

From Poo to You with Safe Biomethane

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2:00pm (NZST) | 10:00am (AWST)
11.30am (ACST) | 12noon (AEST)

Biogas is a versatile renewable fuel that when upgraded to biomethane can be injected directly into the existing gas infrastructure. This makes it attractive globally as a quicker waste to energy solution necessary to meet the energy transition net zero targets. Studies have indicated there is the potential to replace nearly 20% of New Zealand's total gas usage with renewable gas by 2050.

Biogas is produced from a process known as anaerobic digestion where methane and other gases are produced by bacteria eating organic waste in an oxygen-free environment. Sources of organic matter range from animal manure, municipal waste, and food waste through to processed wastewater and sewage sludge. The final composition varies depending on the organic matter, selected bacteria, and processing conditions but is largely methane, carbon dioxide and water vapour with relatively small amounts of other components. However, small amounts of H₂S can create significant safety hazards from both a toxicity and corrosion level. The hazards are not so well understood outside of the hydrocarbon sector in traditionally "safe" industries such as wastewater treatment.

The focus of this webinar will be to:

- Raise awareness of the safety issues associated with H₂S – if you can no longer smell anything are you safe?
- Use the case study of the Jemena's Malabar Biomethane Injection plant to demonstrate what good practice is in relation to the introduction of managing gas containing H₂S.

The Malabar Biomethane Injection plant is a joint initiative between Sydney Water and Jemena supported by ARENA funding. It is the first of its kind in Australia. Use the following links for more information on the project:

- [Malabar Biomethane Injection Project](#)
- [From Poo to You: Biomethane Plant Opens.](#)



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Andrea Hosey is the Managing Consultant for Chemicals and Fuels for Advisian. She is a Chartered Engineer and Fellow of the IChemE with over 35 years' experience in technical leadership, business development and project delivery success in the energy and chemical sector.

She has a strong safety in design background built from experience in water treatment, oil and gas, energy and the chemical sectors.

Ruslan Davletgareev has accumulated over 10 years of experience working across the energy value chain, including technical roles in Oil and Gas Production (Exxon Mobil), the Pipeline Industry (Jemena), and Engineering Consulting. He recently completed his tenure as an Integration Manager for the Malabar Biomethane Injection Project, where he oversaw the integration of various project systems into the BAU, including the incorporation of Process Safety into Operation.



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Sheila Wujanto-Hawe is Process Safety Engineer in Jemena. She is responsible for driving the implementation of the Process Safety Framework and providing technical and hands-on support to deliver optimal process safety solutions across the Gas Markets business.

[Click here to register for the webinar](#)

Continuing Professional Development: The Bioenergy Association supports members by providing opportunities such as this webinar that contribute towards Continuing Professional Development and maintaining registration as a biogas adviser. Contact [the Executive Officer](#) for more details.

Attendance at this webinar is **FREE** courtesy of EECA

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