AGL Energy Limited
T 02 9921 2999
F 02 9921 2552
agl.com.au
ABN: 74 115 061 375

Level 24, 200 George St
Sydney NSW 2000
Locked Bag 1837
St Leonards NSW 2065

NSW Government

Office of Energy and Climate Change

By email: renewablefuelscheme@environment.nsw.gov.au

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AGL Response to the NSW Renewable Fuel Scheme Discussion Paper

AGL Energy (AGL) welcomes the opportunity to contribute to the NSW Renewable Fuel Scheme (**RFS**) discussion paper on rule development (**Discussion Paper**).

AGL is a leading integrated essential service provider, with a proud 185-year history of innovation and a passionate belief in progress – human and technological. We deliver 4.2 million gas, electricity, and telecommunications services to our residential, small, and large business, and wholesale customers across Australia. We operate Australia's largest electricity generation portfolio, with an operated generation capacity of 11,208 MW. We have the largest renewables and storage portfolio of any ASX-listed company, having invested $4.8 billion over two decades in renewable and firming generation. AGL is also the largest gas retailer in NSW.

The NSW Renewable Fuel Scheme was established in 2021 with little prior consultation from stakeholders. Developed as part of the NSW Hydrogen Strategy under the NSW Energy Savings Scheme (**ESS**), the framework of the scheme was legislated in December 2021 without a public consultation on the relative merits of a retailer-led certificate scheme to incentivise green hydrogen production compared to other possible options.

At the same time, critical elements of the scheme that will impact on costs for gas users in NSW, such as the scheme targets, eligible activities, limits on pass through costs to small business and users, and scheme liability, were also legislated. There is now little opportunity to discuss the best approach to incentivising renewable gas production in NSW while minimising costs on gas customers.

In this context, while we appreciate opportunity to input into the development of regulations governing aspects of the scheme, we note that it would have been preferable to engage NSW gas users prior to legislating the broader structure of the scheme.

Setting a backstop to limit costs on customers

Targets for green hydrogen production in NSW are very ambitious. Under the 2021 NSW Hydrogen Strategy, by 2030, the Government is aiming to be producing 110,000 tonnes of green hydrogen per annum from 700 MW of electrolyser capacity for under $2.80/kg (~$22/GJ). The

Strategy notes that it provides up to $3 billion of incentives to commercialise hydrogen supply chains and reduce the cost of green hydrogen from the claimed starting cost of >$8/kg (>$60/GJ).

Scheme targets under the Renewable Fuel Scheme are equally ambitious (and can only be adjusted upwards), with liable entities needing to source certificates for 90,000 GJ of green hydrogen in 2024, increasing to 8,000,000 GJ by 2030. This is starting from a base of green hydrogen production that is presently near zero.

While this ambition is to be applauded, the scheme costs will place a direct liability on NSW gas users—and it is therefore critical that appropriate safeguards are put in place to ensure that there is a cap on overall scheme costs should green hydrogen production fail to meet these ambitious targets.

There is no discussion in the paper as to whether an administered price for certificates will be a feature of the scheme. In our view, a shortfall price will be critical to provide some backstop that scheme costs will not put a disproportionate burden on NSW gas users in the event that green hydrogen production does not scale as forecast by the NSW Government. This is particular important given recent gas commodity price increases and forecast high prices into the future.

Coverage of a broader range of renewable gases

We are also disappointed that despite being designated as a Renewable Fuel Scheme, other renewable gases are not currently considered by the present scheme, which seems to be solely focused on hydrogen rather than other very efficient gas decarbonisation pathways. In our view, the Renewable Fuel Scheme would be much improved by allowing biomethane and other eligible zero-emissions gases into the scheme, to ensure overall costs are minimised while the broader objective of the scheme, to decarbonise NSW gas networks most efficiently, is maintained.

Biomethane is likely to be a key element of gas decarbonisation, especially if hydrogen production takes longer to scale or if production cost declines do not meet the current ambitious forecasts.

Establishing a flexible compliance regime

Finally, the current costs of the scheme, especially in the absence of a price ceiling, are very challenging to model for retailers and therefore include in the calculation of tariffs. No indication has been provided from the NSW Government on expectations of the cost of certificates, which could be significant if not capped and if hydrogen production targets do not follow forecasts.

We anticipate that it will take some time for liable entities to adapt to the scheme and for green hydrogen production to emerge and create eligible certificates; as a consequence there is likely to be challenges in immediately passing through the cost of the scheme in retail tariffs. The proposed cap on costs to small business may also be particularly challenging to meet administratively without knowing more detail about how the scheme will operate.

To support the objectives of the scheme while ensuring costs on customers are minimised, we therefore consider the government should make the following critical policy decisions:

1. **Include a price cap on certificates, which will act as a ceiling on overall scheme costs and minimise price rises for gas users in NSW.**

2. **Include biomethane and other renewable gases under the scheme, to ensure the broadest range of renewable fuels can be developed to decarbonise NSW gas networks at the lowest cost to customers.**

3. **Allow appropriate time for retailers to adjust to the scheme, given that pass-through costs are currently unclear and may take some time to feed through into the retail tariffs.**

Detailed responses to the questions raised in the submission are included in Appendix A below.

We look forward to further opportunities to engage on the direction of this scheme prior to scheme commencement. If you would like to discuss this submission further, please contact Aleks Smits (Senior Manager Policy) at asmits@agl.com.au.

Yours sincerely,

Chris Streets

General Manager (a/g), Policy, Market Regulation and Sustainability

AGL Energy

Appendix A – Response to Questions Raised in Discussion Paper

Question	Response
1. Do you support alignment with the Renewable Energy (Electricity) Act 2000 for the purposes of defining renewable energy?	Yes, this seems a sensible approach; however, noting the evolution of the Renewable Energy Target (RET) into the proposed Renewable Electricity Guarantee of Origin (REGO) Scheme, and the alignment of that scheme with the proposed Guarantee of Origin (GO) scheme to certify green hydrogen, it may be prudent to ensure that the definition of renewable energy aligns with the REGO scheme. We note, however, that the NSW Government should also consider how the RFS might be able to be met through under the existing RET and LGC framework, given that the RET will remain in place until 2030, and key design elements of the REGO scheme are still being considered. A hybrid approach where both schemes are considered may therefore be the most sensible approach.
2. Do you support only recognising green hydrogen production using electrolysis?	As the intention of the scheme is to support decarbonisation of NSW gas network and the NSW climate strategy, we support the recognition of all zero-emissions gas, including biomethane. Concerning hydrogen, while there are several methods of creating hydrogen, by definition, green hydrogen is currently considered to be hydrogen created by electrolysis. Given that the intention of this scheme is to specifically incentivise green hydrogen, it therefore seems reasonable to only allow hydrogen produced by electrolysis in the first instance. However, it may also be prudent for regulation to enable other forms of low- or zero-emissions hydrogen production to be used in the future as technology evolves.
3. Should other production methods be recognised in the future, such as steam methane reforming using biomethane?	As above.
4. What national or international standards should be followed for the production, measurement, quality, and safety of green hydrogen?	We would support the direction of the Standards Australia committee ME-093 Hydrogen Technologies, and the Strategic Work Plan developed by that committee, to inform appropriate standards for hydrogen in the Australian context.

5. What national or international standards should be followed for the sustainable use of water in green hydrogen production?	As above.
6. Do you support the approach to grid electricity, off-grid and behind-the-meter electricity, time-of-use matching, and market-based carbon accounting?	Several of these issues are currently being considered by the federal government's proposed REGO scheme, including certification of renewable electricity that is not currently captured under the RET, and time-of-use matching through time-stamped electricity certificates that can be used to certify green hydrogen production. The design of the REGO has also been put forward with a view to support domestic and international carbon accounting requirements. Where possible, the NSW Government should leverage both the GO and REGO schemes in order to meet the aims of the NSW RFS. In this regard, we note that it may be premature to design elements of the RFS without first considering very complex issues such as time-stamping electricity production, which has been rejected in other markets.
7. What other aspects of renewable energy purchase should be considered?	As above, these issues are well covered in the Federal Government's GO and REGO discussion papers and consultation.
8. How can hydrogen producers demonstrate local use of green hydrogen?	We are supportive of more accurate measurement of hydrogen that is being injected into local networks, which could be used to identify the end use of any produced hydrogen.[1]
9. What are key challenges that should be considered in verifying local use?	As above, challenges emerge where authorities are not establishing appropriate obligations on parties to measure gas use (including injection into networks) across the gas supply chain. We support stronger regulation surrounding the measurement of hydrogen in the existing gas network.
10. Under what specific circumstances in the hydrogen industry, should a 'local use factor' come in effect?	A local use factor, as well as other adjustments to the scheme targets, should be considered at a later date, once any limitations on production forecasts are realised.

[1] See for example AGL's submission on extending the gas regulatory framework to hydrogen, available here. It is critical to delineate between natural gas and hydrogen across gas supply chains for several reasons, including some of the reasons outlined in the present RFS consultation.

11. Do you support the design principles in developing the 'local use factor'?	As above.
12. Do you support that in the first year of the RFS, all green hydrogen produced in NSW will be deemed as having local use?	Producers should provide further information on the end-use of any hydrogen being created by facilities, rather than a simple deeming methodology. It would be straightforward for green hydrogen producers to provide some information on the end use of a product that is being subsidised by NSW gas users (e.g. injection into local gas network, use by an industrial facility, export, etc.).
13. Do you support integration between the RFS and the GO scheme?	Yes, the RFS should follow on the development of the Federal Government's GO scheme.
14. Do you support the points of integration between the RFS and the GO scheme?	Yes.
15. Is there any other data that we should consider leveraging from the GO scheme?	
16. Do you support RFS certificate creation after green hydrogen has been produced?	Yes, although we note that this is likely to create a lag between hydrogen production and creation of a RFS certificate, which is likely to make increasing scheme targets more difficult to meet.
17. Do you support the flexibility of hydrogen producers creating RFS certificates as required?	This would be a sensible approach to alleviate possible issues associated with a rapidly increasing scheme target, given that lag between production and certificate generation may make the scheme target harder to meet. However, there is still a material amount of work to finalise the structure of the GO and REGO scheme, and it may be that it may not be possible to pursue immediate RFS creation if some elements of the REGO scheme (e.g. time stamping) do not proceed. The NSW Government should therefore also consider how the RFS might be able to be met through under the existing RET and LGC framework, given that the RET will remain in place until 2030.
18. Do you support not recognising green hydrogen production facilities that are operational prior to the RFS starting?	It is not clear why existing facilities should not be allowed to scale under subsidies provided by the RFS. This would seem to drive lowest-cost outcomes for delivery of the scheme target.

19. Do you anticipate external organisations or consultants becoming ACPs and assisting hydrogen producers for certification?	
20. Do you anticipate any potential risks of the RFS not complementing the Net Zero Plan Stage 1: 2020-2030?	It is disappointing that the RFS does not include other renewable gases, notably biomethane, which should be incentivised to scale in order to meet the ambition of decarbonising NSW gas networks.
21. What are other Commonwealth or NSW programs that should be considered during development of the RFS?	