and CEO	01	5. Our Stakeholders	06	C. People – Employees and Communities	16
2. About this report	02	6. FY24 ESG Performance Overview & FY25 Outlook	08	D. Climate Change	20
3. FY24 ESG Highlights	03	A. Health, Safety and Environment	10	Glossary	35
4. Horizon’s priority areas & the UN SDGs	04	B. Governance	14		

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, material progress in emission reduction initiatives, kicking off new community support projects with our Maari JV partners and further strengthening the security of our IT assets following an independent assessment.

Horizon’s acquisition of a 25% interest in the Mereenie oil and gas field is a significant development with the company now being an Australian domestic gas producer servicing both the Northern Territory and East Coast gas markets. Our investment provides baseload energy to our customers and reflects our commitment to supporting the energy transition to a low carbon future. Gas delivers approximately 70% of the Northern Territory’s energy needs, of which approximately 25 to 45% is currently supplied by the Mereenie field, the largest onshore gas producer in the Territory. The recently executed Gas Sales Agreement (GSA) with the Northern Territory Government will ensure that the Mereenie field continues to service the Territorians’ energy needs for the next six years at affordable prices. Mereenie also recently executed a GSA with Arafura Rare Earths subsidiary, Arafura Nolans Project. The project, which is currently at the development planning stage, will deliver critical minerals required

for wind turbines and EV motors. The importance of these minerals to the energy transition is recognised by the Australian Federal and Northern Territory governments and we are proud that Mereenie gas will be an enabler for this important strategic project. The Mereenie JV are also working with Twin Bridges in evaluating the feasibility of helium recovery from the natural gas stream. Helium, which is currently experiencing domestic and global supply shortages, has multiple applications in cooling superconductor magnets in MRI scanning machines, nuclear energy, semiconductor and solar panel manufacturing.

Further to our FY23 seed capital investment in the Australian large-scale carbon removal business, Re-Vi Group (formally known as Nobrac), we are pleased to report that the company’s foundation project, the Flinders Biochar Project, has now reached the production phase. Production capacity is planned to gradually ramp up over the next two years with formal certification and commercial sales of carbon removal credits expected during the next financial year.

Closer to home there has been good uptake on our 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 important role in helping to deliver a smooth global energy transition.

*R. M. Harding*

Mike Harding  
Chairman

*Richard Beament*

Richard Beament  
CEO



## 2. ABOUT THIS REPORT

**THIS REPORT HAS BEEN APPROVED BY THE HORIZON BOARD. IT PROVIDES AN OVERVIEW OF HORIZON'S ESG PERFORMANCE FOR THE 1 JULY 2023 TO 30 JUNE 2024 REPORTING PERIOD.**

For climate-related reporting Horizon continues to use 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) methodology to calculate its GHG emissions, except for Maari where emissions are calculated and reported based on Climate Change Regulations in New Zealand.

For the majority of 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. The anticipated economic life of both oil assets is expected to run through to at least 2030. Close to the end of FY24 (11 June), Horizon successfully completed the acquisition of a 25% interest in the Mereenie oil and gas field, located in Australia's Northern Territory. The Mereenie oil and gas field is forecast to be economic to 2048+, with an existing licence in place until 2044. Horizon participates in these operations through Joint Venture (JV) agreements, with the assets being operated by CNOOC Weizhou Operating Company for Block 22/12, OMV New Zealand for Maari (PMP38160) and Central Petroleum for Mereenie (OL4 & OL5). Asset-related ESG targets and metrics for Beibu and Maari are viewed from and calculated based on Horizon's equity position. While Mereenie is discussed qualitatively in this report, all ESG metrics provided in this report exclude this asset, given that the acquisition completion date was close to the end of FY24. Mereenie ESG performance metrics will be included in future sustainability reports. Horizon has no operational control over these assets but at a corporate level, Horizon has full operational control of its Head Office in Sydney.



Horizon is monitoring the proposed requirements and timeline for phasing in climate-related financial disclosure in Australia, following the issuance of the Federal Government's Climate-related financial disclosure exposure draft amendments to the Corporations Act. These amendments are supported by proposed new reporting standards by the Australian Accounting Standards Board (AASB), which are largely based on the International Sustainability Standards Board (ISSB) sustainability disclosure standards (IFRS S1 and S2). In due course, Horizon will assess the need for any changes in future disclosures.

This Sustainability Report is structured around Horizon's current ESG Priority Areas, which are: Health, Safety and Environment, Governance, Our People and Communities, and Climate Change, with each aligned to relevant United Nations Sustainable Development Goals (UN SDG). Horizon's materiality assessment will be updated in FY25 incorporating ESG focus areas for the onshore Mereenie asset. Horizon's ESG priority areas and action plan will be reviewed following completion of the materiality assessment.

This report has not been externally assured.

Horizon welcomes your feedback on this report via [info@horizonoil.com.au](mailto:info@horizonoil.com.au).

## 3. FY24 ESG HIGHLIGHTS

### SAFETY AND ENVIRONMENT



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

Maari-wide HSSE 2024 initiatives.

Incident free infill well drilling and workover campaign at WZ6-12 and WZ12-8E in Beibu.

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

### GOVERNANCE



Continued Board oversight of ESG strategy and performance.

Board oversight of the Mereenie asset acquisition.

Further strengthening the security of our IT assets following an independent assessment.

### OUR PEOPLE AND COMMUNITIES



Continue to offer flexible working arrangement, which has shown a great beneficial impact on staff productivity and morale.

Partnered with South Taranaki District Council for two local community projects in New Zealand.

### CLIMATE CHANGE



Good progress made to initiatives that would result in field emissions reduction, including the replacement of fuel control valves and concept selection for a Vapour Recovery Unit to reduce flaring.

Increased utilisation of Block 22/12 gas as fuel in Beibu.

Flare Gas Recovery project at Mereenie to reduce flaring and field emissions.



4. HORIZON'S PRIORITY AREAS & THE UN SDGs

OUR SUSTAINABILITY VISION

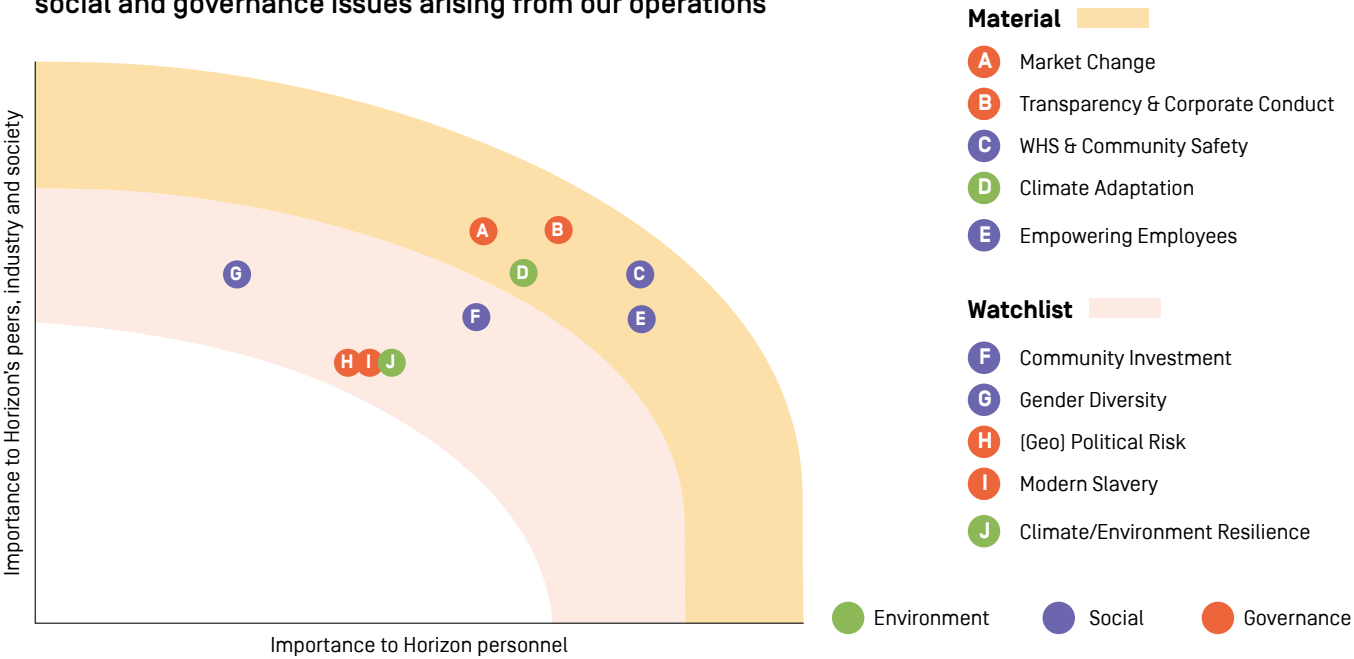
We have a role to play in the World's energy transition and we are committed to making the right kind of impact; through excellence in health and safety, reducing our emissions, and enhancing the communities where we operate.

Materiality Review

Horizon's latest materiality review, conducted by applying the AA1000 Accountability Principles standard, 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. Towards the close of FY24 (11 June 2024) Horizon completed its acquisition of a 25% non-operated interest in the producing Mereenie oil and gas field.

This additional asset diversifies and expands our production portfolio and areas of operation. The SSC has decided that a full materiality assessment will be conducted in FY25, once Horizon has gained in-depth knowledge of Mereenie operation and compliance requirements. The Mereenie asset will most likely introduce new ESG dimensions to our portfolio, presenting different risks and opportunities, which could potentially have an impact on the company's future ESG focus areas.

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

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, New Zealand and Australia to maintain asset integrity and have in place appropriate workplace management systems that reflect our high expectations for health, safety and environmental performance. Horizon maintains an active interest in our operators' programs to maintain focus on safety and environmental protection.

UN Sustainable Development Goals



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.

UN Sustainable Development Goals



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 licence comes from investing in our communities.

UN Sustainable Development Goals



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 committed and focused on supporting our operators in emissions reduction initiatives. Horizon is using the TCFD recommendations to guide our disclosures and is monitoring the requirements to implement ISSB standards in the jurisdictions where we operate.

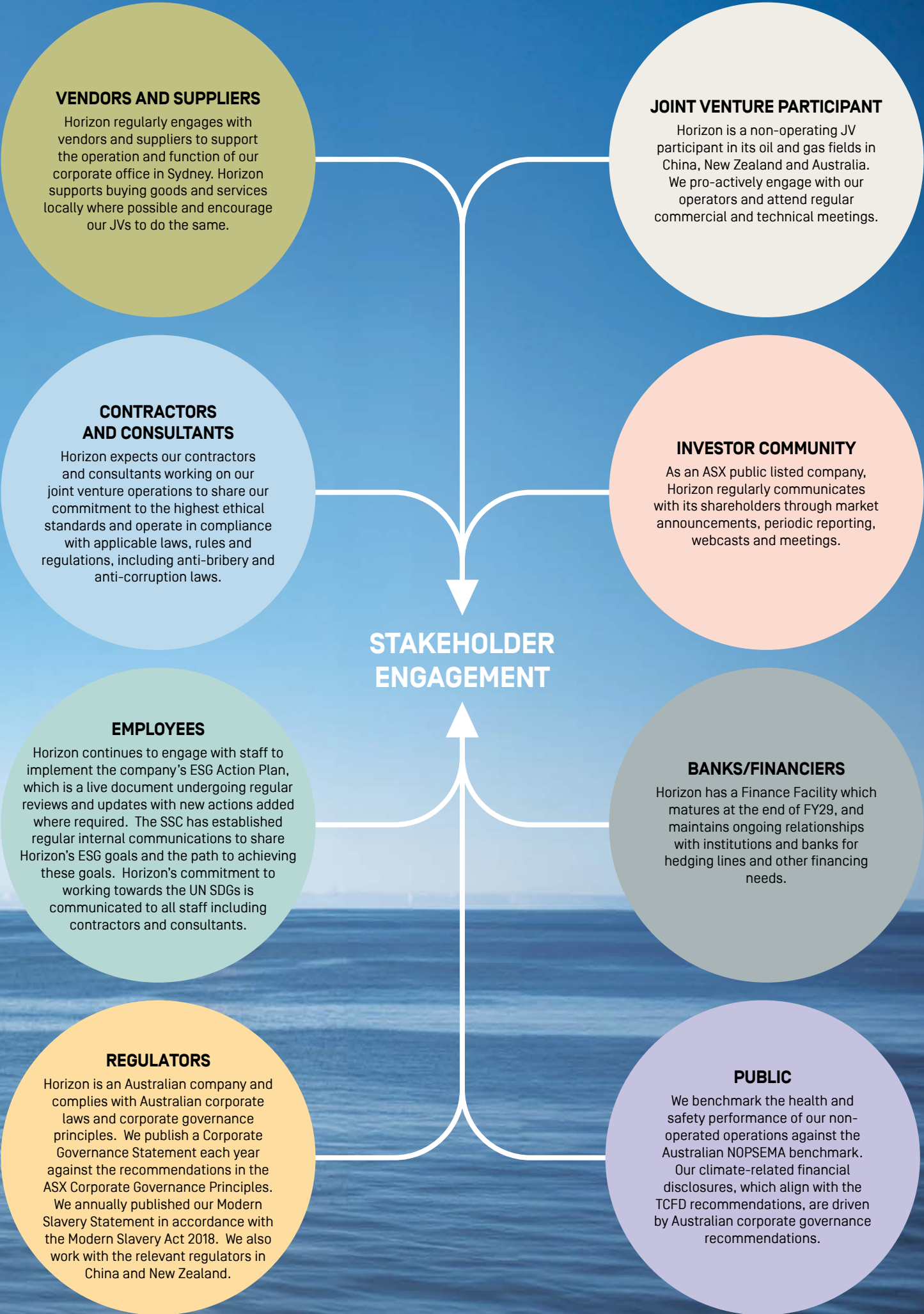
UN Sustainable Development Goals





# 5. OUR STAKEHOLDERS

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. FY24 ESG PERFORMANCE OVERVIEW & FY25 OUTLOOK

Target met Target partially met Target not met

FY24 TARGET		FY24 PERFORMANCE	
HEALTH AND SAFETY	1. Achieve zero fatalities.	Target met	Achieved, page 11.
	2. Achieve a TRIFR less than the NOPSEMA industry average for the reporting period.	Target met	Achieved, page 11.
	3. Achieve a LTIFR less than the NOPSEMA industry average for the reporting period.	Target met	Achieved, page 11.
ENVIRONMENT	1. Achieve zero material or significant reportable environmental incidents.	Target met	Achieved, page 12.
	2. Zero spills to the environment.	Target met	Zero harm to the environment.
GOVERNANCE	1. Our employees are trained in relevant policies and procedures.	Target met	Employees are trained in Horizon policies and procedures.
	2. Conduct annual assessments on our value and supply chain for incidences of modern slavery.	Target met	Annual assessment carried out; Horizon published its FY23's Modern Slavery Statement in Nov-23. (FY24's Modern Slavery Statement will be published towards the end of 2024).
	3. Maintain Board oversight of ESG strategy and performance.	Target met	Achieved –Sustainability discussed at Board meetings and ongoing reporting in Operations Reports, as part of Board papers.
PEOPLE – OUR EMPLOYEES & COMMUNITIES	1. At least 20% women employees in senior executive roles through any future recruitment initiatives.	Target partially met	No new management position appointments in the past year, page 17.
	2. 30% women directors on the Board.	Target partially met	There is no change in Board composition in the past year. The number of women directors on the Board remains at 1 in 6 (16.7%).
	3. Promote flexible working arrangements to encourage employees to return to work after parental leave.	Target met	Achieved, page 17.
	4. Equal opportunity to participate in development and training programs to support career growth.	Target met	Achieved, page 17.
	5. Work with our operators and partners to identify and participate in community-based projects.	Target met	Achieved – the Maari joint venture has signed agreement to fund the development of two community projects, page 18.
CLIMATE CHANGE	1. Support operator emissions reduction initiatives.	Target met	Although we are in a non-operator position in our producing assets, we proactively engage with the operators to monitor and understand field emissions, and where feasible, promote emission reduction initiatives, pages 30 – 31.
	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 assessed as sensitivities for potential new projects.
	3. Continued improvements in Horizon's climate disclosures across the four thematic areas of TCFD (governance, strategy, risk management and metrics/ targets).	Target partially met	Improvements made during the year for more accurate emissions reporting, in preparation for the expected Australian climate-related financial disclosure requirement in FY27.

# 6. FY24 ESG PERFORMANCE OVERVIEW & FY25 OUTLOOK [cont'd.]

FY25 TARGETS	
HEALTH AND SAFETY	Unchanged from FY24.
ENVIRONMENT	Unchanged from FY24.
GOVERNANCE	<ul style="list-style-type: none"><li>FY24 targets have been achieved and included in Horizon's Corporate work processes, therefore are no longer ongoing targets.</li><li>A new target is added for FY25 to conduct a full Materiality review.</li></ul>
PEOPLE – OUR EMPLOYEES & COMMUNITIES	Unchanged from FY24. The company will maintain current gender diversity targets. However, these targets may be difficult to achieve given the small size of the company and the current Board composition. However, we remain committed to have these as ongoing goals.
CLIMATE CHANGE	Unchanged from FY24.



A. HEALTH, SAFETY AND ENVIRONMENT

HEALTH AND SAFETY

OUR GOAL

We will continue to outperform our peers and industry benchmarks through ongoing and active engagement with our operators

OUR TARGETS FOR FY25

- 1. Achieve zero fatalities
- 2. Achieve a TRIFR less than the NOPSEMA industry average for the reporting period
- 3. Achieve a LTIFR less than the NOPSEMA industry average for the reporting period

Training exercise for injured person evacuation from confined space, Maari, New Zealand.

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. Horizon follows up closely on any serious or high potential issues to ascertain appropriate actions have been taken. For management of change projects, we carry out technical oversight to ensure that process safety reviews demonstrate that ALARP criteria are met.

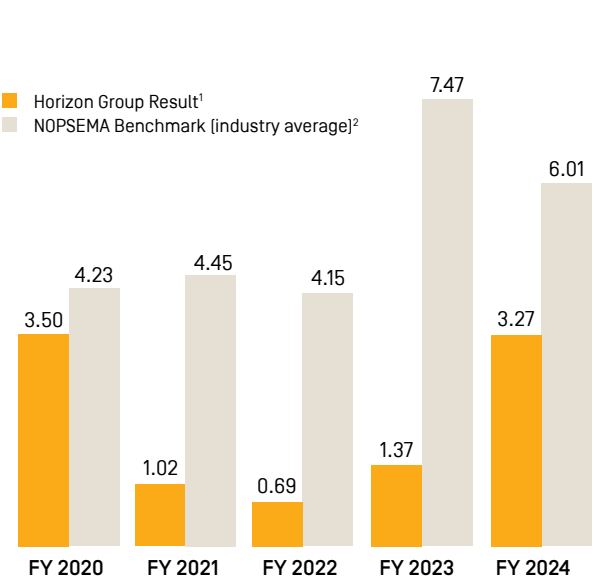
Horizon's Board have oversight of HSSE performance trends and all material HSSE incidents, through regular incident reporting. Horizon's HSSE Policy is available on our website.

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

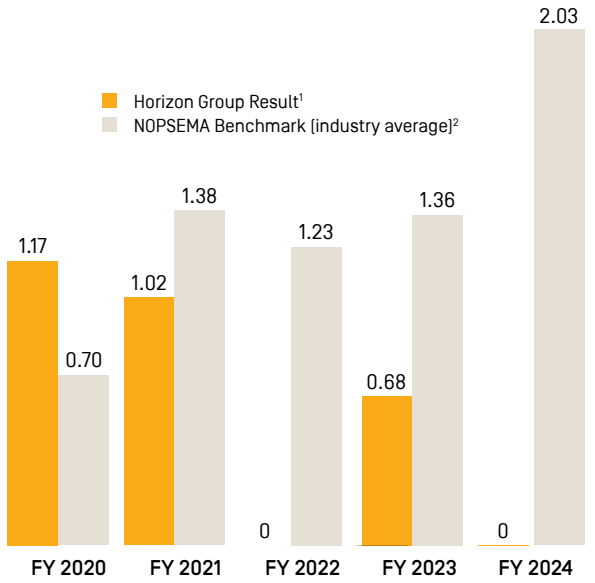
OCCUPATIONAL INJURY AND ILLNESS INCIDENTS

Both Beibu and Maari have continued their strong safety performance, despite significant drilling, well workover and production activities, as illustrated in the metrics below. Mereenie is not included in the below results, given the transaction was completed close to the end of FY24 (11 June). Mereenie safety performance will be included in FY25 and ongoing reporting.

Total Recordable Injury Frequency Rate (TRIFR)



Lost Time Injury Frequency Rate (LTIFR)



SAFETY STARTS WITH US

Ka timata te haumaru ki a tatou

During FY24, the Beibu Operator continued to demonstrate strong HSE leadership and performance with a high level of personnel engagement from all levels in the operation. Safety related work and training is being conducted regularly and is built into team building events to enhance the safety culture. For New Zealand, the successful "Back to Basics" campaign, discussed in our FY23 report, continued into 2024. The campaign encouraged continued growth in HSSE accountability and responsibility. The Maari Operator has also rolled out various other HSSE initiatives during FY24, focusing on Major Accident Event prevention, Emergency Escape Equipment and building slips, trips and falls awareness. Dropped object prevention surveys were also carried out for both the FPSO and WHP for Maari. The Mereenie Operator is active in promoting their core values and safety culture with monthly and dedicated safety campaigns, examples being Team Foundation building, Lifesaver Rules review and journey management. Assurance of management systems and barriers are demonstrated through regular audits.

MAARI ASSET INTEGRITY MANAGEMENT

The Maari Operator has completed a substantial first phase of life extension works. A notable achievement is obtaining the ABS Class Certificate with a five-year life extension notation for the FPSO. The ABS Class Certificate maintains the FPSO in Class to April 2028 and certifies the FPSO has been surveyed in accordance with the Rules of the ABS. The FPSO has now entered its 10th Special Survey with good progress being made in tank inspections and minor repairs. Detailed study work, currently under third party review, demonstrates that other project components (e.g. wellhead platform, flowlines and risers) have an operational life beyond 2030. Study work has commenced on a second phase of FPSO life extension beyond 2028. In accordance with the project's Structural Integrity Management System (SIMS), General Visual Inspection (GVI) of the Wellhead Platform (WHP) structure through use of a remotely operated vehicle (ROV) has been completed with Detailed Visual Inspection to follow in the summer. As a result of these developments, and currently forecast production rates, the Maari Joint Venture will shortly be submitting an application to the regulator to extend the economic field life beyond the current December 2027 permit expiry.

The Mereenie asset has also enjoyed good health and safety metrics in FY24, reflective of the Operator's environmental, health and safety culture. The primary means of protecting personnel is through identifying and eliminating risks, thorough safety inductions and training and the promotion of ongoing improvements in safe practices and procedures.

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



# ENVIRONMENT

## OUR GOAL



We are committed to working with our operators to protect the environment in which we work

## OUR TARGETS FOR FY25

- 1. Achieve zero material<sup>3</sup> or significant reportable<sup>4</sup> environmental incidents
- 2. Zero spills to the environment

The Group is subject to significant environmental regulation in respect of exploration, development and production activities in all countries in which it operates. 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.

Our newly added Mereenie asset is located in one of Australia's most scenic and pristine environments, rich in indigenous culture with diverse flora and fauna. The Mereenie Operator applies safe and industry-leading practices to all activities, discussing processes with local stakeholders and obtaining all necessary certificates and clearances before undertaking work. Mereenie operations are conducted under comprehensive government approved Environmental Management Plans (EMP), complying with all relevant Commonwealth and State Legislations and Codes of Practice. The EMPs detail the way in which the Operator

responsibly and actively manage waste, water resources, air emissions, land disturbance and rehabilitation, soil and flora/ fauna conservation. The EMPs also include strategies to control pest and weeds, along with bushfire prevention. The Mereenie sites undergo regular inspections by the regulators to monitor environmental conditions associated with operations and drilling programs.

Reportable environmental incidents are summarised in the table below. Mereenie is not included in the below results, given the transaction was completed at the end of FY24 (11 June). Mereenie environmental performance will be included in FY25 reporting.

### 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 Notifiable environmental incident on WZ12-8E, 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.

6 Maari – spill with no hydrocarbons involved.

## Ecological survey around the Maari Wellhead Platform and further work planned

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 which could potentially have some ramifications on the selected decommissioning scope and methodology.



## 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 at the end of field life, consistent with the requirements of the relevant country Government authorities.

In FY23, Horizon and its JV partners updated their 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 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 draft security and financial assessment guidelines are being finalised Horizon has commenced setting aside funds 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. As noted in an earlier section, the Maari JV is planning to shortly submit an application the regulator, to extend the PMP38160 permit beyond the current December 2027 expiry date, which if granted will likely defer field decommissioning to beyond 2030.

During FY24, the Maari JV requested a service proposal for a qualitative marine ecological assessment of the Maari WHP. High-definition video imagery will be captured by an ROV and used by the marine biologists to undertake the ecological assessment. The proposal includes having a scientist stationed onboard during imagery capture to maintain direct communications with the ROV operator and view the imagery in real time. This will allow imagery of the most important biological / ecological features to be obtained. In addition to ecological assessment of the fauna and flora associated with the Maari WHP and surrounds, the assessment will extend from the surface to seabed and surrounding seabed habitats covering both natural habitats and anthropogenic structures. The Maari JV has approved the budget for the above-mentioned work and built the work scope into the subsea ROV inspection program, currently waiting for execution later in calendar year 2024 during the summer months.

For Beibu, China, preliminary decommissioning plans, safety and environmental assessments and cost estimates are available for all assets, including the recently installed WZ12-8E facilities. A decommissioning fund was established at the commencement of Beibu production and is fully funded for the WZ12-8W and WZ6-12 facilities (wellhead platforms and subsea pipelines) and PUQB central processing facility. Production based progressive contributions are scheduled to be made towards WZ12-8E (new development project consisting of a standalone platform with flowline tie-back to WZ12-8W).

For Mereenie, Australia, budget estimates for the closure costs of the field have been developed by independent consultants and a percentage of the estimated closure costs, as agreed with the Northern Territory Government has been placed as an environmental rehabilitation security bond for the field (OL4 and OL5 production licenses). For new development wells, as part of the EMP application, the Operator submits to the Regulator (Department of Environment, Parks and Water Security) the security calculation and places the security bond. The Operator also submits an annual update on rehabilitation activities to the Regulator. The current rehabilitation projects include management of a decommissioned pipeline, and well pad area reduction.



OUR GOAL

- 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 FY25

- 1. Conduct a full Materiality assessment to identify ESG issues that can affect Horizon's ability to create value, manage risks and meet the expectations of its stakeholders

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, ethical and transparent behaviour in business. Horizon has an anti-bribery policy and whistleblower policy which are disseminated to all its employees. Horizon published its Corporate Governance Statement 2024 as the Board continues to review its policies and practices to reflect any applicable changes to governance standards and practice.

We also published our annual Modern Slavery Statement (for FY23) 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. The Modern Slavery Statement includes actions undertaken in FY23 and lists actions planned for FY24, which have been implemented throughout the year. Horizon is working on its Modern Slavery Statement for FY24 and will publish it during the first half of FY25 as per the regulatory requirement.

Corporate Governance

There was no change to Horizon's Board composition in FY24. 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 2024 Corporate Governance Statement is available on our website [horizonoil.com.au](https://horizonoil.com.au).

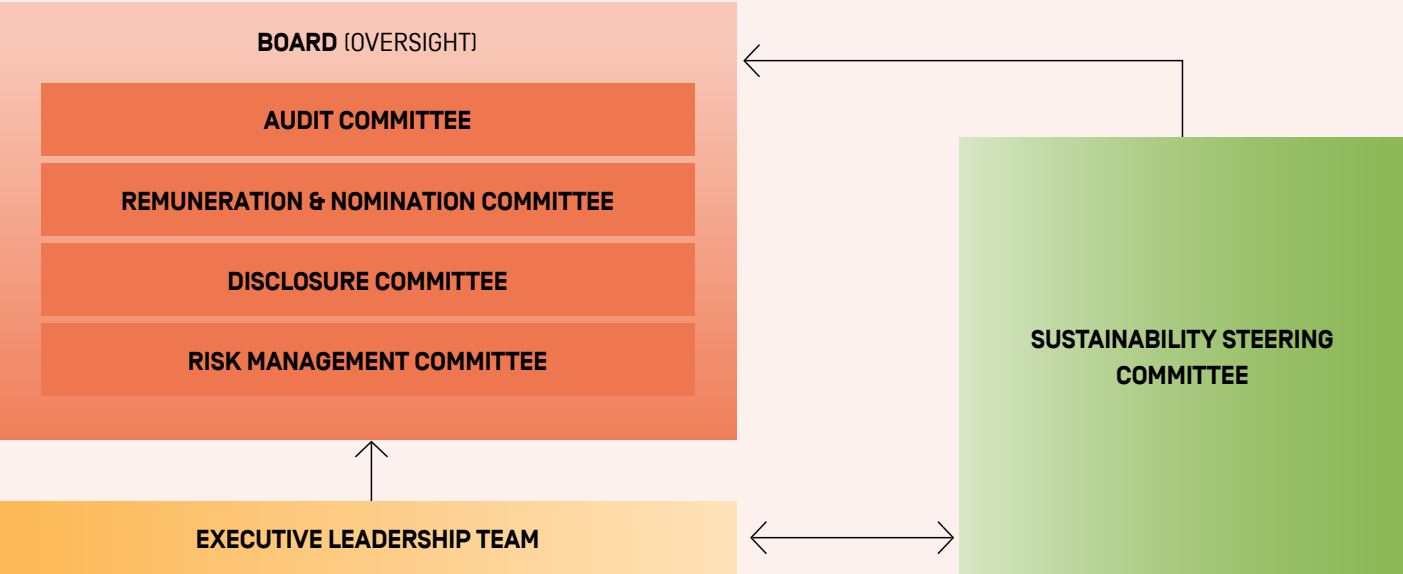
ESG Governance

The Board oversees sustainability opportunities and risks through our strategic planning and risk management frameworks. Horizon's 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 Development. 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 are provided to the Board and Risk Management Committee at each scheduled Board Meeting.

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, and monitoring and reporting the Company's performance against agreed benchmarks. It also ensures 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, responsible for all material operations and financial risks, 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 ISO 31000. 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 Risk Management Committee reviews the company's Risk Report, which is updated no less than twice a year. Horizon 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. An independent assessment of our IT assets was carried out at the end of FY24, as a follow-up to the audit conducted in 2023, with actions currently being implemented.

Aside from the above, 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.



OUR PEOPLE

OUR GOALS

-  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

OUR TARGETS FOR FY25

1. At least 20% women employees in senior executive roles through any future recruitment initiatives
2. 30% women directors on the Board
3. Promote flexible working arrangements to encourage employees to return to work after parental leave
4. Equal opportunity to participate in development and training programs to support career growth
5. Work with our operators and partners to identify and participate in relevant and meaningful 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, the Company maintains flexible working arrangements for employees with some staff electing to work remotely a few days a week to enhance productivity and staff morale.

Last year following the passing of 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 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. This initiative has been well received with some employees purchasing EVs under the novated lease arrangement in FY24.

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.



The Horizon team enjoying a team bonding pasta making day.

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. In the past financial year, Horizon continued its commitment to promoting gender and other forms of diversity by working towards the FY24 measurable objectives set by the Board. Progress against the measurable objectives is summarised below.

FY24 MEASURABLE OBJECTIVE	PROGRESS IN FY24
Maintain a target of at least 20% women employees in senior executive roles.	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.	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 as an ongoing goal.
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.
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.

During FY24, the Remuneration and Nomination Committee has re-iterated most of the above objectives and will maintain the same objectives for FY25.



# OUR COMMUNITIES

Horizon takes an active role in initiatives with local communities that are undertaken by our operators in China, New Zealand and Australia. The operators of our producing assets maintain good relationships on behalf of the joint venture with local communities and businesses, and in the case for Mereenie, with landowners and indigenous people. 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 FY24, on the joint venture's behalf, the Maari Operator has partnered with the South Taranaki District Council by supporting two projects outlined below. These projects were carefully selected by the JV as they align with our SDG priorities.

- 1. Waverly pump track for scooters, bikes and skateboards will be designed and built at Aotea Park in Waverley next to the already established playground and court area. The track will bring the community together, providing a safe area for youth in the community to enjoy and benefit their wellbeing.
- 2. A jetty will be built at Patea, where there are remnants of a jetty from the 1880s that has succumbed to the elements. The Patea River is a special part of the town and is still used for fishing and recreation today, including by the Ngāti Ruanui Iwi. A new jetty will provide a safe place for all people to stand/sit and fish, or just relax and enjoy the view.

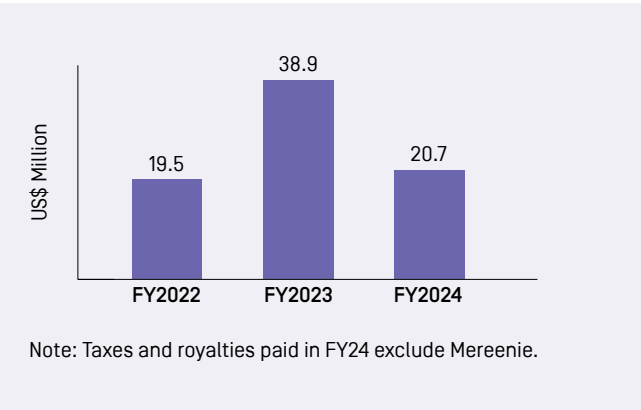


The Mereenie field is located on the lands of traditional owners (TO's) administered by the Central Land Council (CLC) in accordance with the Aboriginal Land Rights (NT) Act 1976. A land access agreement is in place with the CLC, and the field is operated under this agreement which requires approval from the TO's via a Sacred Site Clearance Certificate. Approval from TOs is required for any site activities involving ground disturbance. Regular engagement sessions are held with traditional owners, facilitated by the CLC. The Operator on behalf of the Joint Venture takes ownership of responsibilities to stakeholders and the protection of the environment and cultural heritage.

The Mereenie JV supports local business through our local procurement programs and the Mereenie JV has sponsored multiple community projects, community events and sporting affiliations over the past 10 years. Examples of past projects include solar projects / repairs for remote communities, donation of old vehicles for youth program, assisting youth and adult sporting programs, supporting "Walk-a While" capturing song lines and music, and donating musical instruments to church bands.

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 offers a program of training 'green hats' into well workover programs, with the aim of offering local employment. Our Beibu Operator prefers domestic procurement, which has positive impact on local and domestic businesses. For Mereenie, the JV Operator trains and employs locals from the land where our asset is located.

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 Beibu and Maari assets are based. The Mereenie development was carried out under the auspices of the Aboriginal Land Rights (NT) Act 1976, which protects and advances the interests of traditional owners of the land. Mereenie continues to contribute significantly to the Northern Territory economy. Royalties from Mereenie sales revenues also contribute to the Central Land Council, who has been a strong representative voice for the Aboriginal people.





# D. CLIMATE CHANGE

## OUR GOALS

- 📍 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

## OUR TARGETS FOR FY25

1. Support operator emissions reduction initiatives
2. Apply an internal carbon price to help guide business decisions and viability of future projects and to ensure that projects are economic should a carbon price be imposed in the future
3. Continued improvements in Horizon's climate disclosures across the four thematic areas of the TCFD (governance, strategy, risk management and metrics/targets)

## 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 34.



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 gas production over the transition period whilst minimising the impact on the environment. To this effect, during FY24 Horizon acquired a 25% non-operated interest in the producing Mereenie oil and gas field (OL4 and OL5 development licenses) that supplies gas into the Northern Territory and East Coast gas markets via the Amadeus and Northern Gas Pipelines. With domestic gas recognised as key to the energy transition, Mereenie has a strong part to play in providing essential, affordable and reliable energy to utility companies, miners and other industrial users to support the energy transition. The Federal Government's recent statement on Australia's Future Gas Strategy reinforced the importance of gas in Australia's economy, supporting manufacturing, food processing and refining of critical minerals which will help Australia and the world to lower emissions. Mereenie recently executed a GSA with Arafura Rare Earths subsidiary Arafura Nolans Project. The project, which is currently at the development planning stage, will deliver critical minerals required for wind turbines and EV motors, which are essential to the energy transition. As noted in our FY23 Sustainability report, Horizon made a tangible contribution to global decarbonisation efforts by making

a seed capital investment in Re-Vi (formerly Nobrac). The company specialises in Carbon Dioxide Removal (CDR) projects, with its foundation project being the large scale Flinders Biochar project, in South Australia. The project aims to sequester approximately 2 million tonnes of CO<sub>2</sub> embodied in approximately 4.5 million tonnes of fire damaged biomass (standing timber) into approximately 960,000 tonnes of biochar (see section below on Re-Vi Group for project status details).

We aim to pursue a strategy that provides market resilience going forward, but with the flexibility to allow for growth in oil and gas, and where possible, pursue energy efficiency and emissions reduction projects. This strategy ensures that we add value whilst responding to climate change, with a focus on meeting interim energy demand during this critical period of global energy transition.

## Governance

For climate-related Governance, please refer to the Governance Priority Area, on page 14.





# STRATEGY



At present, Horizon has applied the following time horizons to the identification of climate-related risks and opportunities. As part of the Materiality Review to be conducted in FY25, with the additional Mereenie asset in our portfolio, the time horizons for climate-related risks and opportunities may be refined, given that the economic life of the Mereenie field goes beyond the Beibu and Maari assets.

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 fuel consumption and GHG emissions, improving energy and operational efficiency across production processes.

### PRODUCTS, SERVICES & MARKETS OPPORTUNITY

Increased revenues through access to new and emerging markets, such as carbon capture and storage, and biogas into existing infrastructure networks. Increased opportunity to diversify business activities and investment. For Mereenie, the potential extraction of helium from the raw gas stream provides an additional revenue stream.

## [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, New Zealand and Australia. The process has identified similar risks and opportunities for all regions but our approach to mitigate these risks have some subtle differences due to government regulation and local requirements. Note that the risks and opportunities relating to Mereenie is based on Horizon's initial assessment. As we gain more in-depth knowledge of Mereenie operations and compliance requirements and as part of the Materiality review planned for FY25, the risks and opportunities presented by the Mereenie asset will be updated.

### 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). As these assets are located offshore, extreme weather events include storms and typhoons. Mereenie field, located onshore Central Australia, can experience extreme heat condition during the day. Other risks include drought, flooding and soil erosion / slips.	Declining revenue due to disruptions to operations and supply chains, reduced labour productivity, increased 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
	Chronic	Rising ambient temperature in the Beibu Gulf, Taranaki and/or Mereenie.	Impacting offshore and onshore 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
	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
	Reputational	Reputational damage arising from association with oil and gas assets and partners with oil and gas companies.	Targeted operator or shareholder activism, assets divestment, and reduction of shareholder value. Loss of social license could lead to project delays or stoppages, losing value-adding opportunities.	Medium to long term
		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
	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 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 seed capital investment in carbon dioxide removal company, Re-Vi Group. Another potential revenue stream is Helium associated with Mereenie gas production.	Medium to long term



[b] Resilience of our Portfolio

Horizon's current asset portfolio shows resilience to climate change-related financial risk.

The risk of our low-cost Beibu and Maari production assets being stranded in a carbon-constrained world in a range of IEA decarbonisation scenarios 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 <sub>2</sub> prices.
	IEA APS	●	●	●	Positive oil prices impact partially mitigated by significantly higher CO <sub>2</sub> prices.
	IEA NZE 2050	●	●	●	Asset economics impacted by lower oil prices and significantly higher CO <sub>2</sub> prices.
Beibu	IEA STEPS	●	●	●	Positive oil prices impact.
	IEA APS	●	●	●	Positive oil prices impact partially mitigated by higher CO <sub>2</sub> prices.
	IEA NZE 2050	●	●	●	Asset still shows robust economics with significantly lower oil prices and higher CO <sub>2</sub> prices.

●

 Positive/negligible impact 

●

 Moderate negative impact 

●

 Significant negative impact

Refer to the below table – 2023 IEA Climate Scenarios for more information on IEA scenarios.

Across each of the IEA decarbonisation scenarios, Horizon's Beibu and Maari production assets remain NPV positive, and the economic life of the production assets is not shortened.

Horizon's Mereenie asset shows resilience to climate change-related financial risk over the short to medium term, as Mereenie emissions fall below the Australian Government's current Safeguard Mechanism threshold and were further reduced during the year through a flare gas recovery project. Additionally, Australia Northern Territory current domestic gas prices are forecast to be sustained in the long term, as the Australian Energy Market Operator (AEMO) predicts that the Northern Territory gas market will experience a significant supply shortfall over the next 20 years with continued acceptance of the critical role that gas plays in the energy transition. Should the supply shortfall be met by LNG import, Mereenie still shows robust economics.

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 Beibu and Maari assets, with our forecast carbon emission volumes, IEA forecast commodity pricing<sup>7</sup> and carbon pricing<sup>8</sup>. We have compared the NPV impact for each IEA scenario with Horizon's base case to determine the resilience of Horizon's Beibu and Maari assets. 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.

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 following three scenarios:

2023 IEA Climate Scenarios

KEY FEATURES	IEA SCENARIOS		
	Stated Policies (STEPS)	Announced Pledges (APS)	Net Zero Emissions by 2050 (NZE 2050)
Overview	Provides an outlook based on the latest policy settings, including energy, climate and related industrial policies.	Assumes all national energy and climate targets made by governments are met in full and on time.	Sets out a pathway for the global energy sector to reach net zero energy-related CO <sub>2</sub> emissions by 2050.
Global Oil Prices (real 2022)	US\$85/bbl in 2030; US\$83/bbl in 2050.	US\$74/bbl in 2030; US\$60/bbl in 2050.	US\$42/bbl in 2030; US\$25/bbl in 2050.
World CO <sub>2</sub> Emissions	36.9Gt in 2022; 35.1Gt in 2030; 33.1Gt in 2035; 31.7Gt in 2040; 29.7Gt in 2050.	36.9Gt in 2022; 30.8Gt in 2030; 24.3Gt in 2035; 19.2Gt in 2040; 12.0Gt in 2050.	36.9Gt in 2022; 24.0Gt in 2030; 13.4Gt in 2035; 6.5Gt in 2040; - Gt in 2050.
China Carbon Price Forecast	US\$28/t CO <sub>2</sub> in 2030; US\$43/t CO <sub>2</sub> in 2040; US\$53/t CO <sub>2</sub> in 2050.	US\$40/t CO <sub>2</sub> in 2030; US\$110/t CO <sub>2</sub> in 2040; US\$160/t CO <sub>2</sub> in 2050.	US\$90/t CO <sub>2</sub> in 2030; US\$160/t CO <sub>2</sub> in 2040; US\$200/t CO <sub>2</sub> in 2050.
New Zealand Carbon Price Forecast	US\$120/t CO <sub>2</sub> in 2030; US\$129/t CO <sub>2</sub> in 2040; US\$135/t CO <sub>2</sub> in 2050.	US\$135/t CO <sub>2</sub> in 2030; US\$175/t CO <sub>2</sub> in 2040; US\$200/t CO <sub>2</sub> in 2050.	US\$140/t CO <sub>2</sub> in 2030; US\$205/t CO <sub>2</sub> in 2040; US\$250/t CO <sub>2</sub> in 2050.

Source: IEA

Importantly, Horizon already models carbon pricing in its base case portfolio analysis. Horizon's base case modelling applies a carbon price of US\$36/t CO<sub>2</sub>e [real 2023] across its producing asset in New Zealand, and the IEA STEPS CO<sub>2</sub> 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) an offset regime applies in China.

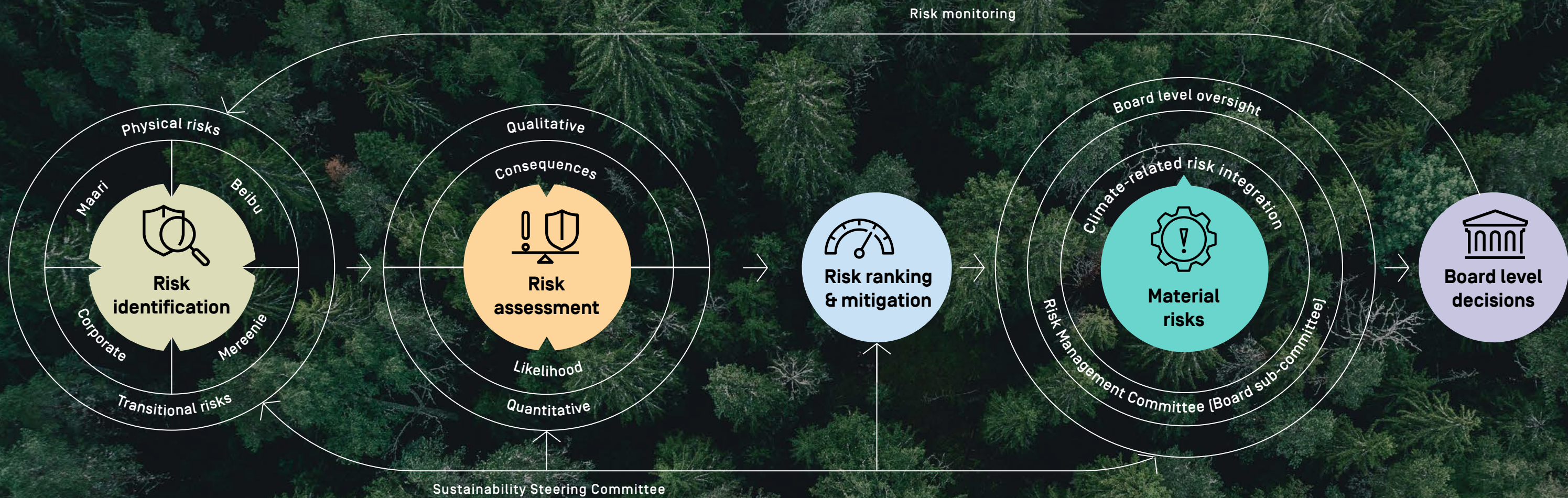
C. Limitations of our analysis

The IEA scenarios are based on reported 2023 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.

7 Oil prices forecasts are based on Horizon's internal assumptions and IEA's oil price forecasts in 2030 and 2050. Inflation has been assumed to be 2%.  
8 CO<sub>2</sub> prices are based on a linear extrapolation from the 2023 CO<sub>2</sub> price and the CO<sub>2</sub> price forecasts in World Energy Outlook 2023 in 2030, 2035, 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, Beibu in China and Mereenie in Australia], 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**

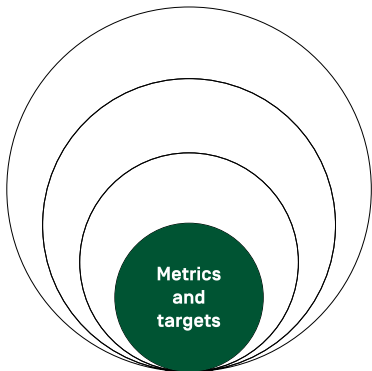
Climate-related risks that are considered material are integrated into Horizon's overall risk management. The material risks, and mitigation measures are included in Horizon's risk report, together with all other material risks to the business. These risks are also highlighted in the internal Operations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

**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 operational control of its Mereenie facilities in Australia and oil operations in China and New Zealand. Accordingly, Horizon is not required to report under the NGER scheme. However, for our Australia asset, the Mereenie Operator is registered under the NGER framework and reports emissions, energy production and consumption each financial year. 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. From FY25, Mereenie emissions will be included for Horizon’s equity position, based on the NGER annual report submitted by the Operator.

For Beibu, the calculated Scope 1 emissions are comparable to the Operator supplied annual (calendar year) emissions, with the reconciled variances largely attributable to our use of NGER emissions factors and the fuel gas allocation. Since FY22, we have used 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. For this reason, Maari Scope 1 emissions included are based on Operator supplied information applying Horizon’s equity position.

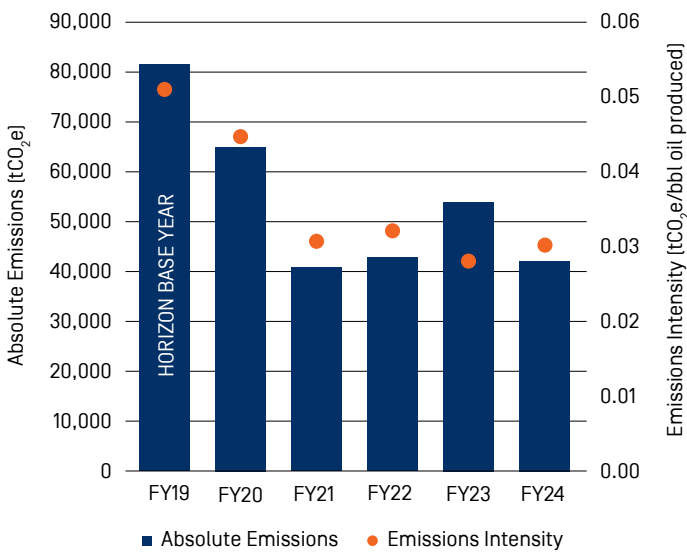
Scope 3 emissions are largely the end-use of produced crude oil, and a small percentage from transportation, refining and storage of crude oil, services to support field operations, business travels and staff commuting. Due to the lack of visibility of our full upstream and downstream value chain, there 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. As over 99.9% of Scope 3 emissions are attributable to the end-use of produced crude oil, the assumption on how crude oil is used has the highest impact on overall Scope 3 emissions calculation. We have taken the conservative assumption that all produced crude oil is combusted and the energy content factor and emission factor are the same as diesel fuel. In FY24, Horizon and the Maari JV visited the Geelong refinery in Australia, where our Maari crude oil is periodically refined. During the visit, validity of Horizon’s assumption on Scope 3 emissions calculation was discussed and considered reasonable. However, ongoing review and improvement of Scope 3 emissions calculation may be required and we continue to work with our operators in this area.

Scope	Description (Primary Category)	Accounting Basis	FY24 Emissions (tCO <sub>2</sub> e)
Scope 1	Emissions related to the consumption of fuel to produce electricity and the flaring of gas at our non-operated producing fields in China and New Zealand.	Equity	42,324
Scope 2	Emissions related to purchased electricity at our office facilities in Sydney.	Equity	16
Scope 3	Emissions related to the final use of produced oil from our non-operated producing fields in China and New Zealand.	Equity	610,451
Total Emissions Intensity [Scope 1 + Scope 2]		Equity	0.030tCO <sub>2</sub> e/boe
Total Emissions Intensity [Scope 1 + Scope 2 + Scope 3]		Equity	0.463 tCO <sub>2</sub> e/boe

Mereenie emissions are not included in Horizon’s FY24 emissions reported above, and will be included in FY25 reporting.

The below graph shows the absolute GHG emissions and emissions intensity from FY19 (starting 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. Note that the below graph includes only the Maari and Beibu assets, and excludes Mereenie.

Horizon Scope 1 GHG Historical Emissions and Emissions Intensity



The reduction in emissions from FY19 to FY21 is mainly due to the reduction in associated gas production, which declines as reservoirs deplete. Notwithstanding gas depletion and the shutdown of a high gas producing well, our operators also implemented various carbon reduction measures during FY21 resulting in an approximate 6,000 tCO2e (on an equity basis) absolute decrease. The above graph also indicates FY23 Scope 1 absolute emissions increased by approximately 26% compared to FY22. This increase was from 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 partly used as fuel gas and partly flared at the platforms.

The Scope 1 absolute emissions for FY24 is approximately 22% lower than FY23, with most of the reduction attributable to production decline and a small amount reflecting the emissions reduction work completed throughout the year (discussed below). Although emission intensity for FY24 has increased by approximately 6% compared to FY23, it should be noted that FY23 production rates were at their highest since 2018 due to the startup of WZ12-8E. The emissions generated in FY24 for each barrel of oil produced was

approximately 7% lower than FY22 when production rates were comparable and approximately 41% lower than Horizon’s FY19 benchmark. Our Beibu and Maari assets require gas for fuel to support operations. Emissions associated with flared gas may reduce but the energy demand for process heating and power generation is expected to 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 as 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 emissions reduction initiatives section on page 30 and 31 for further details.

b. Energy Use

Direct energy use on Horizon’s assets arises from the combustion of natural gas or liquid 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’ business support activities and Horizon’s corporate office. For Mereenie, in addition to diesel, other fuel types to support operation include LPG for camp cooking and petroleum-based oils and greases for lubrication. The Mereenie Operator reports energy use in NGER reports, and emissions from different substances are also reported in the National Pollutant Inventory (NPI) reporting system.

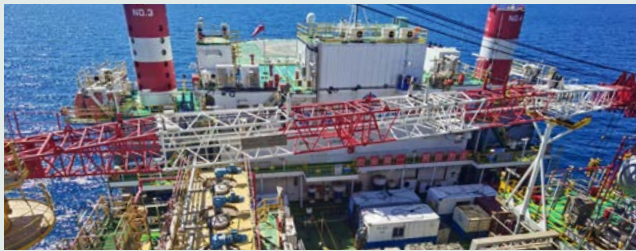
Overall energy use for Beibu has increased since Q2 2022 due to production from the new WZ12-8E field. Power is supplied to the WZ12-8E platform from existing power generators on the central processing facility (PUQB). Our China Operator has an Energy Saving Work Plan and holds regular Energy Conservation campaigns 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 3 – 4 years many opportunities have been implemented to optimise 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 the cargo offloading pumps and heating of cargo. In FY24, cargo heating prior to offtake has been optimised to help minimise energy use and emissions. Our Operator is committed to continue minimising fuel consumption, as well as improving boiler combustion efficiency. These optimisations will not only help to reduce energy and crude oil use but also reduce Scope 1 emissions, given the declining gas rates.



c. Scope 1 Emissions Reduction Initiatives to Date

Horizon proactively engages with the operators of its production assets to reduce Scope 1 emissions.



Beibu, China

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. 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 arise with design changes and enhanced technology. Horizon has expressed willingness to participate in the Operator’s energy efficiency and emissions reduction initiatives, within our specific permit or in the wider Weizhou area. Our Beibu field’s contribution to the overall Weizhou fuel gas system has increased, following some system modifications.



Mereenie, Australia

Horizon is a new joint venture partner in the Mereenie field. Early information suggests that the Mereenie Operator has an effective workstream to reduce field emissions and implemented effective emission reduction initiatives in the past 2 – 3 years, resulting in at least 30% reduction in Scope 1 emissions in FY24 compared to FY22 and prior years. One of the main emission reduction projects implemented is the installation of a flare gas recovery compressor, aiming to utilise gas sent to flare as fuel for the field compressors, effectively reducing flare gas emissions by more than 25%. The project was successfully commissioned in 2024. The Mereenie Operator carries out a fugitive emissions survey annually, using an independent third-party consultant. The survey results are used to generate maintenance work orders with assigned priority levels.



Maari, New Zealand

For our Maari field in New Zealand, the JV is actively maintaining a Scope 1 emissions reduction plan. The following initiatives were implemented over several years, prior to FY24, resulting in approximately 8,500 TC02e 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 and energy demand, thus minimising fuel demand
- Boiler combustion efficiency review
- Single turbine operation to maximise efficiency
- Replace boiler freshwater generators with two Reverse Osmosis (RO) units in April 2023
- Change flare purge from gas to nitrogen, reducing flared gas (purge gas)
- Optimise production separator pressure control to minimise flare valve opening frequency to reduce gas flaring.

During FY24, the Operator has implemented the facilities modifications below to reduce Scope 1 emissions. Although the reduction is modest, this demonstrates the joint venture’s commitment to a continuous system review.

- Fuel control valve change-out to reduce turndown limit– Implemented
- Further tuning of production separator pressure control settings for transient conditions, for further flare gas reductions.

d. Future Initiatives to Reduce Scope 1 Emissions

Notwithstanding the limited scope to reduce absolute emissions given the field operating requirements, our joint ventures continue to brainstorm short to medium term initiatives to reduce emissions.

For China, the Operator continues to assess opportunities to recover gas currently being flared.

For Maari, the boiler combustion efficiency review completed to date has identified further possible modifications, which are being progressed under the Management of Change process. During FY24, the Operator has identified an opportunity to reduce power consumption by derating the motors installed for the electric submersible pumps (ESP), reducing the motor supply voltage. This has no impact on ESP performance or production. This work will be progressively implemented during planned plant shutdowns.

During FY24, Horizon worked with the Maari Operator to progress the Vapour Recovery Unit concept through the Select phase. The objective is to reduce flaring and Scope 1 emissions with the added benefit of reducing fuel consumption. The Maari joint venture has agreed on the selected concept and the Operator has moved the project to the Define phase, to progress engineering design and overall installed cost estimates. Project sanction is dependent on there being long term fuel gas shortages.

For Mereenie, the Operator has identified various emissions reduction initiatives. The well sites already have solar panels with battery back-ups to run the SCADA system.

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.

e. 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 that equal 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.

For our Sydney-based corporate office we opted for a plan with an electricity provider who is a member of the Climate Active Network. The Climate Active Network is an Australian network of organisations committed to the delivery of high integrity emissions reduction actions and the use of accredited offsets. This plan will be maintained going forward.

To better understand emissions generated from Horizon’s business travels and apply offsets from high-integrity projects, Horizon Management approved subscribing to BlueHalo, a division of Tasman Environmental Markets

[TEM] in July 2023. BlueHalo offers climate action technology integrating carbon emission calculations, reporting and offsetting solutions for businesses through their high-integrity carbon projects. The carbon calculations are automated with methodology accepted by Climate Active. The emissions units retired for Horizon’s business travels support various projects including:

- Indonesia Katingan Mentaya REDD (Reducing Emissions from Deforestation and Forest Degradation) project
- Indian wind farm project
- Australia HIR (Human-induced Regeneration) project – NSW and Queensland.



F. RE-VI GROUP (FORMERLY NOBRAC LIMITED)

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 AUD 2 million [USD 1.4 million] seed capital investment, in H1 FY23, to acquire an interest in Nobrac Limited, a subsidiary of Kiland Limited. Nobrac, now rebranded as Re-Vi Group, is developing the Flinders Biochar project in South Australia to sequester approximately 2 million tonnes of CO<sub>2</sub> from carbon embodied in approximately 4.5 million tonnes of the fire damaged biomass (standing timber) into approximately 960,000 tonnes of biochar over 12 years.

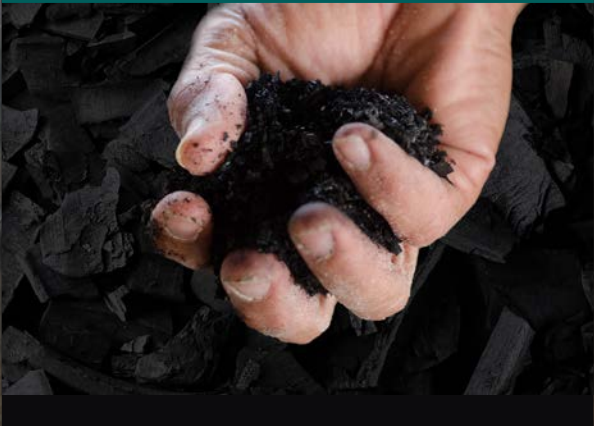
Biochar is a stable form of carbon, made from biomass, that can endure in soil for hundreds to thousands of years. Using biochar to bury carbon in the ground is a large-scale method to tackle global warming and, at the same time, significantly boost the soil productivity reducing the use of fertiliser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

Re-Vi's Biochar project is a large scale, institutional-grade carbon dioxide removal (CDR) project that is expected to lead to real removal and sequestration of carbon, at the same time presenting a long-term opportunity to deliver cashflow and value for shareholders from Carbon Removal Credits (CRC), biochar product sales and company growth.



The Flinders Biochar project is facilitating the remediation of forestry estates destroyed by the bushfires of 2020 in a way that achieves the best possible outcomes for the population, fauna and flora. The project will also make a meaningful contribution to a number of UN Sustainable Development Goals. It will provide employment, contribute to the development of Australia's industrial design, fabrication and engineering industries and contribute to sustainable management and efficient use of natural resources, amongst other benefits.

THE LONGER-TERM PLAN IS TO INVEST IN ADDITIONAL LARGE PYROLYSIS UNITS, RAMPING UP PRODUCTION TO 40 TONNES/HOUR INPUT BY 2026.



Example of a mobile pyrolysis unit.



4.5 million tonnes  
fire damaged  
biomass



Converted to  
~960,000 tonnes  
of biochar and  
~2M CRC's over  
12 years



Biochar significantly  
boosts the soil  
productivity reducing  
the use of fertiliser and  
increasing soil water  
retention

Good progress was made in FY24 with a pilot pyrolysis unit starting up in November 2023 and the project now being in the production phase. This first unit fulfilled the purpose of informing the functional specification for the larger 10 tonnes/hour biomass processing unit which is due to arrive on site in Q3 2024. The Operator is targeting the first sale of carbon removal credits (CRC) within the next 6 months and we understand that negotiations are progressing well for CRC offtakes with high quality buyers. The longer-term plan is to invest in additional large pyrolysis units, ramping up production to 40 tonnes/hour input by 2026. High levels of interest for buying CRC's have been expressed by direct buyers and platforms given the expected project scale.

Re-Vi initiated a A\$20M capital raise process in April which is now due to close. The additional capital is required to complete and commission the first large scale 10 tonnes/hour pyrolysis unit, cover operating costs for the next 12 months with ramped up production and provide capital for further investment in other biochar projects. Horizon understands that the capital raise process has been successful and further information will be provided to the market in due course.

The foundation Flinders Biochar Project has the potential to provide strong returns for Horizon shareholders, whilst contributing to global decarbonisation efforts. We expect that demand for CRC will only increase such that an investment of this nature has the potential to be value accretive.



Reconciliation against TCFD Recommendations

GOVERNANCE <i>Disclose the organisation's governance around climate-related risks and opportunities</i>	
Board oversight of climate-related risks and opportunities.	Horizon discloses its governance and management framework for climate-related risks and opportunities on pages 14 and 15.
Management role in assessing and managing climate-related risks and opportunities.	
STRATEGY <i>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</i>	
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 22 and 23.
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 24.
RISK MANAGEMENT <i>Disclose how the organisation identifies, assesses and manages climate-related risks</i>	
Processes for identifying and assessing climate-related risks.	Horizon sets out how it identifies, assesses and manages climate-related risks on pages 26 and 27.
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 <i>Disclose the metrics and targets used to assess and manage the relevant climate related risks and opportunities where such information is material</i>	
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 forecasts and our own forecast oil production and carbon emissions to assess climate-related risks and opportunities in line with its strategy as described on page 25.
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 28 to 31.
Targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Horizon is in the planning phase of revisiting risks and opportunities presented to the business with our newly added Mereenie asset, by conducting a new Materiality Assessment in FY25. Strategies to manage climate related risks and opportunities to be developed following the Materiality Assessment.

GLOSSARY

AASB	Australian Accounting Standards Board
ABS	American Bureau of Shipping
AEMO	Australian Energy Market Operator
Beibu	Offshore oil production operation in the Beibu Gulf China, of which Horizon has a working interest
BOISET	Basic Offshore Induction Safety and Emergency Training
CRC	Carbon Removal Credit
EMP	Environmental Management Plan
EV	Electric Vehicle
GHG Scope 1	Direct greenhouse (GHG) emissions that occur from sources that are controlled or owned by an organisation
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 organisation, but that the organisation indirectly impacts in its value chain
GSA	Gas Sales Agreement
IEA	International Energy Agency
IEA APS	IEA's Announced Pledges Scenario (APS) assumes that all climate commitments made by governments and industries around the world by the end of August 2023, including Nationally Determined Contributions (NDCs) and longer-term net zero targets, as well as targets for access to electricity and clean cooking, will be met in full and on time.
IEA NZE 2050	IEA's Net Zero Emissions by 2050 Scenario (NZE Scenario) sets out a pathway for the global energy sector to achieve net zero CO2 emissions by 2050. It does not rely on emissions reductions from outside the energy sector to achieve its goals. Universal access to electricity and clean cooking are achieved by 2030. The scenario was fully updated in 2023.
IEA STEPS	IEA's Stated Policies Scenario (STEPS) reflects current policy settings based on a sector-by-sector and country-by-country assessment of the energy-related policies that are in place as of the end of August 2023, as well as those that are under development. The scenario also takes into account currently planned manufacturing capacities for clean energy technologies.
IFRS	International Financial Reporting Standards
IPIECA	International Petroleum Industry Environmental Conservation Association
ISSB	International Sustainability Standards Board
Lost Time Injury	Occurrences that resulted 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	IPECA 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
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
Mereenie	Mereenie Oil and Gas Field in the Amadeus Basin, onshore Australia, of which Horizon has a working interest
NZ ETS	New Zealand Emissions Trading Scheme
OPITO	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 Lost Time Injuries per million hours
UN SDG	United Nations Sustainable Development Goals
WHP	Well Head Platform
WHS	Work Health Safety

For more information please visit  
[horizonoil.com.au](https://horizonoil.com.au)





[horizonoil.com.au](http://horizonoil.com.au)

Disclaimer: Statements contained in this report may be forward looking statements. Such statements relate to future events and expectations and as such involve known and unknown risks and uncertainties. Actual results, actions and developments may differ materially from those expressed or implied by these forward looking statements depending on a variety of factors. While every effort is made to provide accurate and complete information, Horizon accepts no responsibility for any loss, damage, cost or expense incurred by you as a result of any error, omission or misrepresentation in information in this report.