

## **Bioenergy Australia Submission – Jemena Gas Networks (NSW) Access Arrangement 2025-30**

Bioenergy Australia (BA) is the national industry association committed to accelerating Australia’s bio economy. Our mission is to foster the bioenergy sector to generate jobs, secure investment, maximise the value of local resources, minimise waste and environmental impact, and develop and promote national bioenergy expertise into international markets.

*This submission from Bioenergy Australia is on behalf of the Renewable Gas Alliance (RGA). This alliance was founded to accelerate the development and deployment of Biomethane in Australia. The RGA represents members who are active across the entire renewable gas supply chain, from project investors, developers and technology providers all the way through to large industrial customers who will be the beneficiaries of renewable gases. This submission is a collective response and does not represent the views of any specific member.*

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 prioritising the development of biomethane.

Bioenergy Australia thanks the Australian Energy Regulator (AER) for the opportunity to provide a submission on the AER’s draft decision on Jemena Gas Networks (JGN) Access Arrangement 2025-30. We support JGN’s initial and revised proposals to connect eight renewable gas projects into their network by 2030 helping to support 6.7 PJ of renewable gas development. Bioenergy Australia sees renewable gas capital investment as an important step in activating the biomethane market and the emissions reduction benefits afforded by this net zero natural gas substitute.

### **Governments are supportive of a renewable gas market**

Both Federal and State Governments in Australia have become more supportive of renewable gases, signalling now, not *if* there will be a biomethane market developed in Australia, but *when* and *how big* will this market be.

Demonstrated Government support for renewable gases includes:

- Future Gas Strategy – Federal
- Renewable Fuel Strategy – NSW
- Victoria’s Renewable Gas Directions Paper – VIC
- GreenPower Certification Scheme- Federal
- Guarantee of Origin Scheme – Federal

This support is likely driven by the role renewable gases can play in helping governments meet policy commitments and targets, including:

- Advancing the objectives of NSW's Net Zero Plan Stage 1: 2020-2030 by delivering immediate emissions reductions.
- Supports NSW's legislated target of 50% emissions reduction by 2030 and net zero by 2050
- Supporting improved waste management practices and energy recovery from waste, as outlined in the NSW Waste and Sustainable Materials Strategy 2041.
- Contributing to Australia's legislated 43% emissions reduction target under the Climate Change Act 2022.
- Reducing methane emissions, a key commitment for the Australian Government under the Global Methane Pledge.
- Enabling circular economy outcomes through waste-to-energy conversion, aligning with National Waste Policy objectives.

Project producers, who form a large part of Bioenergy Australia's Renewable Gas Alliance, have expressed that with added regulatory certainty, such as funding through the JGN Access arrangement 2025-30, the biomethane industry can develop in Australia at pace.

This regulatory certainty and lower connection costs will signal that there will be an achievable path for renewable gases to flow into the market and help to derisk the investment capital required in this nascent industry.

### **Biomethane societal benefits**

The AER, in approving JGN's renewable gas connection capital, is enabling far more significant societal benefits than simply the emissions reduction that the projects are forecast to achieve. These benefits are extensive and important for the continued economic growth and industry stability in Australia. These benefits include:

- **Attracting Investment:** A local biomethane industry can attract significant international and local investments for project development, leading to increased economic growth, job creation, enhanced local production, and innovation in both regional and city areas.
- **Gas Security:** A local biomethane industry would reduce Australia's reliance on natural gas imports, strengthening national gas security, diversifying the domestic gas mix, and reducing supply chain vulnerabilities while reducing costs to energy consumers.
- **Feedstock Industry Opportunities:** A domestic biomethane industry can capitalise on Australia's abundant feedstock resources. Biomethane can be produced from a variety of local feedstocks, including lignocellulosic materials (e.g., straw, hay, silage residues, cotton trash, sugarcane bagasse, forestry residues, MSW, grasses, woody biomass, and algae). There is significant local feedstock potential with the **Australia's Bioenergy Roadmap** highlighting that the theoretical potential for bioenergy production in Australia is 2611PJ/annum including up to 553 PJ from NSW alone.

Capitalising on local feedstock opportunity will also create additional income streams for local farmers and feedstock providers while supporting regional communities and driving economic growth.

- **Economic Growth:** Capitalising on Australia's bioenergy potential to produce renewable gases and fuels could add up to \$10 billion in GDP annually over the next decade, along with creating 26,200 new jobs, predominantly in regional areas and emissions abatement of 9% on 2019 national emissions (Australia's Bioenergy Roadmap, November 2021).
- **Job Opportunities:** The biomethane industry has the potential to generate substantial employment opportunities, particularly in regional Australia. It will not only create new skills, training, and employment opportunities but can leverage existing skills enabling legacy energy workers to transition to cleaner energy sources. According to the 2023 Jobs and Skills Australia Report, existing workers in petroleum refining (around 1,500 in 2021) could easily transition to Low Carbon Fuel jobs, including at the same worksites.

Bioenergy Australia supports the renewable gas capital expenditure proposed by JGN as without this regulatory certainty, these benefits are at risk of not being realised.

### **Beneficiaries of renewable gas connections**

Bioenergy Australia notes that in the draft decision the AER stated that it was not clear which cohorts of customers were best served by Jemena Gas Networks renewable gas connections. The Renewable Gas Alliance membership includes representatives from across the supply chain including major manufacturers who have expressed significant interest in biomethane procurement.

For example, as part of Bioenergy Australia's Renewable Gas Challenge, we received support from approximately 50 organisations, including **15 of Australia's major manufacturers**, who called on Minister for Climate Change and Energy, Chris Bowen, to support national certification of biomethane to enable gas users to count biomethane towards their emissions reduction targets. These gas-reliant businesses have demonstrated that there is a strong demand for biomethane, recognising it as the decarbonisation solution where gas remains essential, and no alternative pathways are feasible or available.

Renewable gas such as biomethane provides a decarbonisation pathway for hard-to-abate sectors of the economy who will remain reliant on gas for the foreseeable future and require significant emissions abatement. These include those that utilise natural gas for feedstock and high heat that have no other identified emissions reduction pathway other than by renewable gases. This include companies, such as BlueScope and Orica, who are covered under the Safeguard Mechanism and are required to reduce emissions by 4.9% annually. Other significant gas users include Pepsico and AJ Bush & Sons, who have expressed an interest in biomethane to decarbonise their operations are food and beverage manufacturers.

There is no immediate replacement for gas in the heating, refining and reforming processes required throughout our members manufacturing and industrial base. Where electrification across their businesses can be effectively and economically deployed, it will be. But gas will still be required for the

heavy lifting of their operations. A transition to renewable gas such as biomethane, will provide our members with both a means to decarbonise and an answer to the challenge of tightening energy supply.

Despite the prevalence of renewable gas across Europe and North America, where thriving biomethane and biogas markets are changing the face of energy and abatement, renewable gas remains at arm's length from Australian industry and gas users.

The demand for renewable gases is only increasing as business large and small are setting ambitious emissions reduction targets. The AER's acceptance of JGN proposal to connect 6.7PJ of renewable gas projects to the network by 2030 is an important market signal, that the decarbonisation of the gas network is underway and that an innovative migration to a bright future is underway in Australian manufacturing.

### **Biomethane supply**

The Renewable Gas Alliance includes many international and local biomethane project producers, investors and technology providers. These members have expressed to Bioenergy Australia that with regulatory support that aligns with the current evolving policy landscape in Australia, they see the potential for the Australian biomethane industry to flourish.

Bioenergy Australia notes the AER's concerns around project producers being required to invest significant capital and operating expenditure to allow the projects to proceed, and the perceived risks associated with this on gas network customers. Bioenergy Australia closely engages with many of these project producers and notes that they are ready to commercialise the Australian market. Our membership is currently looking at projects that include:

- Multiple wastewater treatment facilities exploring biomethane production.
- Landfills that have significant existing biogas generation that could be diverted from inefficient electricity generation to biomethane production.
- Large and small-scale agricultural projects in planning and development stages.
- Industrial and commercial food waste processing facilities investigating anaerobic digestion and biogas upgrading to biomethane.


In our experience there is a significant development pipeline beyond the eight renewable gas projects proposed in the submission. There is a market ready to evolve with the right regulatory signals and support and demonstrates that the perceived risks of the projects not proceeding is overstated.

Investment groups have indicated that with increased regulatory certainty, capital borrowing rate afforded to renewable gas project producers could decrease as this decision could expand the large customer offtake market and create an affordable path to connect into gas networks decoupling the need for projects to be co-located with offtake supply.

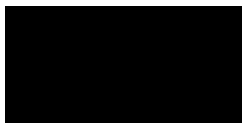
The technology, production and market readiness of renewable gas are long-proven, a fact demonstrated by our international counterparts who have been reaping the significant benefits from renewable gas adoption for many years. The European experience highlights the importance of connection cost support for market development, with successful markets such as Germany, Denmark, and France incorporating mechanisms to support these costs. This support has enabled the rapid scaling of the industry, with over 1,500 biomethane facilities now connected across Europe.<sup>1</sup>

Our domestic industry has the technical capabilities to adopt renewable gas technology, a robust feedstock supply for industry growth and significant demand from gas users across the industrial, manufacturing and hospitality spaces who are ready to act. With the right support in place, there is no reason why our domestic industry cannot also establish a strong, thriving sector.

We strongly encourage the Australian Energy Regulator to embrace the need for innovation and demonstrate leadership in supporting the development of an Australian Renewable Gas Industry by approving the renewable gas capital expenditure and give the renewable gas market the investment certainty it requires to rapidly expand in Australia.

Thank you for taking the time to consider our submission. Any questions or request for further assistance are welcome and can be directed to 

Sincerely,



Shahana McKenzie  
CEO Bioenergy Australia

---

<sup>1</sup> <https://bioenergyinternational.com/2024-european-biomethane-map-shows->