

EnergyAustralia^{*}

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Dear Tim and Manuel

EnergyAustralia's comments on the Renewable Gas Certification Pilot - Consultation Paper led by GreenPower

EnergyAustralia is one of Australia's largest energy companies, providing gas and electricity to 2.4 million household and business customer accounts across Eastern Australia, and controlling over 5,000 MW of electricity generation across Australia's eastern states.

EnergyAustralia is working to reduce the emissions of our customers. We bring experience from the centre of the renewable energy transition and from our work with customers, large and small, including those accessing GreenPower. We hope that our experience might be useful as the Department of Planning and Environment considers what it might pursue through the Renewable Gas Certification Pilot (the Pilot), and how the Pilot and any subsequent certification might support the highest integrity decarbonisation of gas usage.

Key points

EnergyAustralia welcomes the depth of preparation and consultation associated with the Pilot. We express some caution, however, around the potential for the Pilot to be extended and developed into a permanent certification scheme.

This hesitation stems from our understanding that the most efficient and most complete path to decarbonisation is different for different gas consumption needs. The Consultation Paper rightly notes that the electrification of buildings and transport is beneficial for energy efficiency and decarbonisation, and that some industrial use cases have a continuing dependence on gaseous fuels. An all-inclusive Renewable Gas certification, however, might encourage investment in gas blending in usage cases where electrification would have delivered deeper, lower cost abatement.

GreenPower is a brand that confers integrity and quality. It evidences a measurable and material change in emissions. This standard must be maintained. Certified forms of clean energy, whether electricity or gas, must represent a genuine solution that is capable of progressively achieving net zero emissions. The certification of gas blending creates a halo effect for the resulting gas product, even if only a small share of the gas volume is green in origin, and it implies active decarbonisation that will not be true for those energy users that are better served by electrification.

Certainly, some industrial gas users, including high-heat processing and gas-fired power generation, will continue to rely on gaseous fuels. Within the technical limits of equipment, case by case, industrial gas users can be encouraged to pursue hydrogen blending as an important means of

reducing their emissions. They can evidence their climate credentials with reference to the Guarantee of Origin certification. Biomethane blending also offers decarbonisation potential, however, limited existing sources and the uncertain environmental credentials of new sources might mean that the blended share available for our gas supply pipelines remains low.

For household gas users, hydrogen blends greater than $\sim\!10\%$ are understood to require simultaneous appliance replacement in addition to the upgrade of pipework necessary to prevent embrittlement¹. Noting that the energy content of hydrogen is lower than gas, this cap implies the perpetuation of well over 90% of existing emissions for these users. For home and commercial gas users, a gas blending pathway is likely to truncate emissions reductions at this initial percentage.

Households and commercial sites are best positioned to move towards net zero emissions over time through careful, progressive electrification, with readily available and high-efficiency appliances, including heat-pump hot water units and reverse-cycle air conditioners. The growing efficiency of these units means that even if all the electricity used to power them came from gas-fired power stations, the volume of gas implicated would fall. Over the life cycle of these appliances, the emissions will continue to fall, drawing electricity as the electricity system decarbonises with the growing penetration of renewables.

Our customers, across segments and sizes, face a variety of choices as they actively decarbonise their energy use or respond to energy system changes. It will be helpful if official certifications don't legitimise sub-optimal pathways that fall short of the decarbonisation potential open to them.

We suggest that any certification of green hydrogen should be consistent with the United Nations 'Guiding Principles for Climate-Aligned Hydrogen Deployment'². These principles articulate that "Hydrogen deployment should be targeted in applications where other solutions do not currently exist. Stakeholders should provide a clear assessment to evidence that this is the case".

The Pilot, and any subsequent Renewable Gas scheme could theoretically adopt such an entry gate and require the provision of such evidence. On balance, however, our opinion is that the administrative burden of this would outweigh the merits of the certification scheme itself. Where a scheme absent the evidence of pathway optimisation would risk frustrating the most efficient path to net zero, having no scheme at all will be preferable.

Noting that the Pilot is well advanced, we hope that the Department might consider maintaining a customer size threshold as a proxy for the use cases most likely to be credibly decarbonised through gas blending. Only very large gas consumers should be deemed eligible.

We hope to continue discussions with GreenPower in support of the best possible future outcomes.

For further information please contact Anna Hancock, Head of Sustainability, at anna.hancock@energyaustralia.com.au, or Jim Salter-Duke, Leader of Customer care, at james.salter-duke@energyaustralia.com.au.

Best regards,

Anna Hancock

Head of Sustainability

¹ The CSIRO National Hydrogen Roadmap indicates that blending more than around 10% hydrogen into the gas supply may trigger a need to simultaneously replace all the appliances it powers. This view is reinforced by a report prepared for the South Australian Government by GPA Engineering, https://www.gpaeng.com.au/project/technical-and-regulatory-reviews-on-the-impact-of-the-introduction-of-hydrogen-to-australian-markets/

 $^{^2\} https://racetozero.unfccc.int/wp-content/uploads/2021/10/Hydrogen-Guiding-Principles_vFinal.pdf,\ October\ 2021/10/Hydrogen-Guiding-Principles_vFinal.pdf,\ October\ 2021/10/Hydrogen-Gu$

Responses to questions

2. Do you agree with an initial focus on biomethane? If not, why not?

Yes, an initial focus on biomethane is appropriate given that it can be used interchangeably with natural gas. In the absence of an efficiency test within the scheme design, we encourage the Department to defer the consideration of renewable hydrogen to avoid inadvertently diverting resources from electrification in usage cases where electrification is the most direct and complete decarbonisation pathway.

There will certainly be industrial use cases, typically involving high temperatures, that can be decarbonised to some nontrivial degree by blending in renewable hydrogen, to the level tolerated by the operating equipment. For these use cases, reference to the Guarantee of Origin of the hydrogen itself will provide adequate evidence of their climate credentials.

For other use cases, however, that are most readily and affordably converted to an electric equivalent, a Green Gas certification risks legitimising a less complete decarbonisation.

3. Should the pilot be open to other renewable gases, if so, which and why?

We would suggest that the pilot should be restricted to biomethane alone, and that it should not be expanded beyond its current boundary.

4. Do you agree with the above eligibility criteria? If not, why?

We broadly agree with the eligibility criteria for the purposes of the trial but have concerns about the trial being extended into a broader or more ongoing certification scheme.

Some considerations.

- Are there biogas producers that began production prior to 2020 that would increase production at the margin if given access to Certificates? If so, will their exclusion result in lower production?
- Re f), we suggest that international offset units should be eligible. All offsets permitted within the National Carbon Offset Standard administered by Climate Active should be accepted, including quality international units, acknowledging that a tonne of abatement is equivalent across jurisdictions.
- 5. Are there other eligibility criteria that should be included, and what would they achieve?

We suggest that principles protecting cultural heritage and consultation with Aboriginal and Torres Strait Islander custodians should sit alongside the Ecological Sustainable Development principles already noted.

16. Should the use of energy crops be permitted? Why or why not?

Our preference is for a certification scheme to take a conservative position on risks to ecological and biodiversity values.

19. Do you agree that, for project assessment, the pilot should use the cradle to gate approach? Why or why not?

EnergyAustralia suggests that total scope 1, 2 and 3 emissions should be used. Biomethane produces greenhouse gas emissions at its point of combustion. If these emissions are rendered invisible, a gas user might mistakenly pursue a biomethane decarbonisation solution in place of an electrification pathway, which would yield a greater total emissions reduction. A certification of this quality needs to provide full transparency and integrity to support optional decision making and avoid perverse outcomes.

23. Do you agree with this approach? If not, how should fugitive emissions be treated?

In the interests of integrity and transparency, fugitive emissions through transportation should be included within the scope of the Pilot. Trust will be enhanced if this category of emissions is itemised, or even approximated and monitored so as to reduce any perception of under reporting. The mechanism should account for gas leakage also at the user site to reduce the risk of undercounting.

25. Should other carbon offsets be permitted to offset upstream emissions?

All offsets permitted within the National Carbon Offset Standard administered by Climate Active should be accepted, including quality international units, acknowledging that a tonne of abatement is equivalent across jurisdictions.

EnergyAustralia offsets customer electricity and gas emissions at no additional cost to participating customers. Like many companies buying offsets voluntarily, we have been able to grow our impact and accommodate the costs by accessing the lower price point of CERs in addition to ACCU offsets. Our shared national objective should be to grow the reach of carbon dioxide offset offerings. With the highest possible participation in voluntary offsetting, we can expect the positive by-product of growing production and use of local, Australian offsets. We should not distort the core Climate Active voluntary certification framework by making some offsets less legitimate.

27. Are there any other new schemes not mentioned here that GreenPower should be aware of?

We understand that Climate Active might consider developing an accreditation scheme for Clean Gas. We have expressed some concerns and an initial preference that it not be progressed.

34. Do you agree with the decoupled approach being applied for the pilot?

Yes. This flexible approach will make it simpler for end-customers and will support take-up.

44. Do you agree with the proposed validity period? If not, why?

All certificates, even for pilot schemes, should have clear validity and expiration dates to avoid any future questions of integrity. A long validity (over 36 months) is preferable to no expiration.