

#### Australian Gas Infrastructure Group

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## GreenPower

Via online submission: https://oeh.au1.gualtrics.com/jfe/form/SV\_07GrV6w6AoidjxA

To whom it may concern,

## **Renewable Gas Certification Pilot – Consultation paper**

Australian Gas Infrastructure Group (AGIG) welcomes the opportunity to make this submission to GreenPower on its Renewable Gas Certification Pilot (the Pilot).

The Pilot is an important step forward in developing a renewable gas industry in Australia as it will enable biomethane and renewable hydrogen production to be certified as zero carbon emission. We are strongly supportive of the Pilot as a key facilitator of renewable gases being purchased to displace fossil fuels and reduce emissions.

The Pilot also addresses immediate gaps we see in other proposed renewable gas certification schemes, by including biomethane in the proposed scope. This approach will set a good foundation for exploring potential opportunities to expand the Federal Government's hydrogen Guarantee of Origin scheme. Overtime we hope to see, where appropriate, further integration and alignment between the different certification schemes.

We support focusing on injecting renewable gas into gas distribution networks to displace natural gas as a priority. However, we would like to see the proposed scope expanded, ideally at the outset so that renewable gas that do not displace network gas can also be recognised under the Pilot.

We would also welcome the opportunity to explore potential participation in the Pilot, through our project Hydrogen Park South Australia (HyP SA). HyP SA was commissioned in mid-2021 and is currently Australia's largest facility producing renewable hydrogen using a Proton Exchange Membrane electrolyser. HyP SA was the first project in Australia to deliver a renewable gas blend to customers via an existing gas network and is still today delivering up to a five per cent renewable hydrogen blend into part of the Adelaide distribution network.

As HyP SA is currently in operation, it would provide a good opportunity to test the accuracy, administrative requirements and verification mechanisms associated with relevant emissions accounting methodologies and also for customers to buy certificates to match their gas use with renewable gas that is added to the network on their behalf.

Our detailed responses to the consultation questions are found in Attachment A.

#### **About AGIG**

AGIG is the largest gas distribution business in Australia, serving more than two million customers through our networks in Victoria, Queensland, South Australia, and several regional networks in New South Wales and the Northern Territory. Our transmission pipelines and storage facility in Western Australia and the Northern Territory serve a range of industrial, mining and power generation customers.

At AGIG, we are committed to sustainable gas delivery today, and tomorrow. Our Low Carbon Strategy, targets 10 per cent renewable gas in networks by no later than 2030, delivering 100 per cent



renewable gas developments from 2025, with full decarbonisation of our networks by 2040 as a stretch target and by no later than 2050.

We are now delivering on our strategy by deploying low carbon gas projects. Our projects include:

- Hydrogen Park South Australia As outlined above, a 1.25MW electrolyser to demonstrate the production of renewable hydrogen for blending with natural gas (up to 5 per cent) and supply to more than 700 existing homes in metropolitan Adelaide. HyP SA is now operational.
- Hydrogen Park Gladstone A 175kW electrolyser to demonstrate the production of renewable hydrogen for blending with natural gas (up to 10 per cent) and supply to the entire network of Gladstone, including industry. First production is expected in 2022.
- Hydrogen Park Murray Valley (HyP Murray Valley) A 10MW electrolyser to produce renewable hydrogen for blending with natural gas (up to 10 per cent) and supply the twin cities of Albury (New South Wales) and Wodonga (Victoria), with the potential to supply industry and transport sectors. Final Investment Decision on this project is expected in 2022, with first production in 2024.

Thank you for the opportunity to provide a submission on the consultation paper. Should you have any queries about the information provided in this submission please contact Drew Pearman, Head of Policy and Government Relations (<u>drew.pearman@agig.com.au</u> or 0417 544 731).

Yours sincerely,

Kristin Raman Acting Executive General Manager Customer and Strategy

# Attachment A

Co	nsultation questions	AGIG response	
Which renewable gases are included in the pilot?			
1	Do you agree with the definitions outlined above? If not, what should they be?	We agree with the definitions of biogas, biomethane and renewable hydrogen.	
2	Do you agree with an initial focus on biomethane? If not, why not?	The initial focus should be on both biomethane and renewable hydrogen as there are multiple network- connected biomethane and renewable hydrogen projects either online or under development. The focus on biomethane and renewable hydrogen as a starting point for the Pilot will facilitate timely establishment of a Renewable Gas Certification Pilot.	
		Further, the focus on biomethane and renewable hydrogen (also capturing both electrolysis using renewable electricity and using biomethane steam methane reforming) is appropriate as it addresses an immediate gap we see in other proposed renewable gas certification schemes that do not include this in the scope.	
3	Should the pilot be open to other renewable gases, if so, which and why?	The Pilot should be open to other renewable gases like Di-methyl ether and synthetic methane made using renewable hydrogen and carbon dioxide, but given the technologies and markets for these gases are relatively immature as identified in the consultation paper, other renewable gases could be explored once biomethane and renewable hydrogen certification have been established under the Pilot.	
Eli	gibility to participate in the pilot		
4	Do you agree with the above eligibility criteria? If not, why?	g) the requirement to demonstrate 'best practice compliance' may be difficult to define and suggest the following change " <u>must comply with</u> planning approvals and environmental management procedures related to production, transport, injection, and other associated activities"	
5	Are there other eligibility criteria that should be included, and what would they achieve?	No response.	
6	Which technologies and production processes should be included in the pilot?	For renewable hydrogen, hydrogen produced via grid connected electrolysis should be included in the Pilot and should be considered as an immediate priority given the multiple renewable hydrogen projects current in development that will have immediate on emissions reductions.	

Consultation questions		AGIG response
7	What factors do you consider essential when defining best practice planning compliance and environmental management?	As per question 4, we question the need for 'best practice' planning compliance and environmental management as the suggested threshold may be difficult to define and meet.
8	Do you agree that only projects that displace network gas use should be eligible to participate in the pilot? If not, why not?	While we support that projects that displace network gas use through direct injection into the gas network are a priority for the Pilot, this eligibility criteria may be unnecessarily restrictive as renewable gas production in itself would encourage emissions reductions and displace fossil fuels.
		We note that for our planned hydrogen projects, there are many planned markets for hydrogen (to supply directly to industry, and for transport as examples) as well as gas network blending and this should be recognised by the Pilot ideally at the outset.
9	Should behind the meter production and use projects without a network connection be able to participate in the pilot, and why?	We consider that behind the meter production and use projects without a network connection should also be able to participate in the Pilot either at the outset or included overtime and support further investigation into metering and other verification activities.
10	If behind the meter projects without network connection were eligible, how could metering and other verification activities be done?	No response.
11	Are there any barriers to injecting renewable gas into the network in your jurisdiction that GreenPower should be aware of for the pilot?	In terms of market barriers we note that the Australian Energy Market Commission are currently undertaking a rule change process to consider allowing distribution connected facilities in the Victorian Declared Wholesale Gas Market and the process is expected to be finalised in July 2022. <sup>1</sup>
		Outside of this, it is noteworthy that currently hydrogen has only been tested on Australian appliances for volumes up to 10 per cent. This is a consideration for projects, but is not a barrier for the Pilot. Whilst this is the current status, there is work underway to increase blending volumes, likely up to 20 per cent, consistent with projects in the United Kingdom – such as HyDeploy. <sup>2</sup> Ultimately it is likely that hydrogen-ready appliances will enable a transition to 100% hydrogen networks.
12	Do you agree with the proposed national network boundary approach and if not, why?	We agree with the proposed national network boundary approach as it provides the greatest accessibility for customers to purchase renewable gas and also consistent with how renewable electricity certificates are treated.

<sup>&</sup>lt;sup>1</sup> See: <u>https://www.aemc.gov.au/rule-changes/dwgm-distribution-connected-facilities</u> <sup>2</sup> See: <u>https://hydeploy.co.uk/</u>

Consultation questions		AGIG response
13	Do you agree with the pilot aligning eligible feedstocks with the ERF methodology?	The Pilot should not be restricted to eligible feedstocks under the Emissions Reduction Fund (ERF) methodology so the Pilot can further achieve its objectives in the displacement of fossil fuels and reduce emissions.
14	Should any other feedstocks be included? Which ones, and why?	No response.
15	Do you see any risks of unintended consequences from incentivising anaerobic digestion of waste- derived feedstocks and landfill gas capture? If so, which risks and are there any risk mitigation options?	No response.
16	Should the use of energy crops be permitted? Why or why not?	No response.
17	If energy crops were eligible, what conditions and considerations would ensure these projects still adhere to the principles of Ecological Sustainable Development?	No response.
18	Should methane produced using hydrogen methanation of the carbon dioxide in biogas be included?	The Pilot should be open to other renewable gases but note that inclusion into the Pilot could be staggered as to not delay the timely establishment of the Pilot to certify biomethane and renewable hydrogen through electrolysis using renewable electricity.
Pro	pject scope and life cycle analysis	
19	Do you agree that, for project assessment, the pilot should use the cradle to gate approach? Why or why not?	We agree the Pilot should use the cradle to the gate approach as the initial boundary across which the emissions are to be calculated as this aligns with the approach taken by the Federal Government's Hydrogen Guarantee of Origin Scheme trial.
20	Do you agree with the definition of the gate being the gas network injection point? If not, why not?	The proposed definition of the gate is appropriate if the Pilot only allows projects that displace network gas use.
21	Are there any other LCA standards or requirements that should be considered?	We will be interested in understanding the type of upstream emissions/relevant scope 3 emissions (for example transport of hydrogen production inputs) that need to be accounted for and how it is to be accounted. We note that the potential administrative burden for collecting such data might outweigh the perceived benefits, particularly in circumstances where the emissions is immaterial.

Consultation questions		AGIG response
22	Should there be different requirements for biomethane and hydrogen projects? If so, what should they be?	No response.
23	Do you agree with this approach? If not, how should fugitive emissions be treated?	We agree with excluding fugitive emissions from gas network pipelines from the project's life cycle analysis.
24	Do you agree with the proposed approach? If not, why?	We agree with the proposed approach of using Australian Carbon Credit Units (ACCU) to offset omissions and that any certificate will clearly record the use of offsets to provide full transparency to the consumer, in alignment with the hydrogen Guarantee of Origin scheme.
		We note that the Hydrogen Guarantee of Origin Scheme is exploring introducing to exclude measurement of negligible emissions which should also be considered.
25	Should other carbon offsets be permitted to offset upstream emissions?	No response.
26	Do you agree with the proposed approach? If not, why?	The proposed approach in treating baseline emissions considerations outside of the boundary of the life cycle analysis (LCA) is reasonable.
Interaction with other schemes		
27	Are there any other new schemes not mentioned here that GreenPower should be aware of?	No response.
28	What linkages between these schemes and the pilot should be considered?	The Pilot should be designed to ensure it does not duplicate but rather complement other schemes, where appropriate.
Re	cognition of RGCs by existing schemes	
29	What recognition is needed for the pilot to provide value for customers?	The value and credibility of certificates issued under the Pilot would provide value for customers.
30	What design elements of the pilot are most crucial for recognition by other programs and schemes?	It would be preferable that all design elements of the Pilot are recognised by the Hydrogen Guarantee of Origin scheme.
Transaction steps for pilot certificates		

Consultation questions		AGIG response
31	Do you agree with the proposed approaches for non- ERF and ERF projects? If not, which step should be changed and why?	We agree with the proposed approaches for non-ERF and ERF projects.
32	Do you agree that any displacement ACCUs should be surrendered before an RGC is created? If not, why not?	The displacement of ACCUs surrendered before an RGC is created seems appropriate as surrendering the ACCU at the same time as the RGC is surrendered requires tracking of ACCUs that are tied to RGCs which could make verification and auditing more complex.
33	Do you see any risks with the alternative approach of the displacement ACCU being surrendered at the same time as the RGC is surrendered?	No response.
Other pilot design elements		
34	Do you agree with the decoupled approach being applied for the pilot?	We agree with the decoupled approach being applied for the pilot as this approach aligns with the renewable electricity market and will provide the flexibility needed for renewable gas markets to be established, as well as reducing administrative complexity.
35	Please specify why you think one or the other is more suitable, and if any other options should be considered.	As mentioned in response to question 34, the decoupled approach aligns with the renewable electricity market and will provide the flexibility needed for renewable gas markets to be established, as well as reducing administrative complexity.
36	Do you agree with the proposed approach of using an existing registry? If not, why not?	We agree with the proposed approach of using an existing registry.
37	Is it important for customers to be able to access the registry and manage their own surrenders?	Customers may find this functionality useful and provides transparency in being able to access the registry and manage their own surrenders.
38	Is there a particular registry functionality you think should be included in the pilot, and why?	No response.
39	Do you agree with the proposed attributes?	We agree with the proposed attributes identified as it will provide the level of transparency that customers will find useful.
40	Are there any other attributes that should be included?	No response.

Consultation questions		AGIG response
41	Do you agree with GJ as the functional unit? If not, why?	GJ as the functional unit is an appropriate unit, given the displacement of natural gas is on an energy basis.
42	How important is it that the registry is based on GJ in addition to using this unit on the certificate?	No response.
43	Should a certificate be issued for each 1 GJ of renewable gas produced, or should certificates be issued incrementally for any volume chosen by the producer?	A standard 1 GJ per certificate basis would be appropriate.
44	Do you agree with the proposed validity period? If not, why?	We agree with the proposed validity period.
45	Are there other schemes or programs that the pilot should align with regarding the certificate validity period?	No response.
46	Which organisations should be represented on the project steering committee?	We agree with that the organisations identified should be represented on the project steering committee.
47	Do you agree with the proposed approach for auditing? If not, why not?	We agree with the proposed approach for auditing by adopting a similar auditing regime to the current GreenPower program for renewable electricity.
48	Do you agree with the proposed approach not to set price caps or minimum prices? If not, why?	We agree with the proposed approach to let the competitive market decide on a price rather than setting price caps or minimum prices.
49	What price would you expect for a renewable gas certificate?	No response.