The National GreenPower Accreditation Program's submission to the Australian Energy Regulator's Draft decision on Jemena Gas Network's (NSW) access arrangement 2025 to 2030

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The National GreenPower Accreditation Program (GreenPower) welcomes the opportunity to comment on the Australian Energy Regulator's (AER) Draft decision on Jemena Gas Network's (JGN) NSW access arrangement for 2025 to 2030.

The advice presented in this submission are only representative of the National GreenPower Accreditation Program as it relates to our mission and aims. They **are not** to be interpreted as positions of state and territory governments.

GreenPower's Mission

- Help energy users access government-accredited, Australian-made renewable electricity and renewable fuels to reduce emissions.
- providing credible fuel production and retailer accreditation processes,
- enabling voluntary renewable fuel industry markets through robust certifications, and
- supporting emissions reductions with a primacy of hard-to-abate industrial, commercial and transport sectors.

Further information about GreenPower and its mission can be found on the final page of this submission.

GreenPower's impact

Since 2005, GreenPower has made a significant contribution to the Australian renewable energy industry including:

- Around $1 billion investment to the renewable electricity sector.
- Supporting voluntary action to reduce Australia's electricity emissions by almost 20 million tonnes CO_2-e.
- Providing energy consumers with a robust and easy mechanism for renewable energy purchasing.
- Launching Australia's first renewable gas certification scheme.

KEY POINTS

Biomethane production in NSW is poised for significant growth, with several projects underway aiming to harness organic waste for low-emission renewable energy. Collectively, these initiatives have the potential to produce substantial quantities of biomethane annually, contributing to the state's energy needs and environmental goals.

GreenPower is very supportive of measures that will facilitate the development of the renewable gas industry. This includes connecting biomethane projects to the gas pipeline network to support supply to commercial and industrial customers.

It is noted in the AER's draft decision document that there are concerns with AGN's proposed capex for renewable gas connections. Some of these concerns are centred around

i) whether there is sufficient demand for renewable gas from hard-to-electrify industry,
ii) if there is a demand for biomethane production by-products such as digestate and biogenic CO_2, and
iii) if biomethane projects will provide an overall net-benefit.

GreenPower has gained industry insights on these matters collected from extensive stakeholder engagements over the past four years, and more intensively over the past 12 months. Stakeholders include renewable gas developers, energy retailers, large gas users from hard-to-electrify industries, members of the agriculture industry, as well as the Commonwealth and state governments. The following factors, amongst others, will play an important role in supporting the development of the biomethane projects that JGN is working toward connecting to the gas network.

- **GreenPower's Renewable Gas Guarantee of Origin certificates (RGGOs) are only available to commercial gas users, specifically targeting hard-to-electrify industries such as heavy industry, chemicals, and manufacturing**. The certificates are not able to be sold to residential customers. This is to ensure the limited available volume of renewable gas, and its environmental credentials underwritten through the RGGOs, is directed where it will have the most impact. This approach also supports the transition and acceleration to clean more affordable renewable electricity for residential users.

- **There is a strong demand for low-emission renewable gas from commercial gas users.** Particularly from the hard-to-electrify industries that have medium to high-heat processes, that need a chemical feedstock, and that either can't or it's not immediately viable to decarbonise through electrification. These industries will require gas for the foreseeable future. In addition, due to carbon accounting reporting requirements, the need to decarbonise fossil gas use is becoming increasingly critical for these businesses.
- **There is a strong demand from farmers and landowners for locally sourced organic fertiliser.** Digestate is a nutrient-rich by-product of the anaerobic digestion process created in biogas production. It contains organic matter and a variety of essential nutrients, such as nitrogen, phosphorus, and potassium, making it an excellent fertiliser for agricultural use. By incorporating renewable biogenic digestate into agricultural practices rather than chemical fertilisers, farmers can enhance long-term soil fertility, increase cropping yields, promote sustainable farming, support the local economy and contribute to waste management.
- **There is an increasing demand for biogenic CO_2 as industry's transition to sustainable practices, driven by climate goals and innovation in carbon use technologies.** Unlike fossil-based CO_2, biogenic CO_2 is considered more sustainable due to its carbon-neutral production. Biogenic CO_2 supports the reduction of greenhouse gas emissions due to its renewable production, rather than fossil fuel based CO_2. Biogenic CO_2 is becoming increasingly preferred by various industries due to:
    - Carbon neutrality: Unlike fossil-based CO_2, biogenic CO_2 does not add new carbon to the atmosphere.
    - Regulatory incentives: Policies supporting decarbonisation and circular economy practices favour the use of biogenic CO_2.
    - Consumer demand: Growing preference from customers for low-carbon and environmentally friendly products.

  The key industries where current and future demand comes from are the food and beverage industries, food production greenhouses and agriculture, chemical and materials,

low carbon building and construction (example concrete manufacturing), and the nascent renewable fuels industry (Power-to-X e-fuel production technology).

- **Biomethane projects have a long history of demonstrating net environmental and economic benefits internationally and now here in Australia.** The biomethane industries in the UK, the European Union and the US are highly developed thanks to supportive government mechanisms stretching back two decades. This has resulted in achieving significant environmental benefits in the form of emissions reduction from fossil gas production and use, avoided methane emissions from waste diversion in agriculture, landfills, and wastewater, and reduced chemical fertiliser use.

  In Australia, biomethane projects must obtain accreditation from GreenPower to generate and sell Renewable Gas Guarantee of Origin certificates (RGGOs), enabling them to capture the green premium for their biomethane. Due to a variety of factors such as feedstocks type and the production technology and pathway, each biomethane project has unique emissions intensity profiles. The GreenPower Renewable Gas Certification is the gold standard of renewable gas certifications due to its strict environmental and social eligibility criteria. These standards ensure the gas is low-emission, all inputs to the production process are renewable, and there are circular economy benefits and net-social benefits.

  Jemena's Malabar Biomethane Injection Project is the first project to be accredited under the GreenPower Renewable Gas Certification. Biomethane from this project has a 90% reduction in greenhouse gases compared to fossil gas based on a full lifecycle basis. This demonstrates a key environmental benefit of biomethane and what can be achieved through the development of the industry at scale in Australia.

About the National GreenPower Accreditation Program

Established in 1997, the GreenPower Program enables business and household customers to match their electricity use with accredited GreenPower renewable electricity, which is added to the grid on their behalf. The program is managed by the NSW Government on behalf of states and territories through the National GreenPower Steering Group.

The GreenPower Program aims to:

- Support the reduction of greenhouse gas emissions from energy use.
- Facilitate the installation of new renewable energy capacity across Australia beyond mandatory requirements.
- Encourage growth in consumer demand for renewable energy.
- Provide consumer choice for, and increase confidence in, credible renewable energy products.
- Increase consumer awareness of renewable energy and greenhouse issues.

The GreenPower Program has significantly contributed to the Australian renewable energy industry including over 250,000 customers choosing to purchase GreenPower products in 2022, and around $1 billion having been invested back into the renewable energy sector since 2005.

In 2023, the GreenPower Program launched the Renewable Gas Certification. This new certification, establishing Renewable Gas Guarantee of Origin (RGGO) certificates in financial markets, allows commercial and industrial fossil gas users to directly support renewable gas projects by purchasing RGGO certificates to match their network fossil gas with renewable gas.

The GreenPower Program ensures that RGGO certificates are generated from low-emission renewable gas displacing fossil gas in Australia. Jemena's NSW Malabar Biomethane Injection Plant, producing and injecting low emission biomethane into the Sydney gas network, was the first project to be accredited under the Certification in December 2023.

The GreenPower Program is currently exploring other renewable fuel types, including low carbon liquid fuels, to expand sustainable renewable fuel alternatives supporting the national energy transition away from fossil fuels.

For more information:

visit www.greenpower.gov.au or email greenpower.admin@planning.nsw.gov.au