



7 April 2025

## **Submission: Draft AS4564:2025 – General-purpose Natural Gas**

The Australian Pipelines and Gas Association (APGA) represents the owners, operators, designers, constructors and service providers of Australia's pipeline infrastructure. APGA members ensure safe and reliable delivery of over 1,500 PJpa of gas consumed in Australia alongside over 4,500 PJpa of gas for export.

APGA and its members are at the forefront of Australia's renewable gas industry, helping achieve net-zero more quickly and affordably. We support a net zero emission future for Australia by 2050<sup>1</sup> and consider renewable gases to represent a real, technically viable approach to lowest-cost energy decarbonisation in Australia. APGA sees renewable gases such as hydrogen and biomethane playing a critical role in decarbonising gas use for both wholesale and retail customers.<sup>2</sup>

APGA welcomes the opportunity to comment on the Standards Australia consultation on amending AS/NZS 4564 - General-purpose natural gas. APGA previously provided a submission to Standards Australia in May 2023 on the commencement of the amendment process, and we are pleased to see this work come to fruition.

Updates to the Standard are a necessary next step in developing a renewable gas industry while also maintaining safety and compliance. Compliance certain aspects with the previous Standard introduced compliance risk and considerable additional costs in the injection and blending of renewable gases into the gas infrastructure.

This amendment addresses these points, including by:

- **Expanding the coverage of the Standard.** The standard now covers natural gas to natural gas equivalents, including hydrogen and biomethane.
- **Introducing a specific hydrogen limit of 10% by volume.** Previously, there was no specified allowable hydrogen limit, with only the Wobbe Index limit to constrain hydrogen blending. This created regulatory risk for service providers which allow hydrogen blends within its infrastructure. Introducing a specific limit reduces this regulatory risk, and also permits further revisions to the allowable volume in the future.
- **Introducing pressure-related maximum oxygen %.** Previously, the Standard applied a strict limit of 0.2% mol of oxygen. Biogas typically contains around 1% mol of oxygen, and removing this extra oxygen introduced considerable cost to produce biomethane. Future Fuels CRC research in the Australian context indicates that infrastructure and

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<sup>1</sup> APGA, *Climate Statement*, available at: <https://www.apga.org.au/apga-climate-statement>

<sup>2</sup> ACIL Allen, 2024, *Renewable Gas Target – Delivering lower cost decarbonisation for gas customers and the Australian economy*, <https://apga.org.au/renewable-gas-target>

appliances can safely operate with up to 1% mol oxygen. The amendment introduces a pressure-specific oxygen limit of 1% mol below 3,400 kPa, and 0.2% above 3,400 kPa, which recognises the different risk profiles in different pipeline infrastructure.

- **Introducing gas contaminants, including specific contaminants for biomethane.** This adds toluene, arsenic and xylene to the general gas contaminants, and adds a separate section of contaminants for biomethane which include limonene, fluorine, chlorine, ammonia and siloxanes. This will provide guiderails for biomethane producers for allowable contaminants in their product.

APGA commends the AG-010 Natural Gas Quality Specifications Committee for its work on this draft.

To discuss any of the above feedback further, please contact me on +61 409 489 814 or [crafael@apga.org.au](mailto:crafael@apga.org.au).

Yours sincerely,



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