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Bioenergy Australia Submission **Reliability and supply adequacy framework for the east coast gas market**

Bioenergy Australia established Australia's Renewable Gas Alliance (RGA) to accelerate decarbonisation of Australia's gas network through increased deployment of biomethane. The RGA has over 80 member organisations, including gas pipeline owners, gas retailers, project developers, technology providers, off takers, research organizations, and state and local government representatives. This submission is on behalf of the RGA and will be supported by individual member submissions relating to their specific expertise.

Australia's Bioenergy Roadmap (ARENA, November 2021) outlines how, by the start of the next decade, Australia's bioenergy sector could contribute to around \$10 billion in extra GDP per annum and 26,200 new jobs (predominately regional), reduce emissions by about 9 per cent, divert an extra 6 per cent of waste from landfill, and enhance fuel security. Now is the time to capitalise on these opportunities by implementing a framework that supports the market development and investment for **renewable gas (biomethane)** under the Reliability and Supply Adequacy Framework for the east coast gas market.

Bioenergy Australia thanks the Department of Climate Change, Energy, the Environment and Water for the opportunity to provide feedback. We understand the Department's objective is to create a consistent system that offers the market greater visibility as a means to facilitate investment. However, we want to ensure this framework does not consequently hinder the early-stage development and investment of Australia's biomethane industry – an industry that offers critical security, reliability and decarbonisation opportunities.

We urge the Department to consider the biomethane opportunities when developing this framework.

The biomethane opportunities

Biomethane has been identified as an essential player in the decarbonisation transition and can enable gas users to quickly and cost-effectively achieve net zero emissions now, while also scaling to play a significant role in decarbonising the gas supply system over the next decade and beyond.

Biomethane is one of the most viable decarbonisation options in Australia as it is immediately deployable using existing infrastructure. Biomethane can be used on-site, injected into the existing local distribution network and could be readily used to improve domestic supply whilst providing net zero carbon energy for gas consumers, hard to decarbonise industrial processes, heavy transport, and gas peaking stations for dispatchable renewable electricity.

Biomethane can also be produced now for less than the long-term renewable hydrogen target price, is completely interchangeable with natural gas, using the same infrastructure, and can be scaled quickly to account for 23 per cent of the total pipeline gas market by 2030. It is game-changing in its application: clean, cheap, proven, and importantly, ready for immediate use.

The technology to upgrade to biomethane and inject it into the grid has been successfully installed in over 750 locations throughout the world and Australia has the technical capability to use this

technology, interface it, install and operate it. This capacity is currently being demonstrated by **Jemena's Malabar Biomethane Injection Plant**, which is the first project in Australia to produce biomethane and inject it into a gas network. Jemena has identified approximately 30PJ's of biomethane available near its NSW gas distribution network, being enough biomethane to meet the needs of its 1.5 million residential customers - indicating the immediate potential of biomethane development. Further, **Origin Energy** has signed an agreement for biomethane supply from Jemena, which will see Origin become the first company to supply Australian customers with renewable gas.

Further, for Australian manufacturing industries where gas will remain an integral part of the energy mix, biomethane looms as the only genuine short-to-medium term solution for not only emissions reduction but reducing energy costs overall. Australian manufacturers and industrial companies cannot electrify the heating, refining and reforming processes required in their operations. Significant gas users such as Brickworks, Pepsico and Interface have all publicly expressed a keenness to be prolific biomethane customers.

These commitments indicate that large industry players are ready to take on the biomethane opportunity but need supportive policy frameworks in place in order to accelerate development and investment.

Biomethane should be considered an opportunity for increasing domestic gas supply and enhancing our domestic gas production and security.

Biomethane can strongly contribute to our energy security as it can create dispatchable energy to compensate for low energy production during wind and solar droughts. It can use existing gas networks and gas power generation to store and produce this dispatchable electricity.

Biomethane can also displace natural gas and run the peaking gas power stations to cover off deep storage needs. A notable issue with renewable electricity generation is the enormous overbuild of transmission and renewable generation that is required to meet the peak demand. Yet, as little as 20PJ/year of biomethane could fix this issue – and avoid a significant investment impost on the community. Thus, renewable gas is required, both now and well into the future.

In addition, to being a solution to the energy and emissions equation confronting governments and industry alike, biomethane is an economy-builder, a jobs-creator and a valuable tool to build Australia's sovereign capability.

Recommendations

Noting the immense benefits biomethane offers, we strongly urge the Department to create a framework that:

- **Prioritises the significant decarbonisation potential of biomethane while noting it can increase our domestic gas supply, production and security.**
- **Does not impede the deployment and scaling-up of biomethane, particularly during the early stages of development where government and industry support is vital to overcome barriers and stimulate growth.**
- **Acts as a clear market signal that builds industry confidence and supports future investment into biomethane – essentially switching on the green light for Australia to take on the biomethane opportunity.**

The industry's appetite to take on the immediate opportunities presented by biomethane is clear, particularly in hard-to-abate sectors where there are no genuine alternative answers.

Biomethane will lead to an increase in renewable gas supply, provide an improvement in domestic energy security (especially in regional Australia) and enhance our energy system's reliability, resilience and flexibility, whilst significantly reducing emission.

However, industry cannot tackle this task alone. It is imperative that governments create policy frameworks that encourages investment, innovation and deployment, so that these opportunities can be fully realised, just as they are being realised in Europe and North America. Given our vast agricultural might, our refining capabilities and our renowned ingenuity, Australia has the opportunity to be a leading player in the renewable gas industry globally.

We urge the Department to consider these opportunities when finalising the Reliability and Supply Adequacy Framework for the east coast gas market.

Thank you for the opportunity to provide this submission. Please send any comments or queries to myself at shahana@bioenergaustralia.org.au or 0439 555 764.

Sincerely,

A handwritten signature in black ink, appearing to read 'Shahana McKenzie', written in a cursive style.

Shahana McKenzie
CEO Bioenergy Australia