

## **AUSTRALIAN SUSTAINABLE FINANCE TAXONOMY | SECOND CONSULTATION PAPER**

Australian Energy Producers | 5 December 2024

Australian Energy Producers welcomes the opportunity to provide input into the Australian Sustainable Financial Institute's (ASFI) second consultation on the draft [Australian Sustainable Finance Taxonomy](#).

**Australian Energy Producers remains seriously concerned that the voluntary Australian Sustainable Finance Taxonomy's proposed treatment of natural gas risks impacting critical gas investment and the deployment of key net zero technologies**, undermining Australia's ability to achieve net zero while maintaining energy security and minimising for Australian households and businesses.

**The Australian Government Future Gas Strategy clearly states that "Under all credible net zero scenarios, natural gas is needed through to 2050 and beyond", highlighting that "our energy system needs gas to achieve net zero."** Natural gas supports the transition away from coal, provides the firm dispatchable energy required to unlock large-scale renewable energy deployment, and powers Australian industries across the economy including those processing the critical minerals necessary for net zero. The Future Gas Strategy emphasises that Australia needs "continued investment in, and development of, gas supply and transport infrastructure to get us through the energy transition with thriving industries."

**The draft Taxonomy fails to recognise the importance of natural gas investment to the energy transformation in Australia and the region, and risks undermining energy security and emissions reductions efforts in Australia.** The Australian Energy Market Operator's 2024 Integrated System Plan sees the need for a 170 per cent increase in gas power generation over the next two decades in their Orchestrated Step Change Scenario.<sup>1</sup> Similarly, the Net Zero Australia study<sup>2</sup> shows how constraints in renewable deployment could necessitate a doubling of natural gas demand across the Australian economy to meet net zero. A Taxonomy that discourages investment natural gas supply and use only serves to frustrate emissions reductions across the economy, undermine energy security and drive up energy prices, exacerbating cost-of-living pressures for all Australians.

**Further, the draft Taxonomy consistently understates the readiness of widely deployed, proven technologies such as carbon capture, utilisation and storage (CCUS) while overstating the readiness of natural gas alternatives such as low-carbon hydrogen and biomethane, which have yet to be deployed at scale today.** An accurate and consistent treatment of emissions reductions technologies is essential to realising a least-cost approach to net zero in Australia.

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<sup>1</sup> Australian Energy Market Operator, [2024 Integrated Systems Plan](#), 2024

<sup>2</sup> Pascale, D. et al, [Net Zero Australia Modelling Summary Report](#), April 2023

**Australian Energy Producers recommends the Taxonomy:**

- **Take a revised approach that recognises that natural gas investments are environmentally sustainable and aligned with Australia's transition to net zero.** This could include adopting emissions intensity thresholds for 'transitional' and 'environmentally sustainable' gas investments. Such revisions would align the taxonomy more closely with the European Union (EU) Taxonomy, which has undergone rigorous regulatory evaluation.
- **The Taxonomy's treatment of natural gas must align with Australia's energy and climate policies, including the *Future Gas Strategy*.** Natural gas should not be unilaterally framed in the context of short-term renewable electrification goals that will likely change many times in the short- to medium-term and over the next 26 years to 2050.
- **CCUS needs to be better recognised and incorporated in the taxonomy.** CCUS is recognised by the International Energy Agency (IEA), Intergovernmental Panel on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCCC) as a technically proven emissions reductions technology. CCUS is widely deployed commercially around the world and in Australia. It is a critical emissions reductions technology, in particular for hard-to-abate industry, advanced manufacturing, critical minerals processing, and low carbon hydrogen, ammonia and liquid fuels production.
- **The Taxonomy requires substantial improvement before it can be considered fit-for-purpose and serve as a credible sustainable investment guide for Australia. In its current form, it is not suited for its intended use across relevant government policies and compliance-based regulatory settings.**
- **ASFI should implement a more inclusive stakeholder engagement process that actively engages with industry, solicits their expertise, and incorporates their input to help refine the taxonomy.** An inclusive engagement process will ensure the Taxonomy aligns with current government policy settings and adheres to the principle of technology neutrality while adopting proven and practicable engineering standards.

**Australian Energy Producers would welcome further engagement with ASFI on the development of the Taxonomy.**

## AUSTRALIAN ENERGY PRODUCERS' COMMENTS AND RECOMMENDATIONS

The taxonomy requires substantial revision before it can serve as a credible and functional framework to appropriately guide investments within a context of Australia's net zero transition over the next 26 years. The Taxonomy in its current form risks undermining energy security and emissions reductions efforts in Australia. The implications of this framework on short- to medium-term investments means its launch should be delayed until it can be rigorously scrutinised by experts and stakeholders. This includes ensuring it is aligned with national energy, economic, and climate objectives and that it serves the national interest.

This submission highlights significant areas of concern, particularly regarding its treatment of natural gas use and its application of prescriptive and simplistic thresholds, which are inconsistent with international and domestic climate policy and regulatory frameworks.

### Weaknesses in the Taxonomy's treatment of natural gas

#### **The Taxonomy's treatment of natural gas contradicts international and national net zero analysis |**

A range of net zero scenarios – globally from organisations such as the IEA and the IPCC, and domestically in studies such as the Net Zero Australia study – show a critical role for gas in 2050 and thereafter. Globally, the IEA and IPCC present a range of net zero and Paris-aligned scenarios, that see demand for gas in 2050 range from 115 per cent of 2022 levels<sup>3</sup> to 22 per cent.<sup>4,5</sup> Similarly, the Net Zero Australia study<sup>6</sup> – led by the University of Queensland, University of Melbourne and Princeton University in the United States – finds that natural gas will be needed in 2050 across all net zero scenarios for Australia. Further, it shows that pathways could require gas demand to more than double from today's levels to reach net zero in Australia and to deliver net-zero energy exports to the region.

#### **The Taxonomy's treatment of natural gas is incompatible with the Australian Government's net zero and energy policy |**

The Australian Government Future Gas Strategy clearly states that “Under all credible net zero scenarios, natural gas is needed through to 2050 and beyond”, highlighting that “our energy system needs gas to achieve net zero.” Natural gas supports the transition away from coal, provides the firm dispatchable energy required to unlock large-scale renewable energy deployment, and powers Australian industries across the economy including those processing the critical minerals necessary for net zero. The Future Gas Strategy emphasises that Australia needs “continued investment in, and development of, gas supply and transport infrastructure to get us through the energy transition with thriving industries.”

#### **The Taxonomy's representation of gas demand is inconsistent with the assessment of expert agencies |**

ASFI cites unrealistic assumptions about future gas demand which contradict projections of many credible sources like the Australian Energy Market Operator (AEMO) and the government's

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<sup>3</sup> IPCC figures are relative to 2021 gas supply; IEA figures are relative to 2022 gas supply

<sup>4</sup> IEA, *World Energy Outlook 2023*, 2023

<sup>5</sup> IPCC, *6th Assessment Report Working Group III Technical Summary*, 2022

<sup>6</sup> Pascale, D. et al, *Net Zero Australia Modelling Summary Report*, April 2023

own statistics. It assumes a near-elimination of gas-powered generation (GPG) by 2050, contrary to AEMO's Integrated System Plan (ISP) which forecasts an additional 13 GW of GPG capacity and a 170 per cent increase in gas power generation over the coming two decades. It claims a 7 per cent annual decline in GPG over the past decade, while [Australian Energy Statistics](#) (Table O electricity generation by fuel type) shows a decline of only 2.3 per cent share of capacity, and a 1 per cent decline in gas power generation (GWh) for the period 2011-12 to 2021-22.

**The Taxonomy is not aligned with national energy, climate and economic policies** | The Taxonomy prioritises certain policies, such as the 82 per cent renewable generation share by 2030, while sidelining broader considerations like gas supply security and post-2050 demand outlined in the Future Gas Strategy. By marginalising gas, the taxonomy is jeopardising cost-effective pathways for achieving net zero while maintaining economic growth.

**The Taxonomy is misaligned with the Safeguard Mechanism, Australia's flagship climate regime for industrial mitigation** | The Taxonomy's lifecycle emissions (LCE) threshold for gas use (100 gCO<sub>2</sub>/kWh) fails to recognise existing requirements under the Safeguard Mechanism (SGM) which is specifically designed to meet net zero by 2050. This includes the SGM's stringent Scope 1 emissions reduction standards for both gas supply and use and. The Climate Change Authority [notes](#) that in 2023, approximately 84 per cent of emissions from the resources sector were covered by the reformed SGM. The SGM also provides facilities with an incentive to invest in innovative technologies like CCUS and methane mitigation.

The Minister's 2024 Annual Climate Change Statement to Parliament identifies that by 2040, the SGM will have driven more than half a billion tonnes of Scope 1 emissions reductions, and when combined with offsets for the hardest to abate emissions, more than 900 million tonnes of carbon dioxide equivalent (MtCO<sub>2</sub>-e). The government considers the SGM appropriately positions the resources sector including gas to meet net zero. The Taxonomy will only serve to introduce inefficiencies in meeting SGM obligations and frustrate emissions reductions efforts more broadly.

**A strict LCE threshold approach fails to consider broader emissions reductions contributions made by some technologies.** For example, fast-start open cycle gas turbines (OCGT) have a particularly important role to play in backing up renewable power, enabling higher levels of variable renewable penetration into the grid. However, on a purely emissions intensity basis, OCGT would be disincentivised over alternative, less flexible generation such as combined cycle gas turbines (CCGT) with CCUS. This despite CCGT not being able to provide the same levels of flexibility, and therefore the same levels of backup to renewables as OCGTs. Similarly, if OCGTs are displacing coal power generation, the overall emissions reductions are significant, even if the emissions intensity of the OCGT is above an arbitrary threshold. To ensure real-life emissions reductions are achieved the Taxonomy should allow for a broader assessment of overall systems emissions reduction outcomes.

**The Taxonomy represents potential overreach in already emissions-regulated markets** | The taxonomy's lack of defined use cases and voluntary nature raises questions about potential overreach in already regulated markets. It remains unclear what market failures the Taxonomy is seeking to address. The Department of Climate Change, Energy, the Environment and Water's (DCCEEW) latest

projections for example finds the government's current policy settings (baseline scenario), including the abatement facilitated by the SGM, is sufficient to meet Australia's 2030 emissions reduction target and that Australia is on track to achieving its net zero target in 26 years' time in 2050.

**The Taxonomy needs to accommodate the role of offsets** | Offsets provide a credible means to addressing the most challenging and expensive emissions reductions and residual emissions across the economy. Offsets also smooth the transition for many facilities and mitigate some of the steep economic and technical hurdles inherent in reaching near-zero emissions. The exclusion of offsets in the Taxonomy restricts the development of scalable and impactful climate solutions and emissions reductions efforts.

The SGM incorporates the use of high-integrity offsets in Australia. Australian Energy Producers recommends offsets should be included in the Taxonomy, in line with the SGM. The SGM's marginal carbon price equals the spot price of ACCUs, and serves as an essential driver of the investments needed in appropriate net zero aligned and often long-lived assets and infrastructures. This investment is needed to cost-effectively and reliably facilitate Australia's emissions reduction goals, while avoiding the future stranding of productive assets. The role a voluntary Taxonomy can play in helping guide such investments is diminished through the exclusion of offsets.

**The Taxonomy LCE assessments need to be applied to all energy sources to ensure technology neutrality** | The Taxonomy applies LCE criteria inconsistently across different energy sources. Renewables such as solar and wind are automatically deemed to be "green" with no consideration of their full lifecycle emissions. In contrast, gas is prematurely presumed unable to achieve a higher than 'transitional' classification, even with current and future mitigation technologies. This inconsistency disadvantages gas and undermines the Taxonomy's credibility and its commitment to technology neutrality.

**The Taxonomy should avoid unnecessary confusion by aligning with international standards more closely and avoiding arbitrary settings** | The Taxonomy's stringent emissions thresholds natural gas to qualify as 'transitional' – 100 gCO<sub>2</sub>/kWh on a lifecycle basis – is three times stricter than international benchmarks like the EU's taxonomy. The EU taxonomy applies a threshold of 270 gCO<sub>2</sub>/kWh for Scope 1 emissions to qualify as 'transitional', and 100 gCO<sub>2</sub>/kWh on a lifecycle basis to be considered 'environmentally sustainable'. The material difference in the stringency level between what is proposed in ASFI's Taxonomy compared to international standards will discourage investments in gas assets and infrastructure considered to be critical to replacing higher-emission coal assets. In turn the currently proposed classification will serve to delay emissions reductions through the transition.

The Taxonomy's arbitrary 15 per cent cap on non-renewable backup generation, serves only to prolong higher emitting assets by discouraging investments in gas infrastructure that could otherwise replace higher emission generation, including coal and diesel power.

**The Taxonomy disregards key emerging technologies, such as CCUS** | The Taxonomy ignores critical future technological advancements including in CCUS, CCUS-based low-carbon hydrogen production,

and methane leakage detection, repair and management technologies. These innovations are internationally recognised as essential for decarbonising hard-to-abate sectors.

The IEA states that reaching net zero will be “virtually impossible” without CCUS.<sup>7</sup> CCUS plays a unique role among a portfolio of emissions reduction technologies as it can address emissions from existing facilities, mitigate emissions from hard-to-abate industry and underpin large-scale carbon removal. Natural gas combined with CCUS is also currently by far the most affordable pathway to low-carbon hydrogen production.

**The Taxonomy ignores the role of gas in enabling grid stability** | The Taxonomy makes no provision for gas’s role in ensuring grid stability, and in particular the ancillary services it provides including voltage and frequency regulation and spinning reserves given its ability to start up and ramp quickly, which are critical for managing the intermittency of renewables.

**The role of the Taxonomy should be re-considered in the context existing and new compliance mechanisms** | A Taxonomy could duplicate existing frameworks like the mandatory climate-related financial disclosures, the SGM, ACCU scheme, and National Greenhouse and Energy Reporting (NGER) scheme, creating unnecessary costs and confusion and adding regulatory inefficiency without clear benefits.

## Recommendations

To address these weaknesses, the Taxonomy must adopt a more balanced and inclusive approach by:

**Providing a more relevant and higher classification for gas** | The Taxonomy should introduce a more nuanced classification system that recognises gas’ role as an enabler for the transition and as being capable of achieving world’s best practice emissions outcomes, as recently demonstrated in the SGM reforms. The taxonomy should provide for an ‘environmentally sustainable’ class based on lifecycle emissions thresholds. This alignment with international best practices, such as the EU taxonomy, would enhance its credibility and foster the necessary innovation to underpin the transition.

**Adopting a more dynamic approach to Technology Readiness Levels (TRLs)** | The current reliance on static TRLs limits the Taxonomy’s ability to accommodate emerging innovations and evolving technologies that are critical to achieving net zero emissions. To improve the Taxonomy’s functionality and relevance, a more nuanced and adaptive approach to TRLs is necessary, including as they apply to CCUS, low-carbon hydrogen, and methane emissions reductions.

**Adopt more forward-looking indices to better represent sustainable investments** | Reporting the percent of capital and operational expenditure revenue that is taxonomy-aligned is oversimplifying and/or misrepresenting a company’s overall contribution to sustainability and can only represent a snapshot in time. The Taxonomy should adopt indices that better suit activities in the early stages of transitioning toward sustainability (RD&D) by adapting to evolving regulations and policy objectives

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<sup>7</sup> IEA, *The Role of Gas in Today’s Energy Transitions*, 2019

rather than acting voluntarily on hypothetical scenarios that potentially misrepresent Australia's energy and economic futures.

**The Taxonomy should include clear caveats on its applicability and limitations** | This includes its non-binding nature and its role as an informative tool rather than guidance that is to be prescriptively applied for regulatory purposes or financial decisions. The use of the taxonomy needs to avoid locking in capital flows to activities that are not in Australia's national interest as it transitions to net zero. It must also avoid distorting market decisions and creating investment inefficiencies, or hindering necessary future innovations which all serve to undermine and delay Australia's progress in achieving net zero.

**Encouraging a more inclusive stakeholder engagement process** | As part of the second round of consultation, ASFI undertook targeted engagements with peak associations, which was an improvement to the first consultation process. These engagements however remained high-level, were time limited and did not fully allow for two-way dialogue or open feedback regarding the underlying principles (e.g. categorisation of business activities) of the proposed taxonomy, nor its limitations and possible implications. A consultation process that actively engages with industry, solicits their expertise, and incorporates their input is requested. Such an approach will help refine the Taxonomy and ensure it aligns with current government policy settings and adheres to the principle of technology neutrality while adopting proven and practicable engineering standards.