



6 September 2024

Submission: NSW Renewable Fuels Strategy

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 contribute to the New South Wales Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW)'s consultation on a proposed Renewable Fuels Strategy. The opportunity to develop a broader renewable fuels industry beyond green hydrogen is one that the NSW Government should energetically pursue, with a goal of achieving abundant renewable fuel supply.

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 has three overarching messages in answers to the Consultation Paper's questions:

- Industry commends the NSW Governments approach to decarbonisation which reaches beyond renewable electricity solutions alone;
- NSW has the opportunity to strive for abundant renewable fuel supply; and
- The NSW Renewable Fuels Scheme (RFS) has the potential to deliver much greater opportunity and avoid unintended consequences through further policy optimisation.

These are distilled in three overarching recommendations:

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/>

1. **Optimise the RFS.** The NSW Government should consider a design for the RFS that encompasses all renewable fuels, avoids cross-subsidisation and includes customer-side targets to avoid crowding out of more expensive fuels (elaborated on page 5).
2. **Consider policies that aim for scale in renewable fuel production.** This could include renewable fuel consumption targets, which provide strong signals for market development to a broad a customer base as possible. The NSW Government should also reconsider the current restriction of the GreenPower scheme to industrial and commercial users.
3. **Support biomethane production through aggregation of feedstock.** Explore biomass aggregation opportunities at existing regional facilities such as wastewater treatment plants, large agricultural sites and landfills. This would support regional development and least cost energy transport through pipelines.

APGA welcomes continued engagement with the NSW Government on its Renewable Fuels Strategy. To discuss any of the above feedback further, please contact me on +61 422 057 856 or jmccollum@apga.org.au.

Yours sincerely,



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Overarching messages

A constructive approach to decarbonisation

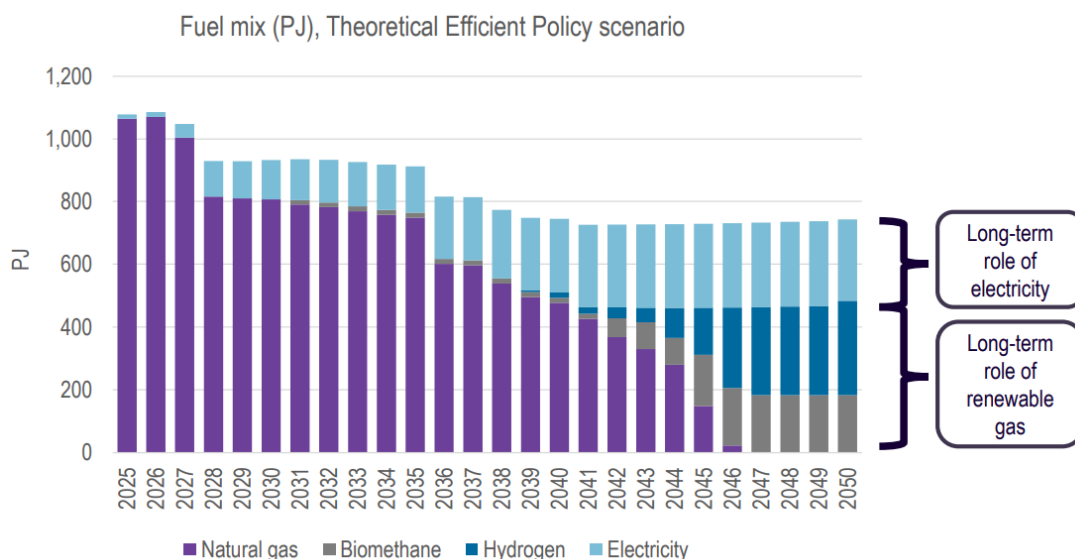
The NSW Government demonstrates a constructive approach to decarbonisation of **energy** use in NSW – rather than the decarbonisation of **electricity** alone. This sets a benchmark for best practice energy decarbonisation strategy for jurisdictions around Australia.

NSW used 252 PJ of electricity in FY2022-23, representing 25% of NSW’s final energy demand of 1,014.⁴ This compares to 615 PJ of petroleum and 97 PJ of gas used in the State, representing a combined 70% of total energy consumption. The NSW Government’s focus on decarbonising overall energy usage, rather than simply electricity, is a much more robust and holistic approach. This approach also dovetails with the Federal Government’s sectoral decarbonisation approach in developing emission reduction targets.

The decarbonisation of coal and oil use is a priority for decarbonisation of fossil fuels. Gas – natural gas now, and renewable gases in the future – can play a significant role in the decarbonisation of those fuels and of overall energy consumption.

In 2024 APGA commissioned ACIL Allen to explore policy solutions to decarbonise gas consumption, including through a national Renewable Gas Target (RGT). An RGT would work in a similar way to the national Renewable Energy Target (RET) which supports investment in renewable electricity generation, by supporting investment in the renewable gas industry.

ACIL Allen’s analysis found that the least cost decarbonisation pathway for Australian gas consumers is achieved through a combination of electrification, hydrogen and biomethane uptake.⁵ This would also support the decarbonisation of other fossil-derived fuels, particularly coal, as renewable gas can be substituted for coal in a range of uses.



⁴ DCCEEW, 2024, *Australian energy update 2024*, Table H, <https://www.energy.gov.au/publications/australian-energy-update-2024>

⁵ ACIL Allen, 2024, *Renewable Gas Target - Delivering lower cost decarbonisation for gas customers and the Australian economy*, <https://apga.org.au/renewable-gas-target>

The approach that the NSW Government is taking in considering the decarbonisation of all energy supply chains including fuel supply chains, rather than decarbonising electricity alone, represents a robust step forward in the energy transition. The gas industry stands ready to support the NSW Government in exploring policies to decarbonise fuel use, particularly gas use, including through a Renewable Gas Target.

Aim for scale in renewable fuel production

Australian governments have previously assumed production of renewable gases will be limited and policies should limit its end uses to the highest value – industrial and commercial users who *cannot* electrify. This includes NSW’s Renewable Fuels Scheme (RFS) where products are certified through the GreenPower Green Gas Certification, which limits end use to commercial and industrial customers.

This ‘scarcity’ perspective limits potential market and growth opportunities and will ultimately act to keep renewable gases scarce. It also ignores the fact that the levelised cost of production of renewable gases reduces with scale.

APGA has advocated for governments to instead take an ‘abundance’ rather than a ‘scarcity’ mindset to renewable gases, which considers the interlinked economics of production, consumption *and* transport. However achieving sufficient scale to provide an abundant supply of renewable gases is difficult to achieve with a single end customer. Producers need access to sufficient customers to leverage common user transmission infrastructure – and this may mean residential customers as well as commercial and industrial.

For hydrogen, co-locating hydrogen hubs with existing gas infrastructure and new hydrogen generation would support increased economies of scale. For biomethane, this may mean feedstock aggregation and using laterals to support blending into existing pipelines to access a broad range of customers. These are considered in more depth in the consultation questions below.

Policies should be aimed at scaling development of renewable bases towards abundance, rather than an assumption of scarcity. This includes the use of Government’s scale and purchasing power to provide direct signals to market.

There is one cohort supported by the scarcity mindset – investors in hydrogen production. As demonstrated by the tightening East Coast Gas Market, where supply capacity is kept scarce, customers pay higher prices to secure supply from producers. The scarcity approach to renewable fuel market embeds this within the market design to the detriment of customers.

Striving for abundance of supply will ensure that producers are always competing for customers and that prices are set by the next highest cost producer rather than the next highest paying customer.

Optimise the Renewable Fuels Scheme

The RFS will incentivise the production and use of green hydrogen in NSW. In this respect it is an excellent starting point in designing policies to encourage scale and APGA supports its expansion to other renewable fuels including biomethane.

However, APGA does not support the overall RFS in its current form, as:

- The design of the RFS applies a liability on gas customers, without those gas customers necessarily being able to benefit from the activities of the scheme; and
- Proposed expansions of the scheme to renewable liquid fuels will mean an imbalance in RFS certificates produced for those fuels relative to more expensive renewable gases.

The liable entities under the RFS are *natural gas retailers and end users that are not retail customers*; that is, current wholesale customers of natural gas. In expanding the scheme to other renewable fuels, the NSW Government has proposed to expand the liable parties under the scheme to transport and aviation fuel customers. This now means that current natural gas customers, including retail and small business customers, will subsidise not just hydrogen production, but also the overall decarbonisation of transport and heavy industry.

Renewable alternatives to fossil liquid fuels can be produced at a lower margin above incumbent supply compared to renewable alternatives to natural gas. This lower margin relative to alternative liquid fuels means that RFS certificates for renewable gases will cost more than RFS certificates produced for renewable liquid fuels. Projects producing renewable alternatives to fossil liquid fuels may reach Final Investment Decision more easily through selling lower cost RFS certificates. If the renewable alternatives to natural gas aren't going into the gas network, then there is currently no way for gas customers to gain the emissions reduction benefit which they are paying for.

APGA reiterates its recommendations⁶ that the NSW Government:

- **Ensure gas customers can access emissions reduction in line with their RFS liability.**
The NSW Government should engage with DCCEEW to ensure liable entities are able to claim Scope 1 emission reductions using certificates under the National Greenhouse and Energy Reporting (NGER) scheme. This would avoid a double cost impost on gas users seeking to use renewable fuels to meet the requirements of carbon reduction schemes.
- **Amend the RFS to include consideration of NSW GreenPower Renewable Gas Certificates** as evidence of renewable hydrogen production alongside Guarantee of Origin (GO) Scheme certificates.
- **Expand the RFS to include other renewable fuels**, including biomethane.
- **Consider separate customer-side targets**, to address the potential crowding out of renewable gaseous fuels by renewable liquid fuels under the RFS.

An example expanded scheme design is outlined in Q18.

⁶ APGA, 2024, *Submission: Renewable Fuels Scheme Rule 1 Consultation*, <https://apga.org.au/submissions/renewable-fuels-scheme-rule-1-consultation>; APGA, 2023, *Submission: Renewable Fuels Scheme Expansion*, <https://apga.org.au/submissions/nsw-renewable-fuels-scheme-expansion>

Consultation questions

Renewable fuel policy objectives

1. Do you support these primary objectives? Are there other objectives renewable fuel policies should address?

The primary policy objectives are appropriately interlinked and well suited to the task of commencing a renewable gas industry in Australia.

However APGA proposes that the “Achieve NSW's emissions reduction targets” priority acknowledge two additional factors: one, avoiding unfair cross-subsidisation, and two, achieving emissions reduction targets at lowest-cost.

APGA has previously noted⁷ the risks of cross-subsidisation. It remains critically important to avoid this by ensuring that energy customers can benefit from the emissions reduction for which they pay. Lowest-cost should also be a key aspect of emissions reduction to reduce the burden on energy consumers.

APGA suggests either amending this priority to include wording such as “emissions reduction equity”, or creating a separate priority that reflects this.

Existing policies and programs

2. What actions can the NSW Government take to continue support for hydrogen production in NSW?

Alongside an appropriately expanded Renewable Fuels Scheme (RFS), the NSW Government should consider policy which aims to scale up development of hydrogen for domestic use. Once scale is set as a goal, multi-user hydrogen infrastructure corridors can be identified to optimise supply chains, including:

- Enabling electrolysis to be located at the site of renewable electricity generation to efficiently soak up excess generation.
- Charting pipelines to maximise the number of customers supplied via one pipeline. This could include hydrogen hubs, hydrogen GPG, gas distribution network blending, and hydrogen refuelling infrastructure.

Beyond existing Federal schemes such as Hydrogen Headstart, there are a number of policy avenues which the NSW Government could explore that would support development of scale, such as targets and funding streams:

- Targets to provide signals to market towards achieving scale. While the RFS includes a specific target for hydrogen *production* (and may expand to other renewable fuels), targets for renewable gas *use* act on the other side of the supply/demand equation.

⁷ APGA, 2024, *Submission: Renewable Fuels Scheme Rule 1 Consultation*, <https://apga.org.au/submissions/renewable-fuels-scheme-rule-1-consultation>; APGA, 2023, *Submission: Renewable Fuels Scheme Expansion*, <https://apga.org.au/submissions/nsw-renewable-fuels-scheme-expansion>; APGA, 2023, *Submission: NSW Renewable Fuels Scheme*, <https://apga.org.au/submissions/nsw-renewable-fuels-scheme>

APGA has been advocating for a national Renewable Gas Target⁸ however jurisdictional targets are also appropriate.

- Project funding to support aspects of industry development – grant schemes, feed-in tariffs, funding for technical and feasibility studies for projects, or other schemes, across green hydrogen and biomethane production and common user infrastructure for energy transportation. NSW DCCEEW should canvass project proponents and infrastructure service providers on the most effective design for direct government funding schemes.

Additionally, the GreenPower Renewable Gas Certification is a critical step forward in enabling a renewable gas industry, both in NSW and across the country. APGA supports this scheme, especially in the absence of the national Guarantee of Origin Scheme. However the current inability of residential customers to benefit from the scheme may be a disincentive for additional investment, because producers cannot contractually access this large group of potential customers even if the gas is ultimately consumed on a household stovetop. Those residential customers will ultimately be asked to pay more for gas they consume, without being able to benefit from the emissions reduction of that gas.

APGA strongly recommends the NSW Government reconsider the current restriction of the GreenPower scheme to industrial and commercial users.

3. What could be implemented or learnt from existing policies and programs?

The NSW Government should consider the design and outcomes of other successful targets, namely the national Renewable Energy Target (RET). The RET provided a considerable incentive to invest in renewable electricity projects at a time when they were largely uncompetitive with fossil-derived electricity generation.

Another example is the Queensland Government's 2005 13% Gas Scheme, a mandatory target for Queensland electricity retailers to provide 13% of the state's electricity from gas-powered generation. This target was raised to 15% in 2011 and 18% by 2020, and significantly reduced emissions by diverting electricity production from coal to gas.

In the 2021 Hydrogen Strategy, the NSW Government committed to 10% blending in the network by 2030. This target is still realistic and should be reiterated, with appropriate policy and financial support through the Renewable Fuels Strategy to achieve the target. Even a voluntary target would provide a substantial signal for investment in the industry.

The NSW Government should also resist the temptation to use appliance or gas use bans to force change. Experience domestically and internationally shows that these kinds of bans are a blunt instrument which are difficult to practically implement, as it does not always leave consumers with choice of appropriate alternatives. New gas appliance (boiler) bans in the UK and countries within the European Union have been progressively pushed back because of these implementation issues. These bans restrict the ability of existing gas

⁸ ACIL Allen, 2024, *Renewable Gas Target: Delivering lower cost decarbonisation for gas customers and the Australian economy*, <https://apga.org.au/renewable-gas-target>

customers from being able to benefit from a decarbonised gas supply chain. They are also unpopular as the Victorian Government is learning from its new gas connections ban.⁹

Infrastructure

4. How can the NSW Government support infrastructure reuse and development that delivers efficient, low-cost renewable fuel supply chains across the state?

NSW's transmission and distribution pipeline infrastructure already delivers between 268 and 436 terajoules per day to non-gas powered generation gas customers.¹⁰ These infrastructure assets can be readily reused to support renewable gas supply chains, enabling access to the largest possible end user base for these products. All current gas infrastructure can deliver renewable methane and blended hydrogen today with minimal change, and could transport renewable hydrogen with moderate change.^{11,12}

Policies should prioritise efficient reuse of existing pipeline infrastructure, including the blending of renewable gases into existing natural gas pipelines.

The NSW Government must also acknowledge the economics of pipeline infrastructure when considering energy infrastructure planning and development. Pipelines are consistently cheaper and easier to build than equivalent powerlines, and also provide benefits including energy storage.¹³ APGA has previously detailed this in a submission to the NSW Upper House Inquiry on Undergrounding Electricity Infrastructure.¹⁴

5. How can the NSW Government support regional renewable fuel supply? Is there an opportunity to aggregate feedstocks at existing regional facilities such as landfills or wastewater treatment plants to create hubs for renewable fuel production?

Biomethane

The NSW Government should explore biomass aggregation opportunities at existing regional facilities such as wastewater treatment plants, large agricultural sites and landfills. Aggregation of feedstocks will be an important factor in the economic viability of producing biogenic fuels, including biomethane. Transporting biomass long distances is expensive relative to the cost of transporting the biogenic fuel product.

⁹ RedBridge, 2024, EnergyShift Tracking Poll: Wave 2, available at <https://apga.org.au/news/energyshift-tracking-poll-wave-2>

¹⁰ AEMO, 2024, 2024 Gas Statement of Opportunities, https://aemo.com.au/-/media/files/gas/national_planning_and_forecasting/gsoo/2024/aemo-2024-gas-statement-of-opportunities-gsoo-report.pdf

¹¹ ARENA, 2023, Knowledge Bank – Australian Hydrogen Centre, accessed 22 November 2023, <https://arena.gov.au/knowledge-bank/?keywords=Australian+Hydrogen+Centre>

¹² APA Group, 2023, *Parmelia Gas Pipeline Hydrogen Conversion Technical Feasibility Study*, https://www.wa.gov.au/system/files/2023-05/3419_apa_public_pipeline_conversion_v6.pdf

¹³ GPA Engineering, 2022, *Pipelines vs Powerlines: a Technoeconomic Analysis in the Australian Context*, <https://apga.org.au/research-and-other-reports/pipelines-vs-powerlines-a-technoeconomic-analysis-in-the-australian-context>

¹⁴ APGA, 2023, *Submission: NSW Inquiry into undergrounding transmission infrastructure for renewable energy projects*, <https://apga.org.au/submissions/inquiry-into-the-feasibility-of-undergrounding-transmission-infrastructure-for-renewable-energy-projects>

Existing distribution and transmission pipeline networks can readily support this. Lateral pipelines to and from existing transmission lines are regularly constructed to supply small towns, and these can also be used for biomethane.

A first step would be to undertake a survey of NSW's biomass aggregation potential, similar to the recent Blunomy analysis for AGIG in Victoria, South Australia and Queensland.¹⁵

Sustainable Aviation Fuel

Developing a cost-effective SAF industry could rely on production which is connected to a blended or pure renewable gas grid. This approach could be lower cost, more technologically ready and more sustainable on feedstock supplies than alternative SAF pathways that exist today.

The concept of using dedicated open-access fuel pipelines to support refuelling of aircraft is long-established in the domestic and international aviation markets. Dedicated fuel pipelines are a common feature of established airports, with fuel trucking typically reserved for smaller airports or during early stages of operation. For airports, fuel that is transported via road is less efficient resulting in higher fuel costs and emissions.

APGA recommends the NSW Government consider transport of SAF in pipelines from aggregated production sources, which would likely be the most cost-effective pathway.¹⁶

Hydrogen

The most technologically mature method of producing green hydrogen is from electrolysis using renewable electricity. Export opportunities for hydrogen have led to the assumption that hydrogen production will take place at ports. Mass renewable electricity generation, on the other hand, is largely located regionally away from ports. This requires the transport of renewable electricity long distances using electricity transmission infrastructure, adding considerable costs to the production of green hydrogen. It is also predicated on a largely export market, rather than hydrogen being produced for domestic use.

APGA suggests an alternative for hydrogen production in NSW: electrolyzers located at the source of renewable electricity generation, with hydrogen transported in much cheaper hydrogen or blended pipelines.¹⁷ Aggregation of the 'feedstock' for hydrogen production – renewable electricity – in largely regional Renewable Energy Zones will necessarily provide benefits for those regions in terms of jobs and infrastructure.

¹⁵ Blunomy, 2024, *Biomethane Potential in AGIG's Network Catchment and Associated Co-benefits Final Report*, commissioned by AGIG, https://www.agig.com.au/-/media/files/agig/Annual-Reports/240712_Biomethane-potential-and-cobenefits-Public.pdf

¹⁶ APGA, 2024, *Submission: Electricity and energy sector plan*, <https://apga.org.au/submissions/electricity-and-energy-sector-plan>

¹⁷ APGA, 2023, *Submission: Inquiry into the feasibility of undergrounding transmission infrastructure for renewable energy projects*, <https://apga.org.au/submissions/inquiry-into-the-feasibility-of-undergrounding-transmission-infrastructure-for-renewable-energy-projects>

6. Would support for feasibility and front-end engineering and design studies assist with reaching final investment decisions? If so, how is this best delivered?

APGA defers to the expertise of renewable gas producers for this question.

7. What action would best support investment in these projects or a NSW renewable fuel industry? Are there example projects where this would accelerate development?

APGA defers to the expertise of renewable gas producers for this question.

8. Should the NSW Government establish renewable fuel demonstration projects? If so, what would be the best model to support these projects?

In terms of renewable gas production which is connected to existing pipeline infrastructure, further demonstration projects are not needed. Industry is willing to prove the concept and begin producing renewable gas¹⁸ assuming policy settings allow them to do so.

What is required is policy and financial support, both to help create a market at scale and to provide a level playing field with natural gas and renewable electricity. The latter has benefited from considerable policy support over the last few decades and ongoing, which has resulted in an industry which is beginning to develop outside the need for subsidy.

9. Are there current regulatory gaps or barriers to establishing renewable fuel facilities? If so, what are they and how could they be addressed?

While some of the gaps addressed previously in this submission are within the remit of the NSW Government to address, such as targets and market access, regulatory gaps are largely at a federal level.

These include:

- **Recognition of renewable gas in the National Greenhouse and Energy Reporting scheme.** APGA is working with DCCEE to develop a market-based method to recognise scope 1 emissions of combustion of renewable gases. A market-based method would permit use of certification schemes such as GreenPower, which is not currently recognised by NGER. This would also enable the recognition of renewable gases in common user infrastructure.
- **Revision of Australian Standard 4564 to remove barriers to injection and blending of renewable gases into existing networks.** Interpretations of AS4564 may restrict the ability of hydrogen producers to blend hydrogen into current networks, and the current oxygen content requirements also restrict biomethane. APGA detailed these issues in a submission to Standards Australia to amend AS4564.¹⁹

¹⁸ Jemena, 2024, *Malabar Biomethane Injection Plant*, <https://www.jemena.com.au/future-energy/future-gas/Malabar-Biomethane-Injection-Plant/>

¹⁹ APGA, 2023, *Submission: Standards Australia consultation on amending AS/NZS 4564:2020 General-purpose natural gas*, <https://apga.org.au/submissions/standards-australia-consultation-on-amendments-to-as4564>

Supporting demand

10. How can the NSW Government accelerate the use of renewable fuels?

Renewable fuels are typically more expensive than their alternatives, which limits uptake – as renewable electricity was previously more expensive than fossil-generated electricity. To combat this for renewable electricity, governments provided a reason and ability to value the emissions reduction of that energy. Governments provided policy support and subsidies to build scale in the industry, which has ultimately made it cheaper than the incumbent.

Similar supports should be considered for renewable fuels, along what has been proposed throughout this submission. Grants to reduce capital expenditure for projects are less economically efficient than policies which create and enable the market.

11. Should the NSW Government set, or redesign existing mandates for the use of renewable fuels? If so, what industries or fuels should be prioritised?

The NSW Government should redesign existing mandates for renewable fuels, with per supply chain targets (i.e. one for gas, one for liquid fuel) that consider renewable alternatives in those supply chains.

12. Would renewable fuel purchase requirements for the NSW Government's assets support investment in production facilities?

Yes. The NSW Government has considerable purchasing power, and a commitment to purchase renewable gas for all gas consumed by NSW government assets would support seeding a renewable gas market in NSW. For example, NSW Health one of the largest gas users on the Jemena Gas Network. This can act as a significant demand pull through.

13. Should the NSW Government set targets for renewable fuel use? If so, should these targets be broad or fuel and industry-specific?

APGA recommends the NSW Government consider supply chain specific targets (see Q18). The NSW Government must also follow the principle that those who pay for emissions reduction then get the benefit of that emissions reduction.

14. What incentives can the NSW Government put in place to accelerate the use of renewable fuels?

The NSW Government should consider a contract for difference (CfD) scheme. Government CfDs would promote an equitable transition where they are used to keep renewable fuel prices low, avoiding cost of living impacts. As renewable gases are generally more expensive than natural gas, this can limit market roll-out and becomes even more problematic when they are gas customer's only or least cost decarbonisation option. Government can target CfD values based on ensuring that renewable gases are sold at the same price as natural gas. APGA has advocated for a CfD scheme tied to natural gas prices, targeting a 3% RGT by 2030.²⁰

²⁰ APGA, 2024, *Submission: Electricity and energy sector plan*, <https://apga.org.au/submissions/electricity-and-energy-sector-plan>

In NSW there is existing infrastructure for CfDs in AEMO Services, which manages Long-Term Energy Service Agreements. These could be expanded beyond renewable electricity to renewable energy, including renewable fuels.

15. What support do asset owners need to refurbish or upgrade existing assets for renewable fuel usage?

APGA defers to the expertise of our asset owner members for this question, but notes that asset owners are likely to undertake refurbishment or upgrades of their assets to carry renewable gases on their own accord if the market incentivised them to do so.

Accelerating supply

16. What funding mechanisms or support should the NSW Government consider to support research and innovation and improve the commercial viability of renewable fuel production?

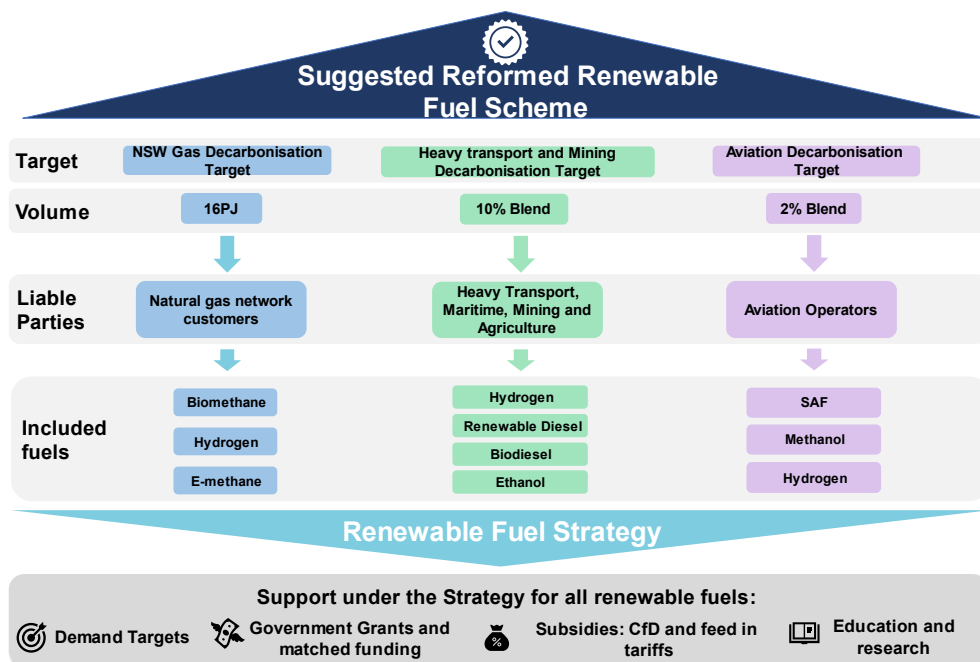
APGA defers to the expertise of renewable fuel producers.

17. Should the Renewable Fuel Scheme be expanded to support other renewable fuels?

Yes, including all renewable forms of methane and hydrogen.

18. If the Renewable Fuel Scheme is expanded to include other renewable fuels, who should be the liable parties and why? (See Appendix B for reference)

An expanded RFS should assign liable parties to those who would benefit from the scheme. Jemena’s proposal for a design of an expanded RFS is one that APGA supports in principle, including the liable parties, included fuels, and customer-base specific targets. Within this, the NSW Government could also create separate targets for gas and liquid fuels.



This is predicated on liable parties being able to benefit from emissions reductions – or in other words, customers should only be liable for the emissions reduction they receive.

19. Should the Renewable Fuel Scheme incentivise fuels that offer short-term emission reduction, longer-term emission reduction or a combination?

The RFS should incentivise all fuels that offer emissions reduction, regardless of the ‘term’ of reduction.

20. How can the NSW Government support feedstock producers for local renewable fuel production (regulatory, research, financial etc.)? What are the potential risks that should be considered?

The NSW Government could consider developing a mechanism to enable porting of feedstock potential to the Petroleum Resources Management System.²¹

21. For feedstock producers and businesses currently exporting biomass crops, tallow and used cooking oils for overseas renewable fuel production, would an incentive scheme support the local sale of these important feedstocks?

APGA defers to the expertise of biomethane producers although notes the biomethane industry has currently restricted itself to only considering biomass from waste resources, rather than from energy crops. Expanding to energy crops brings social licence risk but would also considerably expand biomethane production potential.

22. Should a reservation policy be used to keep feedstock on shore to support the local industry?

APGA defers to the expertise of renewable fuel producers.

23. In setting guidelines for renewable fuels, what sustainability measures should be considered? Including food availability and affordability, lifecycle emissions calculations, changes in market prices for agricultural and waste products.

APGA defers to GreenPower and their approach on these issues, as this has been developed with biomethane industry engagement.

24. Should a hierarchy of use for bio-feedstocks be enforced to prioritise feedstocks for applications where there is no available alternative for decarbonisation?

No, as this would ultimately constrain market growth. APGA details our perspective on a ‘scarcity’ vs ‘abundance’ approach to policy settings in our introduction to this submission.

Value for NSW communities

25. Would a NSW Government-sponsored outline of export opportunities and volumes assist with investment?

²¹ ACCC, 2019, *Framework for the consistent reporting of natural gas reserves and resources*, Box 2.1, https://www.accc.gov.au/system/files/Framework%20for%20the%20consistent%20reporting%20of%20natural%20gas%20reserves%20and%20resources_0.pdf

APGA defers to the expertise of renewable fuel producers, but overall does not consider government funding of such outlines necessary.

26. Should there be a limit on financial support for renewable fuel export projects? If so, what is that limit and when should it apply?

APGA defers to the expertise of renewable fuel producers.

27. How can the NSW Government ensure that the export of renewable fuels benefits NSW communities? Are royalties an appropriate mechanism?

APGA defers to the expertise of renewable fuel producers.

28. How can the NSW Government, education providers and industry best support the development of skills, training and the workforce needed in a renewable fuel industry?

The skills required in a renewable fuel industry are fundamentally similar to the skills required in the gas industry and in some respects skills in coal-fired generation.

Jobs and Skills Australia's examination of the future clean energy workforce notes ongoing skills needs in renewable hydrogen production and transport:

Australia will be able to leverage its large and skilled natural gas workforce to support these types of infrastructure works. The Minerals Council of Australia noted that a successful clean hydrogen industry will require similar skills to those already required by mining, oil and gas, meaning significant re-skilling won't be needed.²²

Importantly, as biomethane is chemically identical to natural gas, reskilling or upskilling may not be necessary for all of those workers. There will also be additional skill opportunities in biomethane production and related work.

APGA notes the Federal Government is currently consulting on a National Energy Workforce Strategy.

Managing market risks

29. How can the NSW Government support companies and industries with cross-border markets to decarbonise?

The RFS will ultimately support producers in NSW, many of which operate across jurisdictions. The NSW Government should support the development of a national Renewable Gas Target, alongside the RFS.

30. How can the NSW Government encourage a fuel transition that aligns with technological advancement?

APGA defers to the expertise of renewable fuel producers.

²² Jobs and Skills Australia, 2023, *Clean Energy Capacity Study*, <https://www.jobsandskills.gov.au/studies/cleanenergycapacity-study>

Building community understanding

31. What information should be provided to industry and the community to build an understanding of renewable fuels? How is this information best delivered?

The NSW Government should ensure that information or messaging provided by government, is consistent and balanced, which sets renewable fuels on the same level as renewable electricity. The NSW Government should avoid mixed messages – such as encouraging households to ‘get off gas’, while at the same time encouraging the production of renewable fuel alternatives.