



24 February 2023

Submission: Safeguard Mechanism

The Australian Pipelines and Gas Association (APGA) represents the owners, operators, designers, constructors and service providers of Australia's pipeline infrastructure, connecting natural and renewable gas production to demand centres in cities and other locations across Australia. Offering a wide range of services to gas users, retailers and producers, APGA members ensure the safe and reliable delivery of 28 per cent of the end-use energy consumed in Australia and are at the forefront of Australia's renewable gas industry, helping achieve net-zero as quickly and affordably as possible.

APGA welcomes the opportunity to continue contributing to reform to the Safeguard Mechanism. APGA considers the Safeguard Mechanism Reform design has reached reasonable compromise between emissions and productivity. Unfortunately, the Safeguard Mechanism remains at risk of being undermined by adjacent schemes. Additionally, pipeline service providers will seek further engagement on the most appropriate industry Production Variables (PVs) across coming months.

APGA supports a net zero emission future for Australia by 2050¹. Renewable gases represent a real, technically viable approach to lowest-cost energy decarbonisation in Australia. As set out in Gas Vision 2050², APGA sees renewable gases such as hydrogen and biomethane playing a critical role in decarbonising gas use for both wholesale and retail customers. APGA is the largest industry contributor to the Future Fuels CRC³, which has over 80 research projects dedicated to leveraging the value of Australia's gas infrastructure to deliver decarbonised energy to homes, businesses, and industry throughout Australia.

APGA is encouraged by the level of compromise seen within the Safeguard Mechanism design. A careful path has been laid out between the extremes of most decisions. A risk of the Safeguard Mechanism Reforms has always been that either industry or emissions reduction will be deemed more important than the other – this outcome demonstrates that the Federal Government seeks to value and support both simultaneously.

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

² APGA, 2020, *Gas Vision 2050*, https://www.apga.org.au/sites/default/files/uploaded-content/website-content/gasinnovation_04.pdf

³ Future Fuels CRC: <https://www.futurefuelscrc.com/>

As per APGA's feedback in the September 2022 Consultation,⁴ the greatest risk to the success of the Safeguard Mechanism Reforms comes not from the Safeguard Mechanism itself, but from supporting legislation. The following remain unresolved at this point in time:

- The National Greenhouse and Energy Reporting scheme (NGERs) still does not recognise the combustion of renewable hydrogen or biomethane delivered by pipeline as producing zero carbon emissions, impeding least cost abatement for many Safeguard Mechanism Facilities (SMFs);
- The Guarantee of Origin (GO) Scheme, as of the policy position paper published December 2022, does not convey information on Scope 1 emissions of combustion to domestic customers of renewable hydrogen and does not yet consider biomethane. Further, NGERs is yet to consider GO Certificates impeding least cost abatement for many SMFs; and
- The recommendations of the Independent Review into Australian Carbon Credit Units (ACCUs), while committed to by Minister Bowen, are yet to be legislated. The Emissions Reduction Framework remains a bottleneck to SMFs accessing least-cost emissions reduction from across the economy or intra-company facilities via ACCU generation.

APGA recommends reform be fast tracked around each of these three supporting legislative instruments in order to ensure the Safeguard Mechanism is able to deliver upon its emissions reduction goal.

APGA acknowledges that the Safeguard Mechanism Taskforce has advised industry that these three legislative instruments – the NGERs, the GO Scheme, and the ERF – are outside the scope of the consultation and hence cannot be considered by this consultation process. It is hoped that the Taskforce takes on the strong industry concern that these instruments risk undermining the intent of the Safeguard Mechanism Reforms. Fast-tracked reform is needed to enable all decarbonisation options be made available to SMFs, including those relating to the least cost supply of hydrogen and other renewable gases.

Compromise within the Safeguard Mechanism Design

APGA commends the effort taken to balance delivering on emissions reductions targets in a flexible and cost-effective way, that shares the cost and effort of decarbonisation across the economy. We appreciate that this balance has been achieved through considering both the needs and realities of the relevant industries, and how best to achieve targets as quickly as possible. APGA also commends the iterative and in-depth consultation process that has been undertaken.

Compromise between industry and emissions is evident in key decisions through the design, including:

- The per-year reduction percentage of 4.9 per cent per annum sits in the middle of the proposed reduction rate range, balancing emissions reduction with productivity;

⁴ APGA, 2022, *Submission: Safeguard Mechanism Reforms Consultation Paper*, https://www.apga.org.au/sites/default/files/uploaded-content/field_f_content_file/220920_apga_submission_-_safeguard_mechanism_reforms.pdf

- The hybrid PV approach creates gradual transition from facility-based PVs to industry-based PVs over the window to 2030, avoiding the creation of winners and losers through a step change approach;
- Safeguard Mechanism Certificate trading has been retained but SMFs are unable to produce Australian Carbon Credit Units (ACCUs), balancing ability to trade while avoiding double counting;
- Facilities can apply for Trade Exposed Baseline Adjusted status but a minimum reduction of 2 per cent has been maintained, balancing support of trade exposed industries with ensuring domestic customers don't take up all of their slack;
- Emissions reduction projects with long delivery times can be accommodated through multi-year monitoring periods where required, essentially creating curved reduction obligations where justifiable.

Overall, these features are appropriate and practical compromises that balance SMF productivity while working towards achieving emissions reduction targets. Ideally, these outcomes should be well positioned to support emissions reduction through renewable gas uptake where this solution is least cost. Unfortunately, this opportunity and others like it will be hampered by the legislative instruments which the Safeguard Mechanism relies upon. These challenges risk undermining the intent of the Safeguard Mechanism Reforms and are the focus of the remainder of APGAs submission.

Lastly, the 'Safeguard Transformation Stream' of the Powering the Regions Fund requires additional consideration. This fund is intended to support decarbonisation by trade-exposed facilities covered by the Safeguard Mechanism. APGA is concerned that the eligibility requirements to be considered 'trade-exposed' for the purposes of this Stream may be too narrow. In particular, current drafting appears to exclude funding for gas transmission pipeline emissions reduction activities. This is despite the strategic role which these facilities play in green export supply chains. This should be reconsidered.

Legislation puts Safeguard Mechanism Reform emissions reduction at risk

Safeguard Mechanism Reform would be perfectly positioned to deliver upon its intended emissions reduction if:

- NGERs legislation allowed renewable gas customers to consider the true emissions intensity of renewable gases such as hydrogen and biomethane;
- The GO Scheme conveyed available information about the Scope 1 emissions of combustion for hydrogen (and included biomethane); and
- The recommendations of the Independent Review into ACCUs had been legislated.

None of the above three points are true. As the Safeguard Mechanism relies upon each of these legislated schemes to function effectively, the Safeguard Mechanism Reform emissions reduction target is put at risk by the shortcomings of each of these schemes.

National Greenhouse and Energy Reporting scheme

The current NGERs reporting framework at present does not allow renewable gas customers to report the true emissions intensity of those renewable gases if those gases are blended with natural gas and delivered by pipeline.

The NGERs Measurement Determination specifies Scope 1 carbon dioxide emissions from the combustion of natural gas and biomethane alongside a formula to calculate Scope 1 carbon dioxide emissions from the combustion of hydrogen.

- Natural Gas is specified to produce 51.4kg CO² per GJ combusted;
- Biomethane is specified to produce 0kg CO² per GJ combusted; and
- The formula for hydrogen is able to produce an outcome of 0kg CO² per GJ combusted.

Despite this, customers that receive biomethane or green hydrogen via existing natural gas pipelines are not able to use the 0kg CO² per GJ combusted figure in NGERs emissions reporting. Instead, customers who procure renewable gases for delivery via pipeline are only able to use the 51.4kg CO² per GJ combusted figure for natural gas. This undermines the purpose of SMFs using renewable gases to reduce emissions despite the fact that the facility is genuinely reducing its emissions.

This is unfortunate as the least cost pathway to renewable gas delivery is via pipeline infrastructure. In 2022 APGA published a GPA Engineering study which considered the relative technoeconomic analysis of pipelines and powerlines.⁵ This study demonstrated that pipelines were a lower cost form of energy transport and storage than powerlines and electricity storage – with pipeline transport costing up to four times less than via powerlines when comparing like for like distance and capacity scenarios. Further, energy transport via pipeline allows green hydrogen to be produced from least-cost behind the meter variable renewable electricity and avoids transporting and storing the energy consumed through electrolysis.

For the Safeguard Mechanism Reforms to be effective in recognising least cost emissions reduction opportunities through renewable gas uptake, NGERs needs to be reformed to allow for the emissions intensity of renewable gases delivered by pipeline to be considered in NGERs reporting.

⁵ GPA Engineering, 2021, *Pipelines vs Powerlines: a technoeconomic analysis in the Australian context*, full report: https://www.apga.org.au/sites/default/files/uploaded-content/field_f_content_file/pipelines_vs_powerlines_-_a_technoeconomic_analysis_in_the_australian_context.pdf;
summary: https://www.apga.org.au/sites/default/files/uploaded-content/field_f_content_file/pipelines_vs_powerlines_-_a_summary.pdf ;
dataset: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.apga.org.au%2Fsites%2Fdefault%2Ffiles%2Fuploaded-content%2Ffield_f_content_file%2Fappendix_3a_and_3b_results_summary.xlsx&wdOrigin=BROWSELINK

Guarantee of Origin Scheme

The GO Scheme aims to create framework for certifying the provenance of green hydrogen produced in Australia. The Department concluded a consultation process with industry on a draft framework in February 2023.

In our submission to the consultation on the proposed GO framework,⁶ APGA's major concerns with the framework is that the proposed GO certificates do not include Scope 1 emissions of *consumption*, and therefore do not align with the intent of the Safeguard Mechanism reforms.

Without conveying information about the Scope 1 emissions of combustion, SMFs which choose to combust hydrogen certified under the scheme cannot use GO certificates as a basis for claiming emissions neutrality of the gas which it is consuming. This is also in part an NGERs challenge, as NGERs also not currently designed to recognise emissions communicated via GO certificates.

The Department acknowledged in the consultation paper⁷ that the emissions information about the hydrogen is unlikely to be relevant for Safeguard liable entities, as only scope 1 emissions (in this case consumption) are within scope for the Safeguard Mechanism. This would be solved by noting Scope 1 emissions of consumption on the certificates.

APGA therefore recommended that the GO scheme certificate design include Scope 1 emissions of consumption. Product GO certificates could then be used by Safeguard Mechanism Facilities to confirm Scope 1 emissions reductions from using hydrogen or other renewable gases.

Much like the Safeguard Mechanism Taskforce, the team responsible for GO Scheme development have identified that it is not in the scope of its project to ensure GO certificates can communicate the necessary information for NGERs reporting. This represents another missed opportunity for SMFs to have the emissions neutrality of renewable gas use communicated to NGERs and hence considered relative to its Safeguard mechanism baseline.

Emissions Reduction Fund

The Independent Review of ACCUs produced 16 recommendations, all of which have been publicly endorsed by the Minister for Energy and Climate Change.⁸ Recommendation 5 of the review addressed the bottleneck created by the current ERF method development process, in line with key feedback from APGA within its submission to the review. The

⁶ APGA, 2023, *Submission: Australia's Guarantee of Origin Scheme*, https://www.apga.org.au/sites/default/files/uploaded-content/field_f_content_file/230203_apga_submission_-_guarantee_of_origin_scheme.pdf

⁷ DCCEEW, 2022, *Australia's Guarantee of Origin Scheme: policy position paper*, https://storage.googleapis.com/files-au-climate/climate-au/p/prj232e2205fdfa8b85770e8/public_assets/Policy%20position%20paper%20-%20-%20Australia's%20Guarantee%20of%20Origin%20Scheme.pdf

⁸ DCCEEW, 2023, *Independent Review of Australian Carbon Credit Units*, <https://www.dcceew.gov.au/sites/default/files/documents/independent-review-accu-final-report.pdf>

recommendation included a transition to proponent-led method development and modification.

If implemented, this recommendation may enable the single greatest expansion of recognition for legitimate emissions reduction in the past decade of emissions reduction reform.

Proponent-led ERF method development is the key to SMFs accessing least cost emissions reduction from across the Australian economy. This is also the key to allowing companies which own SMF and non-SMF assets to transfer lower-cost emissions reduction from non-SMF assets to SMF assets. This intra-business transfer via ACCU generation will be a key to enabling individual businesses to pursue least cost emissions reduction internally as well as across the economy.

While the Federal Government has indicated it will implement all recommendations of the Independent Review, Safeguard Mechanism Facilities remain unable to access all least cost emissions reduction opportunities until the ERF is reformed.⁹ APGA recommends reforms stemming from the Independent Review into ACCUs be pursued as a matter of urgency alongside other reforms enabling SMFs and all Australian energy consumers to access the potential for least cost emissions reduction through a transition to renewable gas.

To discuss any of the above feedback further, please contact APGA National Policy Manager, Jordan McCollum, on +61 422 057 856 or jmccollum@apga.org.au.

Yours Sincerely,



STEVE DAVIES
Chief Executive Officer
Australian Pipelines and Gas Association

⁹ DCCEEW, 2023, *Government welcomes Independent Review of ACCUs*, Media Release, <https://minister.dcceew.gov.au/bowen/media-releases/government-welcomes-independent-review-accus>