

BIOMETHANE



THE FACTS YOU NEED TO KNOW!

What is biomethane?

Biomethane is one type of renewable gas, with renewable hydrogen and biogas being other forms.

It is produced by refining biogas from organic waste, is a viable low-emissions replacement for natural gas that leverages existing gas infrastructure for rapid market deployment and decarbonisation.

From a molecular level there is no major difference between biomethane and natural gas. The latter is a fossil fuel stored underground for millions of years, extracted to burn to produce energy, which releases CO₂ into the atmosphere.

Biomethane, on the other hand, is a type of biogas produced from plant- and animal-based residuals. These residuals generate emissions through natural decomposition.

No new CO₂ is released into the atmosphere when biomethane is burnt to produce energy, which makes biomethane a carbon-neutral fuel.

KEY FACTS

Renewable gas is:

- Recognised under the National Gas Rules and Laws
- A certifiable product just like renewable electricity, meaning it can be procured by companies as a green credit in lieu of direct usage
- Biomethane is derived from mature technologies domestically and internationally
- Biomethane is a versatile, dispatchable energy carrier that can support grid stability while delivering long-term, economy-wide benefits beyond just renewable energy.

Where is the demand for renewable gas in Victoria?



Energy diversity and access to renewables are vital for resilient energy infrastructure and Victoria's economic growth.

While renewable electricity will play a critical role, renewable gases are the only viable pathway to decarbonise a range of industrial processes and provide energy diversity and security.

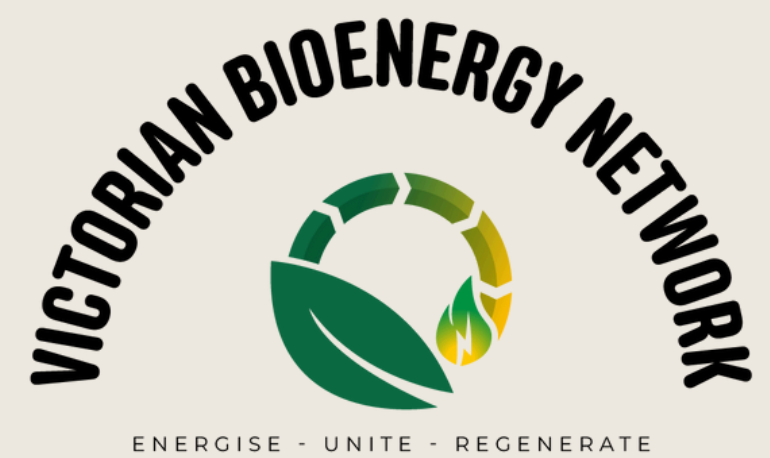
It's not only traditional heavy industry: brewers, food manufacturers, coffee roasters, commercial laundry services, brickmakers, panel beaters and many others depend on high-temperature processes that are not feasible or possible to electrify.

Many of these businesses are under pressure from international owners and investors to decarbonise rapidly and are seeking viable options or facing imminent decisions about their future operations

KEY FACTS

- A wide range of industries in Victoria need certainty on the availability of renewable gases. This is costing Victorian businesses today who need to make decisions now.
- The role of renewable gas is well recognised domestically and internationally, forecasts of energy use by Net Zero Australia, Shell, and the International Energy Agency all highlight roles for bioenergy and hydrogen.

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Victoria's biomethane potential

Biomethane presents a near-term opportunity to decarbonise Victoria's industrial sector while supporting economic growth and energy resilience:

- **Decarbonisation Now:** Biomethane can immediately reduce emissions in hard-to-electrify industries ensuring their long term viability.
- **Economic and Employment Advantages:** Access to renewable gas attracts investment, and positions Victoria as a first-mover. The industry can generate at least 1,700 direct jobs and significantly more indirect jobs boosting regional economies.
- **Energy Security:** Biomethane can supplement local gas supplies, addressing the forecast shortfall.
- **Circular Benefits:** Biomethane production creates valuable by-products, including nutrient-rich digestate for soil health and biogenic CO₂ for industrial applications, reducing fossil CO₂ reliance.

KEY FACTS



Blunomy estimates that with appropriate government policy support, nearly 63 petajoules (PJ) could be developed in Victoria.

This represents approximately

38%

of the total gas supplied through Victoria's distribution networks in 2024 (165 PJ)

It is more than sufficient to meet current industrial demand, which stands at 25PJ in 2024.



Victoria's bioenergy sector represents a

\$15-30

BILLION

investment opportunity by 2035

Low-cost, high-impact opportunity

To kickstart the biomethane sector, the Victorian government needs to set a clear path forward, unlocking a massive decarbonisation opportunity with minimal financial input. It can accelerate this opportunity by:

- **Sending Clear Signals:** Send a clear signal that renewable gas is a critical part of the energy transition, building investor confidence and setting a strategic direction. Introduce enforceable or aspirational renewable gas targets, like volume-based obligations for energy retailers or tradeable certificate schemes, to drive demand.
- **Utilise Existing Infrastructure:** Leverage Victoria's gas network to deliver biomethane, reducing energy costs, avoiding costly industry relocations, and preserving access for smaller manufacturers.
- **Modernise Regulation:** Update legislative frameworks including incentives for waste segregation and levies to discourage landfill. This maximises organic waste recovery.
- **Recognise and Reward:** Clearly define renewable gases in policy and develop market mechanisms similar to other renewables, like feed-in tariffs and guarantees of origin to close the gap.
- **Explore Targeted Capital Grants:** For behind-the-meter biogas projects targeted capital grants to stimulate the sector and to support regional communities.
- **Streamline Approvals:** Work with industry to develop supportive planning and approval processes that fast-track project development and reduce red tape