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Bioenergy Australia Submission: Amendments to Victorian Declared Wholesale Gas Market and Retail Market consultation

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 is on behalf of the Renewable Gas Alliance (RGA), an alliance founded to accelerate the decarbonisation of Australia's gas network through increased deployment of biomethane. The RGA has over 100 member organisations, including gas pipeline owners, gas retailers, project developers, technology providers, off takers, research organisations, 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 ensuring our frameworks support the market development and investment for biomethane.

Bioenergy Australia thanks the AEMO for the opportunity to provide feedback on the Amendments to Victorian Declared Wholesale Gas Market and Retail Market consultation. We want to ensure that as policy develops within the gas space, it does not consequently hinder the early-stage development and investment of Victoria's biomethane industry – an industry that offers critical security, reliability and decarbonisation opportunities.

We urge the AEMO to consider the biomethane opportunity when developing these amendments.

Biomethane emerges as one of the most viable decarbonisation options due to being immediately deployable using existing infrastructure and appliances, thus reducing the total cost of delivery. Using Australia's existing natural gas network comprising ~45,000km of pipelines, more than 150 PJ of biomethane could be stored at any given time, being equivalent to ~50x Snowy Hydro 2.0s, at a fraction of the cost. Biomethane can be produced at a lower cost than the long-term renewable hydrogen target price and is entirely interchangeable with natural gas.

Given the right policy measures, biomethane can also be utilised on-site, injected into existing local distribution or transmission networks, and rapidly scaled to account for 23 percent of the total pipeline gas market by 2030. This growth is further facilitated by the abundant availability of feedstock in Victoria, with Australia's Bioenergy Roadmap 2021 indicating that Victoria has a theoretical resource potential of up to 371PJ.

Biomethane provides net-zero carbon energy for gas consumers and aids in decarbonising hard-to-abate industrial processes. 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. Many Australian manufacturers and industrial companies simply cannot electrify the heating, refining and reforming processes required in their operations. For these hard to abate sectors that cannot fully transition to electrification, biomethane presents as the only viable decarbonisation solution.

Biomethane provides a cost-competitive means of supplying existing customers with a 'drop-in' decarbonisation solution and by utilising established pipeline infrastructure, it ensures security and reliability through multiple supply points.

Biomethane is game-changing in its application: clean, cheap, proven, and importantly, ready for immediate use and typically capable of delivering emissions reductions of 90%+ over BAU.

Recommendations:

We are concerned that the way contaminants and impurities are being addressed may not adapt well to modern standards for biomethane. We make the following comments:

Wholesale Market Gas Quality Monitoring Procedures (Victoria)		
Procedure Cause #	Issue/Comment	AEMO Response
2.4.4	<p>We note that Standards Australia is currently seeking to update AS4564: General-purpose Natural Gas Specifications. We have sought that the specification be amended to better support biomethane injection. Amendments we recommended include:</p> <ul style="list-style-type: none"> - inclusion of a definition of biomethane; - increased limitation of oxygen, nitrogen and inert limits; - introduction of a siloxane limit that aligns with international standards; and - introduction of a risk-based approach tailored to the biogas production source. <p>These amendments are aligned with well-researched international standards and would reduce implementation and operational costs, and improve upgrading conversion efficiency, facilitating biomethane injection and ultimately supporting the decarbonisation of the Australian gas industry.</p> <p>You can read our full submission to the Standards Australia AS4564 consultation here</p> <p>We recommend that this section ensures compliance with any subsequent revision of AS4564.</p>	
2.4.4	<p>We recommend using updated resources that have been developed with an evidence-based approach after the formation of EN 16723. We note that while EN 16723 is an appropriate starting point, this standard is currently seeking an update.</p> <p>Contaminants depend on the source of biogas, with many coming from landfills and wastewater treatment plants. Some testing regimes for these contaminants may not be online or in Australia, making compliance with interval sampling difficult. When setting limits, AEMO should be cautious and consider the wide variations in acceptable concentration limits, as well as the appropriate dilution of biomethane into the existing natural gas flow. This caution is necessary as there is significant range of acceptable concentration</p>	

	levels for these contaminants, which may vary depending on different factors.	
2.4.4 "and its compounds"	The reference to "and its compounds" in relation to various elements lacks clarity and definition. Some of these elements are associated with a wide range of different compounds, which could significantly increase the cost of analysis.	
2.5.4	It is unclear whether site specific low and high limits and "Confirm, Notify, Mitigate and Curtail" limits would be provided for biomethane. We seek further clarification.	

It is key that Victoria enacts supportive policy and standards that act as a market signal for biomethane project development, providing clarity and assurance to investors and developers seeking to engage in the state's growing clean energy sector. Establishing a stable and supportive framework will not only reinforce Victoria's dedication to achieving its emission reduction goals but also foster an environment conducive to regional development, job creation, and enhanced local energy security and reliability.

The industry's appetite to take on the immediate opportunities presented by biomethane is clear. However, industry cannot tackle this task alone. It is imperative that we create standards that support biomethane injection and encourage investment, innovation and deployment, so that these opportunities can be fully realised, just as they are being realised in the EU and US. Given Victoria's agricultural might, refining capabilities and renowned ingenuity, Victoria has the opportunity to be a leading player in the biomethane space.

We strongly encourage AEMO to implement amendments that support biomethane injection.

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

Sincerely,



Shahana McKenzie
CEO Bioenergy Australia