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NSW Climate Change Licensing Requirements

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 unavailable[1].

Gas Energy Australia (GEA) welcomes the opportunity to comment on the NSW Climate Change Licensing Requirements and associated consultation papers. We respond with particular regard to the implications for the LPG sector and the need for a technology-neutral, proportionate approach that recognises the role of Renewable Liquid Gases (rLG) in supporting NSW's decarbonisation objectives.

General Feedback

Technology-neutral approach

GEA urges the EPA to ensure the framework recognises all low-carbon fuels, not just electrification pathways. BioLPG and Renewable DME are credible, scalable Low Carbon Liquid Fuels (LCLFs) capable of achieving up to 90 per cent lifecycle emissions reduction using existing infrastructure. Their inclusion would ensure the framework remains technology-neutral and reflects the full suite of practical, deployable decarbonisation options available to NSW industry.

Energy resilience and regional outcomes

LPG already supports reliable, lower-emission energy supply across regional and off-grid NSW. Recognising rLGs within EPA guidance would enhance decarbonisation outcomes while maintaining rural energy security. rLG complements electrification by providing a dispatchable, transportable, and affordable energy source for communities and industries not able to fully transition to electricity.

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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

Alignment and consistency

Reporting and mitigation obligations should align with existing Commonwealth schemes including the National Greenhouse and Energy Reporting (NGER) framework, the Safeguard Mechanism, and the Guarantee of Origin (GoO) scheme to avoid duplication and ensure consistent recognition of renewable gases. The EPA should coordinate through the Energy and Climate Change Ministerial Council (ECMC) to maintain national consistency and avoid regulatory overlap.

Economic and Investment Certainty

A stable and consistent policy environment is necessary to maintain confidence and encourage investment in cleaner energy solutions. GEA encourages the EPA to align the Climate Change Licensing framework with national programs to provide clarity for industry and support long-term investment in renewable LPG and other low-emission technologies.

Recommendations:

GEA recommends that the EPA:

- Adopt a technology-neutral, outcome-based approach to emissions reduction which includes fuel switching to Low Carbon Liquid Fuels including rLG.
- Explicitly include rLG, including rLPG, BioLPG, rDME, in Climate Change Licensing and CCMAP frameworks.
- Ensure alignment with national schemes and maintain proportionate, practical requirements.
- Engage with GEA to integrate rLG pathways into future EPA sector guidance and decarbonisation policy.

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

LPG stands out as a cleaner alternative to many traditional fossil fuels, producing 14% fewer greenhouse gas emissions than diesel[5]. The industry is actively embracing Australia's transition to net zero through the pursuit of renewable forms of LPG[6]. 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[7]. 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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[2] 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

[3] 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

[4] 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

[5] Australian Federal Government, *2024, National Greenhouse and Energy Reporting (Measurement) Determination 2008*, https://www.legislation.gov.au/F2008L02309/latest/text

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

[7] Elgas, 2025, *LPG Gas Bottle Sizes*, https://www.elgas.com.au/elgas-knowledge-hub/residential-lpg/lpg-gas-bottle-sizes-gas-bottle-dimension-measurements/

Consultation Question 1

Source: Proposed Climate Change Licensee Requirements (EPA, July 2025)
"The EPA is seeking feedback on the proposed timeframes for the Annual Climate Change Emissions Report and Climate Change Mitigation and Adaptation Plans.
Are these timeframes suitable in light of NGERS and Safeguard Mechanism reporting obligations? Are there other factors the EPA should be aware of?"

GEA response
GEA supports aligning the EPA's reporting timeframes with existing Commonwealth programs such as the National Greenhouse and Energy Reporting (NGER) framework and the Safeguard Mechanism to ensure consistency and reduce duplication. A tiered or risk-based approach would ensure practical implementation for smaller operators. GEA also encourages the explicit recognition of rLG, including rLPG, BioLPG, and rDME, as eligible low-carbon liquid fuels within reporting and mitigation frameworks.

Consultation Question 2

Source: Proposed Greenhouse Gas Mitigation Guide for NSW Coal Mines (EPA, July 2025)
"The EPA seeks feedback on whether the proposed methane monitoring and mitigation measures are achievable for different mine types, and if there are any additional measures that should be included."

GEA response
GEA considers the proposed methane monitoring and mitigation measures appropriate for coal mines but emphasises that they should remain sector-specific and not be extended to unrelated low-emission fuels such as LPG. Note that LPG and rLG have substantially lower fugitive emission global warming potential than methane fugitive emissions.

Additional Feedback Prompts (from the CCMAP – Proposed Requirements for Consultation)

Source: Climate Change Mitigation and Adaptation Plans (CCMAP) – Proposed Requirements (EPA, July 2025)
"The EPA seeks feedback on whether the proposed 25,000 tCO_2-e threshold is appropriate, on the proposed content of CCMAPs, and on the EPA's approach to public disclosure."

GEA response
GEA supports maintaining the 25,000 tCO_2-e threshold as appropriate for capturing large emitters while excluding smaller operators such as LPG retailers and distributors. Renewable liquid gases, including rLPG, BioLPG, and rDME, should be recognised as valid mitigation options within CCMAP templates and guidance. GEA supports transparency and disclosure where feasible but notes that reporting should protect commercial confidentiality and align with national frameworks such as the Guarantee of Origin, NGER, and Safeguard Mechanism to ensure consistency across jurisdictions.