18 July 2025

GEA Submission: Exposure Drafts of the Legislative Instruments (GO) scheme

Gas Energy Australia (GEA) represents Australia's liquid gas supply chains including Liquefied Petroleum Gas (LPG) and associated gases. Our members span from producers to retailers and everything in between. The LPG industry safely and securely supplies 43PJpa of energy to industrial, commercial and residential consumers nation-wide, including around 30% of regional households where electricity can be unreliable or unavailable[1].

GEA welcomes the opportunity to comment on the Department of Climate Change, Energy and Water (DCCEEW) Exposure Drafts of the legislative instruments that will support the GO scheme.

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 targets[2].

General Feedback

GEA commends DCCEEW on the release of the Exposure Drafts supporting the Future Made in Australia GO scheme. The proposed Rules, Methodology, and Charges instruments reflect a clear and well-integrated framework and the inclusion of early design thinking on energy storage systems is also welcomed.

The approach sets a strong foundation for a trusted and transparent certification scheme that can drive investment, support domestic and export opportunities, and help position Australia as a leader in low-emissions product supply. GEA supports the direction of the GO scheme and its alignment with national goals for clean energy and emissions transparency.

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[1] DCCEEW, 2024, *Australian Energy Update 2024*, https://www.energy.gov.au/publications/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

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

LPG today, renewable forms of LPG tomorrow

Just like electricity, natural gas, aviation fuel and diesel, LPG also has drop-in renewable alternatives. BioLPG and Renewable LPG (rLPG) can be used with no changes in LPG 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 LPG appliances and infrastructure.

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

GEA supports the intent of the Guarantee of Origin (GO) scheme and its potential to unlock market opportunities for verified clean fuels. BioLPG – produced as a co-product of renewable fuel pathways such as HEFA/HVO and Alcohol-to-Jet (AtJ) – could play a critical role in decarbonising energy to hard-to-electrify sectors and regional energy use.

Through the Go Scheme Low Carbon Liquid Fuel (LCLF) Methodologies consultation, GEA will advise DCCEEW on the value of including BioLPG recognition in PGO methodologies for HEFA/HVO processes. As BioLPG is a co-product of these processes, enabling BioLPG recognition in HEFA/HVO methodologies will require minimal additional effort while enabling an entirely new decarbonisation pathway for regional Australia.

Ensuring BioLPG is eligible for PGO certification will be essential to enabling the investment decisions required to see coproduction of BioLPG. Without recognition, it will be difficult to create a market for this critical renewable energy option for regional Australia. This in turn risk BioLPG being redirected to heat production within HEFA/HVO processes rather than being available to support regional decarbonisation.

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

Yours sincerely,

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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 households[3]. The LPG industry safely and securely supplies 43 petajoules of energy annually across industrial, commercial, and residential applications nationwide[4]. 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 economy[5].

LPG stands out as a cleaner alternative to many traditional fossil fuels, producing 14% fewer greenhouse gas emissions than diesel[6]. The industry is actively embracing Australia's transition to net zero through the pursuit of renewable forms of LPG[7]. 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 cost[8]. 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.

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[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

[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*, https://www.elgas.com.au/elgas-knowledge-hub/residential-lpg/lpg-gas-bottle-sizes-gas-bottle-dimension-measurements/