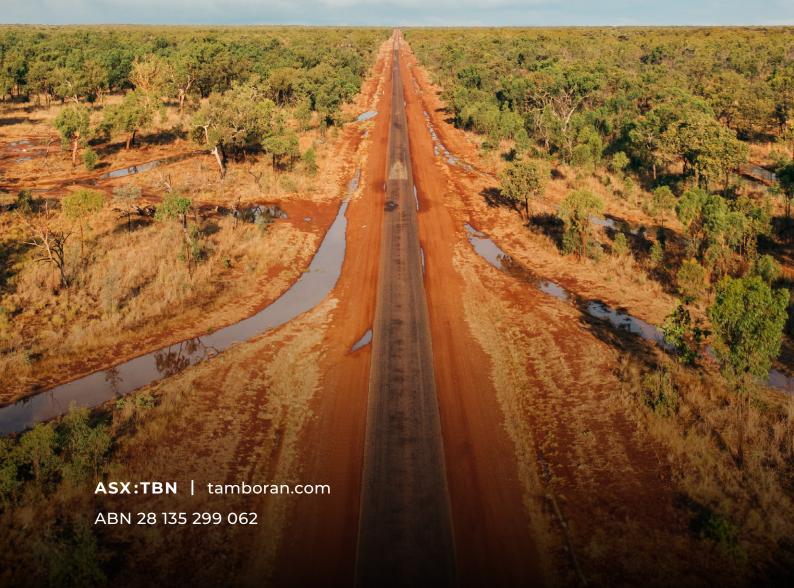


# TCFD CLIMATE CHANGE AND NET ZERO REPORT

December 2023





#### Acknowledgement

We acknowledge the Traditional Owners of the land where we operate and work. We recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past, present and emerging.

#### Forward Looking Statements Disclaimer

The information contained in this report is based on assumptions and contingencies which are subject to change without notice and involve known and unknown risks, uncertainties and other factors which are beyond the control of Tamboran Resources. Tamboran Resources assumes no obligation to update this information, which is provided as a general guide only and should not be relied upon as an indication or guarantee of future performance.

This report contains forward-looking statements that are subject to risk factors associated with the oil and gas industry. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a range of variables which could cause actual results or trends to differ materially, including but not limited to: price fluctuations, actual demand, currency fluctuations, geotechnical factors, drilling and production results, gas commercialisation, development progress, operating results, engineering estimates, reserves and resource estimates, loss of market, industry competition, environmental risks, carbon emissions reduction and associated technology risks, physical risks, legislative, fiscal and regulatory developments, economic and financial market conditions in various countries, approvals, conduct of joint venture participants and contractual counterparties and cost estimates.

The forward-looking information in this report is based on management's current expectations and reflects judgments, assumptions, estimates and other information available as at the date of this document.

There are inherent limitations with scenario analysis. Scenarios do not constitute definitive outcomes. Assumptions may or may not be, or prove to be, correct and may or may not eventuate, and scenarios may be impacted by factors other than assumptions made.

All information contained in this report is subject to change without notice. Our strategies and targets will adapt given the dynamic conditions in which we operate; it should not be assumed that any particular strategies, targets or implementation measures are inflexible or frozen in time.

While every effort is made to provide accurate and complete information, Tamboran Resources does not represent or warrant, whether expressed or implied, that the information in this report is free from errors or omissions or is suitable for its intended use. Forward-looking statements do not represent guarantees or predictions of future performance, and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Tamboran Resources, and which may cause actual results to differ materially from those expressed in the statements contained in this report. Subject to any terms implied by law which cannot be excluded, Tamboran Resources accepts no responsibility for any loss, damage, cost or expense (whether direct or indirect) incurred by you as a result of any error, omission or misrepresentation in the information contained in this report.

#### **Important Note**

This report should be read in its entirety, together with the Forward Looking Statements Disclaimer, above.

#### **Report Feedback**

We welcome feedback on our reports via: info@tamboran.com

#### **CONTENTS**

Statement from the Chairman & CEO	01
Our Climate Position	04
Climate Change Policy	12
Climate Change Governance	14
Climate Strategy Included as Key Part of Corporate Strategy	15
Climate Targets, Metrics, and Indicators	25
Climate Change Risk Management	27
Climate Scenario Analysis	30
Definitions and Abbreviations	35
TCFD Reference Guide	36

# STATEMENT FROM THE CHAIRMAN AND CEO



Mr. Dick Stoneburner
Chairman



Mr. Joel Riddle Managing Director & CEO

We are pleased to issue this Climate Change Report, which outlines Tamboran's strategy to respond to climate change, achieve Net Zero equity Scope 1 and 2 GHG emissions from first commercial production, and play a leading role in the energy transition as a reliable supplier of natural gas.

As a growing natural gas company, Tamboran recognises it is impossible to decouple corporate strategy from climate change strategy. Tamboran's corporate vision is intrinsically linked to the energy transition and managing the risks of climate change.

Our vision is to play a role in the global energy transition by investing in the development of low CO<sub>2</sub> unconventional natural gas resources in the Beetaloo Sub-basin of the Northern Territory of Australia and to become a Net Zero emissions gas producer for our equity share of Scope 1 and Scope 2 emissions when the Company initiates commercial sales of natural gas.

Tamboran's vision acknowledges the triple challenge facing global energy markets today; the world requires energy that is reliable, affordable, and low carbon. Tamboran believes we can help address this global challenge by developing our low GHG intensity natural gas assets in the Beetaloo Basin. Tamboran's Beetaloo Basin assets are positioned to support

the reliable supply of natural gas and we are developing our project to achieve Net Zero Scope 1 and 2 GHG emissions. Tamboran's 2022 acquisition of the western Beetaloo permits (EP 76, 98 and 117) is consistent with its strategy and greatly increases its acreage in the low reservoir CO<sub>2</sub> Beetaloo Basin.

This report, Tamboran's first climate change report, has been structured to align with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations framework.

Tamboran's TCFD report explains how we are positioning Tamboran for a Net Zero world, how we are committed to developing our Beetaloo Basin project to be Net Zero Scope 1 and 2 GHG from first commercial production, and our belief in the resilience of a low GHG intensity natural gas portfolio. The Report explains how we manage our climate risks and how we plan to seize the opportunities presented by the energy transition.

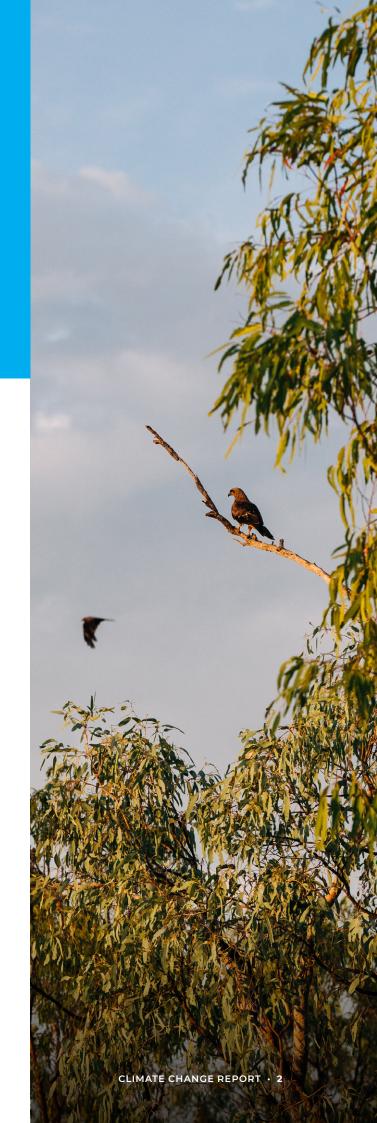
Our analysis shows that natural gas will be required in a range of decarbonisation scenarios and that natural gas is a key partner with renewable energy.

Importantly, the recent reforms to Australia's Safeguard Mechanism should give investors and stakeholders confidence that the Beetaloo Basin is indeed a Net Zero Scope 1 gas basin.

Tamboran expects its climate change risks and the scenarios it assesses will continue to evolve as countries legislate for, and "ratchet up" their Paris climate change commitments. Tamboran is committed to using a range of indicators to monitor this evolving global landscape and identifying early signals of likely decarbonisation pathways. Monitoring these pathways should provide insights into how actual data compares to what published scenarios and targets expect.

Over the past year, we have adopted a standalone Climate Policy, introduced an internal carbon price, developed GHG forecasts for our projects, increased the volume of carbon offsets in our portfolio, and added to our inhouse climate change team.

Over the next year, we look forward to progressing the development of our Net Zero equity Scope 1 and 2 Beetaloo natural gas project, exploring new opportunities presented by the energy transition, and importantly sharing this journey with all our shareholders and stakeholders.



# Tamboran Resources Limited (Tamboran) has an industry leading target to be a Net Zero energy company<sup>1</sup> from first production.



Tamboran has made a policy commitment to disclose and report transparently in alignment with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations.



In a decarbonising economy, natural gas with low reservoir CO<sub>2</sub> produced by a company with Net Zero targets should be prioritised for development.



New supply of natural gas is required to meet demand in a range of decarbonisation scenarios, including Paris Aligned 2°C pathways.

1. Tamboran's aspiration is to have Net Zero equity scope 1 and 2 GHG emissions from first commercial production.



# OUR CLIMATE POSITION

Access to affordable, reliable, and low GHG intensity energy is essential for economic growth, improving living standards, and addressing climate change. As a developer of natural gas assets, Tamboran believes it has an important role to play and is focused on providing affordable, reliable, and low GHG intensity<sup>2</sup> natural gas that meets society's needs.

We recognise there is an increasing and justified stakeholder focus on climate change and the energy transition. As an upstream natural gas company, managing the risks and opportunities posed by the energy transition forms the basis of our Net Zero strategy and is critical for Tamboran's long-term success.

The consensus of multiple scenarios, including Paris Aligned scenarios, is that natural gas will have an important role to play in the transition to a Net Zero energy system. At Tamboran, we support this position and believe the flexibility of natural gas is likely to become even more critical as additional renewable energy is used in the electrical grid and as companies implement their own decarbonisation strategies by using natural gas instead of coal.

Global decarbonisation requires a reliable supply of natural gas, and the importance of a reliable producer has never been more important. Recent events over 2022 and 2023 have demonstrated that if a reliable supply of natural gas is not available, coal is likely to re-enter the energy system and lead to higher global GHG emissions.

Tamboran believes the development of new Net Zero Scope 1 and 2 natural gas projects must be prioritised for the world to achieve its decarbonisation goals while continuing economic growth.

Tamboran supports ongoing global efforts to implement the Paris Agreement with each country committing to robust National Determined Contributions (NDCs). We believe that all governments must establish clear and stable policy frameworks that support a global warming trajectory of well below 2°C. Market mechanisms such as Australia's Safeguard Mechanism or other carbon pricing arrangements are an efficient response, and we support these and other measures that improve investment certainty. As Tamboran has low GHG intensity projects and we have committed to Net Zero Scope 1 and 2 emissions by first production, we believe that effective climate change policies can help demonstrate the long-term value of our natural gas assets.

In 2023, Tamboran approved a new stand-alone Climate Change Policy, making its position and commitments around climate change explicit. We are committed to understanding and managing the regulatory, reputational and market risks of climate change to our business. This includes maintaining open lines of communication on the topic with a broad range of stakeholders, including governments, investors and non-governmental organisations, as well as transparently reporting our GHG emissions, and disclosing climate risks.

This Climate Change Report represents
Tamboran's first initiative to align our
reporting and disclosures with the TCFD
recommendations and we have provided a
TCFD reference guide at the back of this Report.

## Core elements of recommended climate-related financial disclosures

#### Governance

The organisation's governance around climate related risks and opportunities

#### Strategy

The actual and potential impacts of climate-related risks and opportunities on the organsiations businesses, strategy and financial planning

#### **Risk Management**

The processes used by the organisation to identify, assess, and manage climate-related risks

#### **Metrics & Targets**

The metrics and targets used to assess and manage relevant climate-related risks and opportunities



Figure 1: Core Elements of TCFD disclosures (Source: https://www.fsb-tcfd.org/publications/final-recommendations-report/)





## ABOUT TAMBORAN

Founded in 2009, Tamboran Resources Limited is a natural gas company with a vision of supporting the Net Zero energy transition in Australia and Asia-Pacific through developing unconventional gas resources with low reservoir  $\mathrm{CO}_2$  in the Northern Territory of Australia.

Tamboran is headquartered in Sydney, Australia with a global management team leveraging a significant depth of experience in the successful commercialisation of unconventional gas throughout North America. The team brings a wealth of knowledge, including modern shale reservoir assessment, as well as cutting-edge drilling and completion design technology. Tamboran's focus is on its acreage portfolio in the Beetaloo Basin in the Northern Territory of Australia.





#### **Transformational Acquisition**

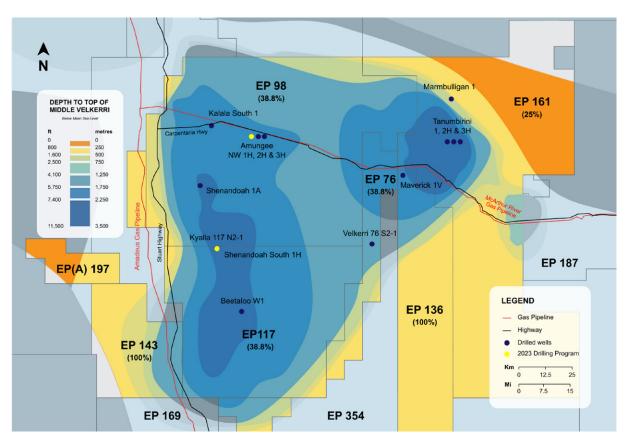
In September 2022, Tamboran announced the transformational acquisition of the operated western Beetaloo acreage, including exploration permits EP 76, 98 and 117. This transaction made Tamboran the leading acreage holder and operator in the Beetaloo Basin.

Regarding the transaction, Tamboran's Managing Director and CEO Joel Riddle stated:

"Tamboran remains absolutely committed to operating sustainably. We intend to build on the deep relationships with Traditional Owners, pastoralists, other local stakeholders and the Northern Territory Government that have been fostered by Origin in the Beetaloo over its substantial, multi-year exploration

and appraisal program. The Company is committed to working constructively and transparently in all interactions as we seek to support businesses, jobs and local interest as a member of the community.

The Company's vision for playing our part in the global transition to a lower carbon economy through the production of low  ${\rm CO}_2$  natural gas resources also remains unchanged. Our objective is to become a Net Zero carbon emission gas producer for our equity share of Scope 1 and Scope 2 emissions when the Company commences commercial sales of natural gas by integrating renewable energy and carbon offsets into any development."



Map 1: Tamboran's assets in the Beetaloo Basin

#### **Asset EP 98/117/76**

Tamboran acquired 38.75% working interest and operatorship of assets EP 98/117/76 in the Beetaloo Basin. This includes ~1.55 million net prospective acres in the 'core' Beetaloo Basin and was a five-fold increase to Tamboran's previous net prospective acreage position.

#### **Asset EP 136**

EP 136 covers approximately 4,230 km2 and is positioned in the core of the Beetaloo Sub-Basin. Tamboran acquired EP 136, EP 143 and EP(A) 197 permits through the acquisition of Sweetpea Petroleum Pty Ltd, a wholly owned subsidiary of Tamboran Resources. Sweetpea was granted the exploration permits directly from the Northern Territory government. Tamboran owns 100% working interest and is the operator EP 136, EP 143 and EP(A) 197.

#### **Asset EP 161**

EP 161 covers approximately 10,500 km2 and is positioned in the core of the Beetaloo Sub-Basin. Tamboran was granted this exploration permit directly from the Northern Territory government and subsequently completed a farm-out with Santos QNT Pty Ltd in 2012. Tamboran holds 25% working interest and Santos holds 75% working interest and is the operator in EP 161.

## Proposed Northern Territory LNG (NTLNG) Development

In June 2023, the Northern Territory Government provided Tamboran exclusivity over 170 hectares on the Middle Arm Sustainable Development Precinct for a proposed LNG development, Northern Territory LNG (NTLNG). The proposed NTLNG facility would be supplied by natural gas with low reservoir CO<sub>2</sub> from the Beetaloo Basin.

NTLNG would represent the first fully integrated onshore LNG development in Northern Australia where upstream, midstream and downstream production and processing are based in the Northern Territory.



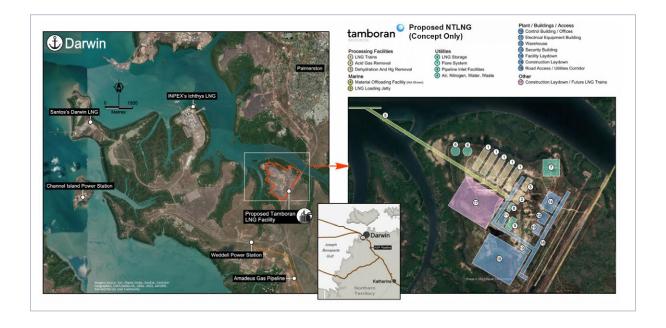
Tamboran is currently conducting the Concept Select Engineering phase before entering pre-Front End Engineering and Design pre-FEED) during 2024.

This initial engineering phase intends to evaluate the technical and commercial opportunity to construct a 6.6 million tonne per annum (MTPA) LNG development, subject to establishment of commercial flow rates from Tamboran's Beetaloo Basin assets.

The Scope of the studies includes evaluation of LNG liquefaction technology selection, including the evaluation of LNG e-drives powered by renewables. This phase also

intends to assess carbon capture and storage (CCS) infrastructure and the potential of NTLNG to use common CCS hub in Darwin. The use of electric LNG e-drives, renewable energy, and CCS is likely to significantly reduce the Scope 1 GHG emissions of the NTLNG facility.

Tamboran has also entered into two non-binding Memorandum of Understanding (MOUs) with BP and Shell regarding the potential purchase of LNG from Tamboran's proposed NTLNG project. The MOUs include volumes from BP and Shell to each purchase up to 2.2 million tonnes of LNG per annum over a 20-year period.



#### **Climate Change Policy**

In 2023, Tamboran approved its first Climate Change Policy. The Policy details Tamboran's climate change commitments and objective to be a Net Zero equity Scope 1 and 2 energy company by first commercial production. Tamboran's climate change policy is available on its publicly available website.



#### **Climate Change Policy**

#### 1.1. Introduction

- (a) Tamboran Resources Limited (Tamboran), acknowledging the current scientific consensus of climate change, is committed to reliably delivering low cost, low GHG intensity natural gas<sup>1</sup> that meets society's needs.
- (b) Tamboran supports global efforts for implementation of the 2015 Paris Agreement and the goal of limiting global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C.
- (c) Tamboran aims to be a Net Zero energy company (equity scope 1 and 2 GHG emissions) from first commercial production of natural gas.
- (d) Tamboran recognises the global energy transition to Net Zero emissions will be complex with many potential decarbonization pathways.
- (e) Tamboran will contribute to an orderly energy transition and support energy security by suppling affordable, reliable, and low GHG intensity natural gas<sup>1</sup>.

#### 1.2. Commitment of Tamboran

- (a) Set meaningful targets to reduce our GHG emissions and achieve Net Zero equity scope 1 and 2 GHG emissions by first commercial production of natural gas.
- (b) Manage climate change risks and opportunities with the objective of creating a sustainable business.
- (c) Seek to ensure our low cost and low GHG intensity natural gas¹ portfolio is aligned with the objectives of the Paris Agreement.
- (d) Work with JV partners, customers, communities, host governments, and other stakeholders towards the shared objectives of the Paris Agreement.
- (e) Promote the use of new technologies and renewable energy and, when commercially feasible, seek to adopt and integrate low GHG technologies into our operated and nonoperated projects.

 $<sup>^{1}</sup>$  Low GHG intensity natural gas refers to Tamboran's Scope 1 and 2 GHG emissions from the production of natural gas.





# CLIMATE CHANGE GOVERNANCE

**Tamboran Board:** oversees the Company's climate risk governance and assess how climate risks and opportunities may influence the Company's Corporate Strategy and decision-making. The Climate Change Policy, approved by the Board, describes the Company's climate change commitments and expectations on how climate risks should be managed and disclosed within the business.

**ESG Committee:** oversees the Company's strategies, processes and performance relating to climate change issues and greenhouse gas emissions. Review of key climate change strategies and positions including the Company's industry leading position to be a Net Zero Scope 1 and 2 energy company by first commercial production.

**Tamboran Executive Leadership Team:** establishes the structures, reporting lines, and responsibilities to oversee the management of the Company's key risks, including climate change risks.

Tamboran executive management are financially incentivised to manage longer-term risks that could impact the value of the Company, including climate risk.

In 2022, Tamboran elevated the importance for Climate Change and Sustainability with the creation of a new role focused on strategy and delivery of Climate Change and Sustainability commitments. This role advises on climate risk strategy, emerging issues, trends, GHG management, and related climate change matters that may impact broader strategy or decision-making.

## CLIMATE STRATEGY

#### Climate Strategy included as key part of Tamboran's Corporate Strategy

As an upstream energy company, we recognise that our climate change strategy must be completely aligned and integrated with our corporate strategy. Demonstrating the linkage between climate strategy and corporate strategy, in 2021, Tamboran made the corporate commitment to be a Net Zero Scope 1 and 2 energy company by first commercial production. This was, and continues to be, an industry leading GHG target.

Tamboran is committed to achieving its corporate goals and climate change targets through the implementation of its climate change strategy and its Six Pillar Sustainability Model. Tamboran's sustainability approach and its Six Pillar Sustainability Model includes a Climate Pillar with climate change commitments and targets.



#### **Community**

Partnering with our local and host communities to share value through the creation of local jobs and business opportunities.



#### **Climate Change**

Playing an effective role in the transition to a lower carbon economy through the production of low CO<sub>2</sub> natural gas resources.



#### **People**

Attracting, developing and retaining a diverse, inclusive, and competent workforce.



#### **Health & Safety**

Putting the health and safety of our people, contractors, and community first through effective systems, conduct and safe operations.



#### **Environment**

Applying leading drilling technologies to promote efficiency and minimise environmental impacts.



#### **Economic**

Generating economic growth and value for our investors, employees, customers and communities.

## Net Zero Scope 1 and 2 by First Commercial Production Strategy

Managing the risks and opportunities posed by climate change and the energy transition is essential for our growth and long-term success. Tamboran recognises that as part of the energy transition, the world is likely to need reliable, low cost, and low GHG intensity natural gas. To meet this mandate of reliable natural gas produced from low GHG intensity assets, Tamboran has set an industry leading target to be a Net Zero equity Scope 1 and 2 company from first commercial production.

Tamboran aims to achieve this target by utilising new technology, such as renewable and batteries, using best operating practices, and through the use of high-quality carbon offsets to reduce any residual emissions.

Tamboran's Net Zero strategy not only helps manage our long-term climate change risks, we believe it also helps differentiate Tamboran as a new energy company focused on reducing its own GHG emissions and providing natural gas to allow customers to reduce their own GHG emissions. By implementing our strategy of Net Zero Scope 1 and 2 emissions from first production, we are reducing the risk of high carbon costs and demonstrating leadership in the energy transition.

#### **Safeguard Mechanism Reforms**

During 2023, the Australian Federal government announced reforms to the Safeguard Mechanism as a key part of its strategy to achieve Net Zero GHG emission in Australia by 2050.

As part of the Safeguard Mechanism reforms, new Federal regulations require shale gas facilities in the Beetaloo Basin to have a "Zero GHG baseline" and achieve Net Zero Scope 1 GHG emissions. Companies covered by the Safeguard Mechanism must reduce Scope 1 GHG emissions to below the baseline by implementing new technology, utilising new operational measures, or by purchasing carbon offsets.

Tamboran has been planning for Net Zero Scope I and 2 emissions and does not believe the Safeguard Mechanism reforms requiring Net Zero Scope I emissions are materially different to our own corporate target. The anticipated costs of achieving our Net Zero Scope I and 2 target have already been included in the base case of our project economics and we are designing our production facilities with Net Zero Scope I and 2 emissions as a key design parameter. After reviewing the Safeguard Mechanism reforms in full, Tamboran believes the reforms are aligned with our existing targets.

Tamboran is also encouraged that the Beetaloo Basin is one of the first natural gas basins in the world with a Net Zero Scope I emission target from "Day I" legislated by a Federal Government. Under the Safeguard Mechanism, there is now a Federal Government guarantee that natural gas from the Beetaloo Basin is produced from Net Zero Scope I production facilities.

The Beetaloo Basin is one of the first natural gas basins in the world with a Net Zero Scope I emissions target from 'Day I' legislated by a Federal Government.



#### Reliable supply of natural gas through the energy transition

Recent external shocks to the energy system have demonstrated the critical role Tamboran intends to play in the energy transition by being a reliable supplier of natural gas.

The war in Ukraine has disrupted the flow of natural gas to Europe as European Governments have pivoted away from Russian energy. Unfortunately, due to long term underinvestment in natural gas, countries are now relying more on coal to fill the gap left by the exit of Russian gas.<sup>4</sup> Coal is the most pollutive of fossil fuels. When combusted to generate electricity, natural gas has 50% lower GHG emissions compared to coal and significantly lower local air pollutants.5

The experience in Europe is a real-life example of what can happen if a reliable supply of natural gas is not available; the evidence shows some countries are likely to revert to using coal. Natural gas is, and is likely to continue to be, a key tool for countries to reduce GHG emission, improve local air quality, and meet their decarbonisation goals.

In July 2023, the International Energy Agency (IEA) reported that 2022 global coal consumption rose to an all-time high. The IEA expects coal consumption will continue to grow and does not anticipate coal demand decreasing in 2023 or 2024.6 The increasing use of coal is leading to higher global GHG emissions and makes achieving the goal of the Paris Agreement more difficult.

In Australia, as the electricity grid transitions towards more renewables and less coal. Tamboran believes the role of natural gas is likely to become even more important. Natural gas is the reliable partner for renewable energy as it provides firming capacity and baseload power when renewables are not available. Tamboran's Beetaloo Basin project has the potential to reliably supply natural gas to both domestic and export markets as these economies move away from coal.

#### Beetaloo Basin gas is naturally low in CO,

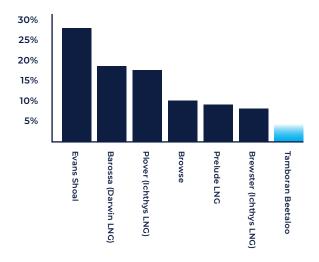
Tamboran has an advantage compared to other energy companies because the Beetaloo Basin has low CO<sub>2</sub> natural gas with low reservoir CO<sub>2</sub>. The CO<sub>2</sub> carbon dioxide content in the Beetaloo Basin reservoirs is estimated to be ~1% to 5% and this gives Tamboran both a decarbonisation advantage and a commercial advantage.

As Australia and our global trading partners continue to decarbonise, natural gas that is low in reservoir CO<sub>2</sub> should be prioritised for development. Under carbon pricing schemes such as the Australian Federal Government's Safeguard Mechanism, natural gas with low reservoir CO<sub>2</sub> should be priced at a premium compared to natural gas with higher reservoir CO<sub>2</sub>.

Benchmarking other gas reservoirs in Northern Australia with the Beetaloo Basin highlights the intrinsic carbon advantage of Tamboran's low CO<sub>2</sub> natural gas. Tamboran believes the low reservoir CO<sub>2</sub> in the Beetaloo Basin is a natural advantage and the gas is likely to become even more valuable as Australia and the world decarbonise.

#### Tamboran's Beetaloo Basin asset has low reservoir CO, compared to other Australian gas resources in the region

#### Reservior CO, Composition (%)



6.https://www.iea.org/news/global-coal-demand-set-to-remain-at-record-levels-in-2023

<sup>4.</sup> Energy crisis fuels coal comeback in Germany, December 16, 2022. https://www.reuters.com/markets/commodities/energy-crisis-fuels-coal-comeback-germany-2022-12-16/

#### Decarbonisation strategy: Avoid, Minimise, Offset

Tamboran's decarbonisation strategy is focused on reducing and minimising its own Scope 1 and 2 GHG emissions. Importantly, Tamboran is in the design phase of its Beetaloo production facilities and has the ability to "design out" GHG emissions. Building low GHG emissions into the design of a greenfield facility is the most efficient and the lowest cost time to invest in emission reductions.

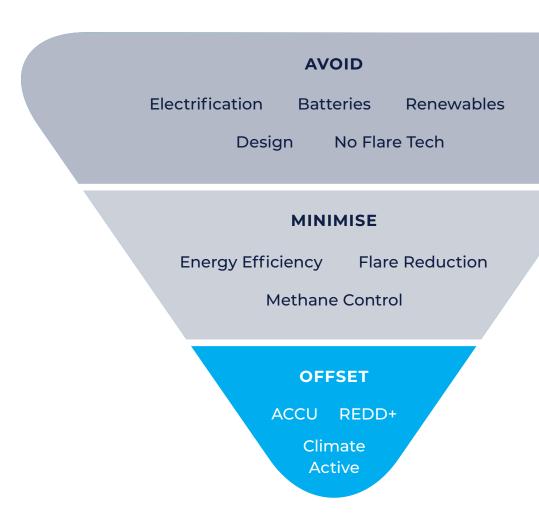
Tamboran is committed to using a hierarchy of controls approach to drive down absolute GHG emissions using a philosophy where Avoid, is prioritised over Minimise, which is prioritised over Offset.

**Avoid:** The priority will be to Avoid any GHG emissions in the project design, this can be done by electrifying the facility and utilising renewable energy, batteries, and low flaring technology.

Minimise: The second priority will be to Minimise any GHG emissions that cannot be avoided. This is done through good operating practices to reduce emissions and improve efficiency. It is also accomplished by using technology such as methane leak detection and repair to minimise fugitive emissions.

**Offset:** Finally, Tamboran is committed to using high quality carbon offsets to offset residual GHG emissions. These are the emissions that cannot be either avoided or minimised.

Tamboran's Avoid, Minimise, and Offset approach means that using renewable energy, batteries, new technology, and good operating practices are likely to be the main tools to reduce GHG emissions. Only after Avoid and Minimise will Tamboran use its high-quality carbon offsets to reduce any residual GHG emissions to Net Zero.



#### Partnerships to reduce GHG emissions

Tamboran recognises that it cannot achieve its Net Zero targets on its own, as deep decarbonisation requires new technology, new ways of doing business, and importantly strong partnerships. During 2023, Tamboran joined the Methane Guiding Principles, became a member of the NT Low Emissions Hub working group, broadened its relationship with carbon offset provider Viridios, and entered into an agreement with Helmerich & Payne Inc. (H&P) for the import and use of its super-spec FlexRig® Flex 3 rig. All of these initiatives will play a role in helping Tamboran in its aim for Net Zero Scope 1 and 2 GHG emissions by first commercial production.



By joining the Methane Guiding Principles (MGP), Tamboran joins an association comprising 50 signatories, including major oil and gas producers, and supporting organisations, including the United Nations Environment Programme, the World Bank, and the International Energy Agency. This collective is committed to reducing methane emissions throughout the gas supply chain. Launched in 2017 by a coalition of industry and civil society organizations, MGP focuses on five key areas of action to combat methane emissions and foster collaboration between industry and government. Members build on the foundation of five key principles to develop and share hands-on interactive tools and guidance to help others learn from experience and put those lessons into practice.

Tamboran plans to utilise new technology in the design of its facilities to eliminate methane sources. During production, Tamboran plans to use methane leak detection and repair systems to systematically monitor and reduce any remaining methane emissions.

More information on the Methane Guiding Principles: https://methaneguidingprinciples.org/

#### NT LOW EMISSIONS HUB

Led by CSIRO, the NT Low Emission Hub is a collaboration between industry and the Northern Territory Government to develop a business case assessing the viability of a large-scale low-emission carbon capture utilisation and storage (CCUS) hub based in the Northern Territory.

The aim of the NT Low Emission Hub will be to reduce existing emissions significantly, by acting as a catalyst to new Net Zero industries to continue beyond the energy transition. It is also intended to enable the development of an interconnected hydrogen industry, and the use of captured carbon in other industrial processes, such as the production of non-fossilfuel alternatives for transportation.

More information on the NT Low Emission Hub: https://www.csiro.au/en/research/technology-space/energy/nt-low-emissions-hub



Tamboran has worked with Viridios since 2021 to develop a portfolio of both voluntary and Australian Carbon Credit Unit (ACCU) offsets. Viridios is an asset management business focused on the growing Voluntary Carbon Market and compliance markets. While Tamboran's main GHG reduction strategy is to avoid and minimise Scope 1 and 2 GHG emissions, we also recognise that some residual GHG emissions will likely need to be offset.

All of the carbon offsets that Tamboran holds in its portfolio are eligible under the Australian Safeguard Mechanism or the Australian Climate Active Standard.



The H&P super-spec FlexRig® Flex 3 rig is Australia's most powerful onshore drilling rig, capable of drilling more than 4,000-metre horizontal sections within the Mid-Velkerri B Shale. The new capabilities of the rig are expected to support a material reduction in cost per unit of recoverable gas and minimise Tamboran's environmental footprint.

Current Australian rigs are unable to drill wells with a 4,000-metre horizontal sections at the depth of Tamboran's Beetaloo Basin assets with the required 5-½ inch casing. By drilling longer horizontal sections through the shale, Tamboran is able to reduce the number of wells across the Basin for the same production rate. Instead of drilling three wells with 1,000-metre horizontal sections, Tamboran will be able to drill wells with a horizontal section in excess 3,000 metres. This has the potential to reduce surface disturbance and is expected to reduce Scope 1 GHG intensity of Tamboran's operations.



#### **Carbon Offset Portfolio**

Tamboran is actively building a high-quality carbon offset<sup>7</sup> portfolio. These high-quality offsets are likely to help manage climate change risks and the successful implementation of Tamboran's Net Zero strategy. It is important to note that Tamboran plans to only use carbon offsets to manage residual GHG emissions, these are the emissions that Tamboran cannot reduce through technology or good operating practices.

Tamboran has been progressively buying carbon offsets since 2021. As of December 2023, Tamboran has over 51,000 carbon offsets in its portfolio and has contracted 60,000 more carbon offsets to be delivered from 2024 to 2025. All of the carbon offsets in our portfolio meet the requirements of either the Safeguard Mechanism or Australia's Climate Active Standard® and many provide environmental, social, and economic co-benefits.

Over the next 12 months, Tamboran plans to grow its carbon offset portfolio and is keen to invest in local offset projects in the Northern Territory and the broader Australian market.

Tamboran believes that its carbon offset portfolio is a key differentiator and is likely to help Tamboran achieve its Net Zero target by reducing residual emissions and materially reducing climate change risks.

#### Physical climate risk assessment

To minimise the physical risk of climate change to Tamboran's assets, the Company intends to assess physical climate risks when developing our proposed NTLNG facility and our Beetaloo Basin natural gas project.

Over the next 18 months, we plan to conduct a physical climate risk assessment of our operated areas in the Northern Territory where climate data is available. This physical risk assessment is likely to inform our project design and the results are likely to be incorporated into Front End Engineering and Design (FEED) of our NTLNG Facility and Beetaloo Basin development. Importantly, this

review intends to consider the direct physical impacts of climate change on Tamboran's assets and operations and also the indirect impacts, such as climate events impacting local communities, and contractors.

Tamboran will rely on research and climate data published by scientific organisations and other third parties. As more detailed climate information is released, we are committed to continuing to refine and update our physical climate change risk assessments.

#### Internal carbon price

Tamboran has adopted an internal carbon price and uses the carbon price during major investment decisions. The price is risk-based and applied to the base case of project economics.

An internal carbon price embeds awareness and consideration of climate risks in decision-making by:

- Enabling Tamboran decision-makers to consider the future risk of carbon costs (direct or implicit prices) when making capital investment decisions.
- Ensuring carbon price risks are assessed and managed in the same way as any other financial risk.
- Enabling Tamboran's teams to optimise project design decisions and reduce our exposure to future carbon costs.
- Provides a reference point when growing our own carbon offset portfolio.

Tamboran currently uses an internal carbon price of AUD A\$50 per tonne of CO2e (2023, escalated at CPI) internal carbon price. Importantly, this internal carbon price is applied to all of Tamboran's forecasted equity Scope 1 and 2 GHG emissions.

"Over the next year, we look forward to progressing the development of our Net Zero equity Scope 1 and 2 Beetaloo natural gas project."

- Joel Riddle, Managing Director





# CLIMATE TARGETS, METRICS, AND INDICATORS

#### **GHG** emissions:

As a responsible natural gas company, reducing the intensity of our greenhouse gas emissions and achieving Net Zero equity Scope 1 and 2 emissions by first commercial production is an important element of our Climate Change and Corporate Strategy. Tamboran reports both its equity and operated GHG emissions.

#### FY23 Operated:

- Scope 1 GHG emissions: 11,383 tCO<sub>2</sub>e
- Scope 2 GHG emissions: 0 tCO<sub>2</sub>e

#### • FY23 Equity:

- Scope 1 GHG emissions: 12,868 tCO<sub>2</sub>e
- Scope 2 GHG emissions: 0 tCO<sub>2</sub>e

#### **Target: Net Zero Scope 1 and 2 emissions**

Many energy companies have set short (2025), medium (2030) and long term (2050) GHG reduction targets. Tamboran's GHG targets are more ambitious. When Tamboran begins commercial production of natural gas, Tamboran aims to have Net Zero equity Scope 1 and 2 GHG emissions.

Tamboran then aims to maintain Net Zero equity Scope 1 and 2 GHG emissions for the duration of the asset life.

#### Scope 3 emissions

Tamboran is not a producing company. As such, it does not yet have Scope 3 emissions associated with natural gas sold to customers.

Tamboran has control over its Scope 1 and 2 emissions and has established an industry leading GHG target for these emissions. Once natural gas is sold to customers, Tamboran does not have control over how the natural gas is used and it does not have control over Scope 3 emissions.

Some customers may use natural gas as feedstock for plastics or chemicals and in this case, the carbon in the natural gas is not released to atmosphere and there are no Scope 3 emissions associated with combustion of the gas. In other cases, a company may use natural gas for blue hydrogen production and again there would not be Scope 3 emissions.

As we develop our Net Zero Scope 1 and 2 project, we are likely to engage with natural gas customers and inquire into how they intend to use the natural gas. While Tamboran does not have control of Scope 3 emissions, we do want to collaboratively work with our customers and develop solutions to help them reduce their own Scope 1 emissions.

#### Internal metrics

Tamboran has set internal GHG metrics to give Tamboran's Management and Board the data and tools to achieve our Net Zero emission target. These metrics are intended to be used for both internal reporting and external reporting purposes.

Tamboran will report GHG emissions under the Australian Government's National Greenhouse and Energy Reporting (NGER) scheme when operated GHG emissions exceed 25,000 tCO<sub>2</sub>e.

Tamboran's FY23 GHG emissions are below the NGER threshold. However, Tamboran has published both operated and equity GHG emissions on its publicly available website and in this TCFD climate change report.

The internal GHG metrics Tamboran will likely report on include:

- GHG by Scope 1 emissions (kt CO<sub>2</sub>-e);
- GHG by Scope 2 emissions (kt CO<sub>2</sub>-e);
- GHG by Scope 3 emissions (kt CO<sub>2</sub>-e);
- GHG emission intensity on an operated basis (kt CO<sub>2</sub>-e/mmboe);
- GHG emission intensity on an equity basis (kt CO<sub>2</sub>-e/mmboe);

#### **External indicators**

Tamboran is also monitoring external climate change indicators by comparing actual data to predicated scenario data. Monitoring these external indicators is likely to give Tamboran greater insights into which decarbonisation pathways the world is actually following.

The external indicators are either "lag indicators" and provide data on where the world is now or "lead indicators" that signal where we may be going.

#### **Examples of external indicators include:**

#### **Lag Indicators**

Global CO<sub>2</sub> emissions and growth/decline from previous year

Global oil demand and supply

Global gas demand and supply

Global LNG demand and supply

Global coal demand and supply

Renewable energy capacity and growth

Electric vehicles (number of new cars and percentage of global fleet)

Carbon offset prices (ACCU and voluntary markets)

#### **Lead Indicators**

Changes in National Determined Contribution (NDC) commitments

Australia and regional GHG targets to 2030 and 2050

Battery prices per kilowatt-hour

Cost of green hydrogen production per kg

Carbon Capture Storage (CCS) projects planned or under construction

Nuclear power plants under construction

ACCC and AEMO Gas Supply Outlook

### **CLIMATE CHANGE RISK MANAGEMENT**

Climate change risks are assessed in the same way as other financial risks. As part of Tamboran's climate change risk review, we begin by assessing any changes in our own operating environment. This includes legislative and regulatory changes in Australia or the Northern Territory; new investor expectations or GHG reporting recommendations, industry led climate change commitments, the direction of global climate negotiations, emerging stakeholder concerns, and technological advancements. We then consider if the likelihood or impact of our climate risks have changed, or if there are new risks to evaluate. Finally, we review our controls to assess whether they are effectively managing the risks and if we need to implement additional controls.

#### Material climate risks

Market risk: Changes in demand for our products due to emission reduction targets or technological changes. Time horizon: medium and long-term.

**Operating costs:** Increase in operating costs of our long-life assets due to carbon pricing policies or other market mechanisms or regulations. Time horizon: short-, medium and long-term.

Reputational and legal risk: Reputational and legal impacts, driven by stakeholder activism and increasing societal expectations that negatively impact our brand, increase costs, and impact our ability to attract a talented workforce. Time horizon: short-, medium- and long-term.

Access to capital: Restricted access to capital for hydrocarbon industries and projects. Time horizon: short-, medium and long-term.

Physical risk: Physical impact of climate on our assets and on the communities where we operate. Time horizon: medium and long-term.

For the purposes of this climate risk analysis, Tamboran's risk time horizons are:

1 to 5 years

Short-term:

Medium-term:

5 to 15 years

Long-term:

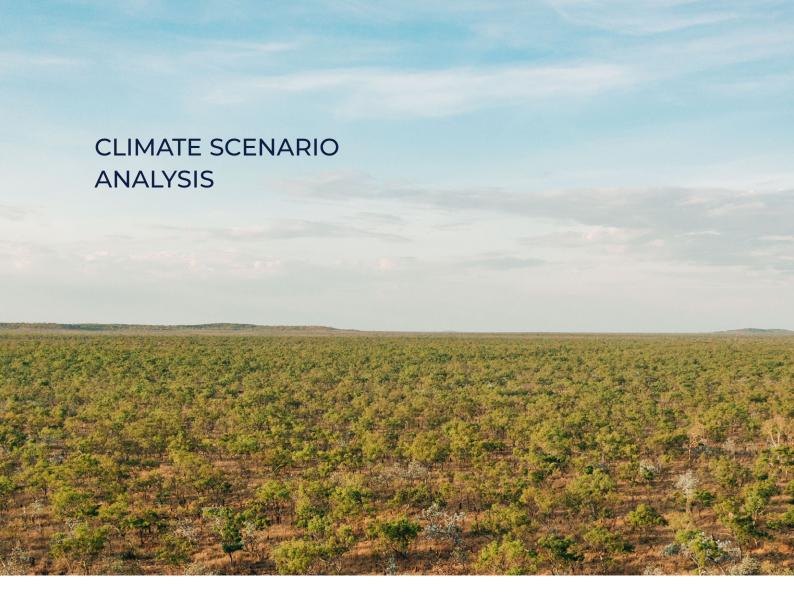
15 to 25 years

#### Detailed climate risks and opportunities, and planned response

Risk	Туре	Description	Financial Impacts	Time Horizon	Our Planned Response*
Physical Risks	Acute	Physical impact of more intense and extreme weather events on assets.	Damage to physical assets.  Disruptions to drilling, operations or supply chains.  Increased community and employee needs following events.	Medium /long-term	Embed internal processes to ensure physical climate impacts are considered in design and construction of new facilities.  HSE management system with emergency preparedness and response.  Partner with local communities and government for adaptation initiatives.
	Chronic	Changing average climate conditions (e.g. Hotter working conditions and lower average rainfall).	Decreased productivity and increased operating costs.	Medium/ long-term	Potential climate impacts are considered in design and construction of new assets.  Develop Health and Safety practices and procedure that take account of higher average temperatures.
Transition Risks	Operating	Increase in operating costs due to carbon prices, taxes, or other GHG regulations in Australia.	Increase in operating costs.	Short / medium/ long-term	Net Zero Scope 1 and 2 by first commercial production strategy.  Use an internal carbon price to ensure the cost of future carbon costs are taken into account during design and investment decisions.  Focus development on low GHG intensity projects with low reservoir CO <sub>2</sub> .  Develop portfolio of high quality carbon offsets prior to first production.
	Legal	Exposure to climate change litigation. Delays to project approvals.	Increased compliance costs. Potential for liabilities.	Short / Medium/ long-term	Net Zero Scope 1 and 2 by first commercial production strategy.  Engagement with local communities and stakeholders.  Communicate the environmental credentials of project, low CO <sub>2</sub> intensity of natural gas resource, and ability to reliably supply natural gas to alleviate gas shortfalls.
	Market	Changes in demand for natural gas leads to lower prices and re-pricing of natural gas assets.	Revenue less than projected due to lower demand and lower natural gas prices.  Asset impairment due to lower natural gas prices.	Medium / Long-term	Use of scenario analysis to assess long term demand for natural gas under different decarbonisation scenarios.  Monitor global and local regulatory changes and trends.  Focus on unconventional shale gas resource that provides production flexibility.  Advocate for a stable market mechanism as the most efficient response to manage risks of climate change.

<sup>\*</sup> These initiatives may be ongoing.

Risk Type		Description	Financial Impacts	Time Horizon	Our Planned Response*
Transition Risks	Reputation	Damage to reputation due to stakeholder activism or changing societal expectations	Damage to brand value. Lost revenue. Additional expenditure.	Short/ medium/ long-term	Net Zero Scope 1 and 2 by first commercial production strategy.  Adopt TCFD recommendations and publish annual climate change reports.  Consider climate risks and opportunities during project design and prior to major investment decisions.  Clear public position statements on climate change and the energy transition.
	Access to Capital	Restricted access to capital for hydrocarbon industries and projects.	Higher cost of capital.	Short/ medium/ long-term	Net Zero equity Scope 1 and 2 by first commercial production strategy.  Adopt TCFD recommendations and publish annual climate change reports.  Demonstrate Tamboran's strategy is aligned with and supports banks and other financiers climate change targets.
Opportunities	Reputation	Differentiate Tamboran through Net Zero by first production strategy.	Preferred company for local community and stakeholders. Increased ability to obtain finance. Preferred JV and strategic partner. Access to wider employment talent pool. Increase value of brand.	Short/ medium/ long-term	Implement Tamboran's leading Net Zero by first production strategy.  Develop portfolio of high quality carbon offsets prior to first production.  Stakeholder management and advocacy with policy makers.  Effectively communicate Net Zero and Sustainability strategy.  Proactive support of NT and Australian
	Financial	New commercial opportunities from the transition to a lower-carbon economy and Tamboran's low GHG intensity natural gas.	Enhanced market pricing for natural gas produced by a Net Zero company. Increased revenue through new markets for carbon offsets linked to natural gas and LNG sales. Enhanced market value of Tamboran's low reservoir CO <sub>2</sub> natural gas compared to industry average.	Short/ medium / long-term	Implement Tamboran's leading Net Zero by first production strategy.  Develop portfolio of high quality carbon offsets prior to first production.  Establish strategic partnerships for new funding models.  Work with customers on need for carbon offsets linked to natural gas sales.  Effectively communicate the value of Tamboran's low CO <sub>2</sub> natural gas compared to peer's higher CO <sub>2</sub> resource.



Climate scenario analysis forms part of Tamboran's climate change risk assessment, strategy development and decision-making processes. Scenarios help inform how the world could change under different circumstances and provide useful insights. However, scenarios are not forecasts or predictions of what will occur.

The value of scenario analysis is reflecting on how the world may change and what would be required to bring about that change.

For the global energy industry, the last three years have been some of the most volatile on record. None of the scenarios published in late 2019 predicated the shutdown of the global economy due to Covid-19 or the recent disruption of the oil and natural gas markets due to the Russian invasion of Ukraine.

Events of the last three years have reinforced our view that scenarios are not forecasts and they do not predict the future; scenarios are meant to provide insights into how the world might look under different circumstances and constraints.

While Tamboran examines different well known decarbonisation scenarios, including the IEA scenarios, we do not have one central scenario as our base case.

### **Scenario Insights**

· TAMBORAN RESOURCES

- There are a wide range of decarbonisation pathways to achieve Net Zero emissions and the Paris Agreement goal of below 2 degrees of warming.
- Climate scenario analysis indicates continued demand for natural gas in a range of decarbonisation scenarios, including Paris Aligned pathways.
- Continued investment in fossil fuels is essential in all of the IEA scenarios, including the IEA Net Zero scenario.
- Tamboran's Beetaloo Basin project has the ability to supply natural gas to NT markets, Australia's East Coast markets, backfill existing LNG projects, and Tamboran's proposed NTLNG project.
- Tamboran's strategy is focused on low cost, low GHG intensity natural gas assets that meet global energy demand.

#### Additional gas projects need to be developed, even in Paris aligned scenarios.

Tamboran understands that if the world is to meet the Paris Agreement goal of limiting temperature increases to well below 2°C, the world will need to decarbonise, and this will likely mean less consumption of hydrocarbons over the long term. However, due to the natural decline of existing gas fields, new investment in gas is still required today to meet future demand. This is true even in Paris Aligned decarbonisation scenarios.

In 2021, the International Energy Agency (IEA) released their landmark Net Zero by 2050 (NZE) scenario. This scenario presented one pathway to achieve Net Zero emissions by 2050 and it required deep reductions in GHG emissions and dramatic reductions in the demand for hydrocarbons.

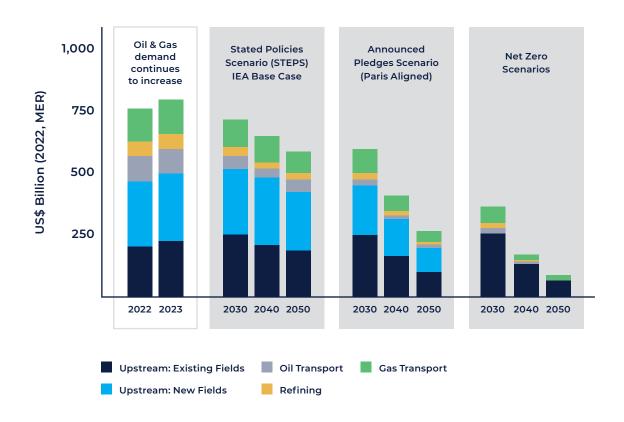
The IEA NZE scenario anticipated that global oil demand should be 88 MMbbl/d today and that in 2030 demand would 72 MMbbl/d. In fact, the demand for oil today is over 102 MMbbl/d. If demand for hydrocarbons was falling this

quickly, Tamboran agree that the world would not need to invest in new hydrocarbon supply. In reality, the demand for oil and gas is increasing, and more supply is needed to meet this demand.

The IEA made this point clear in their updated Net Zero by 2050 scenario published in the 2023 World Energy Outlook (WEO). The IEA states in the 2023 WEO, describing the IEA Net Zero by 2050 scenario:

"Continued investment in fossil fuels is essential in all of our scenarios. It is needed to meet increases in demand over the period to 2030 in the STEPS and to avoid a precipitous decline in supply that would far outstrip even the rapid declines in demand seen in the NZE Scenario".

#### Global oil and natural gas Investment by scenario (2022-2050)



The IEA has made clear that the world requires investment in natural gas projects to meet continuing global demand for natural gas, even in Paris Aligned decarbonisation scenarios.

As the world requires continued investment in natural gas supply, Tamboran believes that this gas should be produced:

- In an environmentally and socially responsible manner.
- In countries with stable governments who have been long term and reliable suppliers of natural gas.
- By companies with Net Zero Scope 1 and 2 targets.

This describes Tamboran's Beetaloo Basin natural gas project.

#### Future scenario analysis

In future years, Tamboran aims to further develop its climate change and scenario disclosures. As the Beetaloo Basin and NTLNG projects progress towards FID, Tamboran's TCFD climate change analysis intends to assess how these projects may perform under different decarbonisation pathways. It is intended that this analysis will include IEA scenarios, other reputable scenarios that are aligned with the objectives of the Paris Agreement, and scenarios that support the energy transition.

#### **Report Feedback**

We welcome feedback on our reports via: info@tamboran.com



"The world requires energy that is reliable, affordable, and low carbon. Tamboran believes we can help address this global challenge by developing our low GHG intensity natural gas assets in the Beetaloo Basin."



#### **Definitions and Abbreviations**

**APS:** The IEA Announced Pledges Scenario form the IEA World Energy Outlook. Consistent with global warming of 1.7°C in 2100

**Bcf:** Billion cubic feet, measurement of natural gas

**Bcf/d:** billion cubic feet of per day, measurement of natural gas production

Company: Tamboran Resources Limited

**CO<sub>2</sub>:** Carbon dioxide

**CO<sub>2</sub>e:** Carbon dioxide equivalent. Using the global warming potential of other GHG (methane) and converting to equivalent value of carbon dioxide

**FEED:** Front-end engineering and design.

FID: Final investment decision

Gas: natural gas

**High quality carbon offsets:** Australian Carbon Credit Units (ACCU) offsets or offsets approved by the Commonwealth's Climate Active Carbon Neutral Standard

IEA: International Energy Agency

LNG: Liquefied natural gas

**Net Zero company:** When referring to Tamboran, meaning Net Zero equity share of Scope 1 and Scope 2 GHG emissions

**Net Zero emissions:** Net Zero Scope 1 and Scope 2 greenhouse gas emissions

**Net Zero natural gas:** Natural gas that is produced from a facility with Net Zero Scope 1 and 2 GHG emissions

**NZE:** The IEA Net Zero Emissions by 2050 Scenario form the IEA World Energy Outlook. Consistent with global warming of 1.4°C in 2100.

**Paris aligned scenarios:** Consistent with limiting global warming to below 2°C above pre-industrial levels

**TCFD:** Task Force on Climate-related Financial Disclosures

35 · TAMBORAN RESOURCES

#### **TCFD Reference Guide**

TCFD recommendation and recommended disclosures	
Governance: Disclose the organisation's governance around climate-related risks and opportunities	
Describe the board's oversight of climate-related risks and opportunities	Pg 14
Describe management's role in assessing and managing climate-related risks and opportunities	Pg 14
Strategy: Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material	
Describe the climate-related risks and opportunities the organisation has identified over the short-, medium-, and long-term	Pg 27-29
Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning	Pg 27–29
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	Pg 32
Risk Management: Disclose how the organisation identifies, assesses, and manages climate-related risks	
Describe the organisation's processes for identifying and assessing climate-related risks.	Pg 27
Describe the organisation's processes for managing climate-related risks.	Pg 27
Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	Pg 27
Metrics and Targets: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material	
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Pg 26
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	Pg 25
Describe the targets used by the organisation to manage climate-related risks	Pg 25

Source: Financial Stability Board 2017, Recommendations of the Task Force on Climate-related Financial Disclosures Final Report.



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