

National Greenhouse and Energy Reporting Scheme 2025 Amendments

Gas Energy Australia (GEA) represents Australia's liquid gas supply chains including Liquefied Petroleum Gas (LPG) and associated gases. Our members span production to retailing and everything in between. The LPG industry safely and securely supplies 43PJpa to industrial, commercial, residential, leisure and transport energy consumers nationally, including around 30% of regional households where electricity can be unreliable or unavailable¹.

GEA welcomes the opportunity to comment on the Federal Department of Climate Chante, Energy, the Environment, and Water (DCCEEW) National Greenhouse and Energy Reporting (NGER) Scheme 2025 Amendments Public Consultation.

LPG plays a vital role supplying energy to Australian industrial, commercial, residential, transport and recreational energy users today. Through the supply of drop-in renewable forms of LPG, energy consumers can continue to receive reliable, affordable energy via LPG while supporting emissions reduction targets².

General Feedback

Market-based methods will enable a step change in gas decarbonisation

GEA strongly supports the introduction of market-based emission reporting for Scope 1 emissions from biomethane and hydrogen as part of the NGER Scheme 2025 amendment. Allowing gas users to reduce emissions by demonstrating surrender of renewable gas certificates forms the link between renewable gas purchases and emissions reduction.

This change founds a new renewable energy market in Australia – an impact which all parties involved should be proud of. This market will incentivise the use of low-emission alternatives to natural gas, supporting Australia's broader decarbonization ambitions.

https://www.energy.gov.au/publications/australian-energy-update-2024

² Frontier Economics, 2023, *Pathways to Zero Emissions for LPG*, https://www.gasenergyaus.au/get/2016/pathway-zero-emissions-for-lpg-frontier.pdf

¹ DCCEEW, 2024, Australian Energy Update 2024,

Australian Bureau of Statistics, 2014, Environmental Issues: Energy Use and Conservation, https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4602.0.55.001Main+Features1Mar%202014 ?OpenDocument

LPG today, renewable forms of LPG tomorrow

Just like electricity and natural gas, LPG also has renewable alternatives. Drop-in BioLPG and Renewable LPG (rLPG) can be used with no changes in LPG supply, infrastructure or appliances. Dimethyl Ether (DME) can be blended into LPG for use with existing appliances and infrastructure or used in its pure form with minor changes to existing LPG or natural gas appliances and infrastructure.

For many, these options will have much lower upfront costs and lower lifecycle decarbonisation cost than electrification. This is especially true in regional Australia where electricity can be unreliable or unavailable, making electrification less practical.

A Market Based Method for LPG

A market-based method for renewable forms of LPG would similarly advance LPG decarbonisation. Establishing a certificate market where customers can surrender renewable forms of LPG certificates to reduce their reported emissions under NGER would incentivize transition to these alternatives. This would be especially valuable in regional Australia where electrification can often be impractical.

Supporting renewable forms of LPG through an NGER market-based method provides genuine decarbonisation options for regional industries, businesses and households dependent on LPG while also ensuring energy equity for regional communities. Introducing renewable forms of LPG into the Autogas supply chain could also support transport decarbonisation where battery electric vehicles are less feasible.

Recommendations:

GEA recommends that the 2026 NGER Amendments cycle introduce:

- Emissions factors for renewable forms of LPG within the NGER emissions reporting framework; and
- A Market-based method for renewable forms of LPG which reflects the approach taken under the market-based method for renewable gas.

Gas Energy Australia commits to connecting parties interested in a Market-based Method for LPG to the DCCEEW NGER team. We trust that demonstration of broad interest will assist in DCCEEW facilitation of a working group to develop and implement our recommendations.

To discuss any of the above feedback further, please contact me on +61 422 057 856 or via jmccollum@gasenergyaus.au.

Yours sincerely,

JORDAN MCCOLLUM Chief Executive Officer Gas Energy Australia

The Role of LPG in Australia's Energy Landscape

Liquefied Petroleum Gas (LPG) plays a vital role in Australia's energy security and net zero transition. As a versatile energy source with drop-in renewable alternatives, LPG provides essential energy services to millions of Australians, particularly in regional and remote areas where it serves approximately 30% of households³. The LPG industry safely and securely supplies 43 petajoules of energy annually across industrial, commercial, and residential applications nationwide⁴. A further 120 petajoules of LPG is exported annually, with the LPG sector as a whole contributing over \$5bn of GDP and 20,500 FTE to the Australian economy⁵.

LPG stands out as a cleaner alternative to many traditional fossil fuels, producing 14% fewer greenhouse gas emissions than diesel⁶. The industry is actively embracing Australia's transition to net zero through the pursuit of renewable forms of LPG⁷. These include bioLPG (a co-product of Sustainable Aviation Fuel) and renewable LPG (rLPG) produced from hydrogen. These alternatives reduce scope 1 emissions by 99% while utilizing existing infrastructure and appliances.

One of LPG's most significant advantages is its superior energy storage capability in cheap, transportable LPG tanks. This is key in regional areas where mains power may be unreliable or unavailable. A standard residential LPG tank installation provides energy storage equivalent to more than 42 Tesla Powerwall 3 home battery systems at around one-tenth the cost⁸. This storage capacity, combined with the portability of LPG tanks, makes it an invaluable resource for energy security and emergency resilience.

The LPG industry is uniquely positioned to support Australia's energy transition without requiring government funding or subsidies. As the nation moves toward net zero emissions, renewable forms of LPG complement renewable electricity, offering a practical decarbonisation pathway for applications where electrification may not be feasible or cost-effective. By recognizing and supporting the development of renewable forms of LPG, Australia can ensure a diverse and resilient energy mix that retains energy security while achieving its climate goals.

 ³ Australian Bureau of Statistics, 2014, *Environmental Issues: Energy Use and Conservation*, https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4602.0.55.001Main+Features1Mar%202014
⁴ Australian Federal Department of Climate Change, Energy, the Environment and Water, 2024, *Australian Energy Update 2024*, https://www.energy.gov.au/publications/australian-energy-

update-2024

 $^{^{\}scriptscriptstyle 5}$ ACIL Allen, 2022, Economic contribution of the Australian gas economy in 2020-21,

https://www.gasenergyaus.au/get/2123/economic-contribution-of-australian-gas-economy.pdf ⁶ Australian Federal Government, 2024, National Greenhouse and Energy Reporting (Measurement) Determination 2008, https://www.legislation.gov.au/F2008L02309/latest/text

⁷ Frontier Economics, 2023, *Pathways to Zero Emissions for LPG*,

https://www.gasenergyaus.au/get/2016/pathway-zero-emissions-for-lpg-frontier.pdf

⁸ Elgas, 2025, *LPG Gas Bottle Sizes*, <u>https://www.elgas.com.au/elgas-knowledge-hub/residential-</u>lpg/lpg-gas-bottle-sizes-gas-bottle-dimension-measurements/