

Victorian Government Department of Energy, Environment, and Climate Action **Submitted by email:** gas.roadmap@delwp.vic.gov.au

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Victoria's Renewable Gas Consultation Paper

AGL Energy (**AGL**) welcomes the opportunity to make a submission in response to Victoria's Renewable Gas Consultation Paper (**Consultation Paper**).

AGL is a leading integrated essential service provider, delivering 4.3 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 and have the largest renewables and storage portfolio of any ASX-listed company, having invested \$4.8 billion in renewable and firming generation over the past 20 years and added more than 2,350 MW of new generation capacity to the grid since 2003.

AGL strongly supports the Victorian government's ambition to meet its long-term ambition of net zero greenhouse gas emissions by 2050. To achieve this objective, emissions must decline across all sectors of the economy, including the natural gas sector, which currently contributes around 17 per cent of Victoria's total greenhouse gas emissions. Although this transition to a low-emissions economy brings significant challenges, with well-designed policies there is potential to promote a more productive, inclusive economy with healthy, connected communities, underpinned by affordable energy.

In our inaugural 2022 Climate Transition Action Plan (CTAP), we outlined AGL's updated ambition to become an integrated low-carbon energy leader, including:

- Targeting a full exit from coal-fired generation by the end of FY35;
- Ambition to meet customer energy demand with around 12 GW new firming and renewable assets by 2036; and,
- An initial target of 5 GW new firming and renewables by 2030.

AGL has committed to repurposing its large thermal generation sites into low carbon industrial energy hubs. Our industrial energy hub at the Loy Yang site in the Latrobe Valley will bring together renewable energy production and storage with energy-intensive industries, centred around a shared infrastructure backbone. This existing infrastructure backbone may also play a role in hydrogen and/or biomethane industry developments.

With the increased tightening of supply and demand conditions within Victoria and across the broader Eastern Australian gas markets, it has been a key priority for AGL to ensure adequate gas supplies for its customers, especially in the context of declining gas supply in the southern states with no replacement production or import facilities.

To support the transition of high emission industries to a cleaner future, in 2022 AGL acquired Energy360 Pty Ltd (Energy360). Energy360 is a leading provider of solutions for sustainable energy systems, by producing biogas through the break-down of residue organic materials in an oxygen-free environment, providing an effective renewable solution for commercial and industrial customers within agricultural, landfill, food processing and waste management industries.



AGL has also launched a pilot program, Electrify Now, which supports customers looking to switch away from natural gas appliances such as gas heating, gas hot water, and gas cooktops. This program aims to save customers money on their energy bills and also reduce their home's carbon emissions.

AGL is committed to a safe and responsible transition, for our customers and community and pursuing its decarbonisation roadmap. Within this context, gas supply continues to be critical to achieving a successful transition to net zero, particularly through flexible peaking generation to support other forms of long duration storage or clean dispatchable generation.

Key considerations of biomethane and hydrogen

In general, we agree with the use cases set out in the Consultation Paper. However, we note that the commercial and industrial (C&I) sector consists of a very broad range of different businesses that utilise natural gas in different ways and in different quantities. Given that these applications for natural gas use are fairly bespoke and, in some cases, not easily substituted, the right approach for this sector will likely consist of a range of different support measures and incentives. As such, we would caution the Victorian Government not to treat all C&I applications as the same.

We would also emphasise that the policy should focus on supporting sectors where it is currently difficult to substitute natural gas (e.g. high-heat industrial processes, such as those for cement kilns and petrochemical plants), rather than sectors where electrification is a more likely decarbonisation pathway (e.g. residential).

Policy objectives

AGL generally agrees with the key policy objectives outlined in the Consultation Paper for the proposed renewable gas policy.

We would encourage the Victorian Government to look carefully at the needs of each of the sectors affected by any proposed renewable gas policy and look to design the proposed policy (and any supporting policies) accordingly.

In our view, it is unlikely that one overall scheme will be able to meet all the key policy objectives outlined in the Consultation Paper without complementary policies.

Market-based approach

AGL supports any potential renewable gas policy being market-based to support the lowest cost outcomes, attract private sector investment, and drive innovation and efficiency. However, we need to ensure that the market incentives allow renewable gas options to compete equally with electrification options and other decarbonisation pathways to ensure that the overall key policy objectives are met, namely maintaining energy security while reducing greenhouse gas emissions and reliance on fossil fuel for the least cost.

We also consider that different sectors may require different approaches. For example, a combination of tax incentives and/or renewable gas production credits may be good for businesses, while a certificate-style scheme may be best suited to incentivise other large gas users, including retailers of small and residential customers.

Types of policy mechanisms

The Consultation Paper has clearly identified the different sectors affected by any potential renewable gas policy and the potential use cases for renewable gases. AGL broadly agrees with the transitional pathways identified for each sector.

However, given the differing needs of each sector, it is our view that the appropriate policy mechanism for each sector may be different. For example:



- a certificate-style gas RET may be appropriate for residential customers. However, an alternate approach could include a simple levy or charge that could be calculated according to customer usage and recovered by retailers through gas bills;
- tax incentives and production credits may be more appropriate for business, commercial, and industrial customers, which would incentivise the larger capital expenditure programs that may be required to accommodate electrification by switching to renewable gas as an input;
- bespoke treatment may be required for safeguard liable facilities, including consideration of any renewable fuel scheme incentives within the safeguard mechanism framework; and
- impacts on Gas Powered Generation (GPG) should be considered as annual usage is highly variable and gas generation may be required in the future to replace the NEM's aging coal fleet.

Managing consumer impacts

It is important that the cost implications of any renewable gas policy are appropriately managed.

To assist with this, we would strongly encourage the Victorian Government to provide a cap for any potential scheme's costs to limit Victorian gas customers' exposure. In our view, if a certificate-style scheme is progressed, a shortfall price for certificates would be critical to provide some backstop that scheme costs will not put a disproportionate burden on Victorian gas users in the event that renewable gas production does not scale as forecasted by the Victorian Government. This is particularly important given recent gas commodity price increases and forecast high prices into the future.

The Victorian Government will also need to manage the diverse and complex impacts of any potential renewable gas policy on different groups of customers. One option that could assist with this is to look to redistribute some of the scheme's revenue to prevent unequal impacts on certain customers (i.e. supporting vulnerable customers, renters, hard to abate sectors and small-to-medium enterprises (SME's) with unclear gas substitution pathways).

Target design

AGL's view is that any target needs to be ambitious enough to drive investment while also being achievable.

We broadly agree with the preliminary view put forward in the Consultation Paper. In particular, the target should be set in fixed terms (e.g., PJ) rather than a moving decarbonisation-linked target. We also agree that any target needs to be expressed in energy (rather than volume) terms, primarily because biomethane and natural gas have a much higher energy content than hydrogen at the same volume.

Certification and administration

In AGL's view, any Victorian-based scheme should align with the Guarantee of Origin Scheme (GO scheme), as this will help minimise the compliance costs and the administrative burden on participants.

In aligning with the GO scheme, the Victorian Government should look to align with the definitions of renewable gases as laid out in the GO Scheme, currently being developed by the federal government. It should also rely on the GO scheme's registry and participants should not need to provide any additional evidence beyond the records held in that registry. The Victorian Government should likewise establish data-sharing arrangements with other scheme administrators to ensure the robustness of data.

AGL also encourages the Victorian Government to consider looking beyond the Victorian Energy Upgrades (VEU) Program when considering the appropriate framework for any potential renewable gas scheme. While the VEU has been effective in achieving its purpose, the continual phase-out of older activities and introduction of newer activities has caused some issues in recent times.



We also think this is a good opportunity for the Victorian Government to look and see if it can rationalise and streamline the administration of some of its schemes with a view to making them more efficient to administer in the future.

Interaction with the Commonwealth Safeguard Mechanism

While AGL is not a liable entity under the Safeguard Mechanism, we consider that there may be a good rationale to resist placing additional cost pressures on safeguard-liable entities given they already have a market-based mechanism aimed at reducing greenhouse gas emissions.

It is also worth noting that the Safeguard may eventually include more entities, including smaller industrial emitters, so any future potential renewable gas scheme may need to accommodate this.

What Victoria can learn from other jurisdictions

Some of the key learnings that can be taken from the policies being implemented in other jurisdictions including NSW and WA include the following:

- Ensure that the target is aspirational but achievable.
- For certificate-schemes, have a penalty price that will cap the scheme's costs.
- Support gas substitution efforts elsewhere in the economy more directly.
- Ensure any incentives are placed on the parties in the best position to act.

AGL has provided more detailed responses to the Consultation Paper questions below in Appendix A.

Should you have any questions in relation to this submission, please contact Leilani Kuhn (Policy Manager) on 03 8633 6934 or myself on 0409 533 584.

Yours sincerely,



Chris Streets GM Policy & Markets Regulation, AGL Energy



Appendix A – AGL's Responses to the Consultation Paper

No.	Question	AGL Response
2.1 Key considerations of biomethane and hydrogen		
2.1(a)	Do you agree with the use cases this paper has set out for biomethane and renewable hydrogen?	In general, we agree with the use cases set out in the Consultation Paper. However, we note that the C&I sectors are fairly bespoke, and the approach needed will depend on their individual circumstances. As such, caution should be taken to not treat all C&I applications as the same.
		We would also emphasise that the policy should focus on the sectors where it is currently difficult to electrify. This will help ensure that the focus remains on electrification in the residential space given it is the quickest and easiest way to decarbonise in that sector.
2.1(b)	Are there any other use cases that should be incentivised through a policy mechanism?	Another potential use case that could be included is the export industry. Although the focus is primarily on domestic use, any incentives should consider that, in most cases, hydrogen projects require scale and long-term supply agreements. As such, it would seem likely that they would be tied, at least in part, to international export.
		If the export sector is out of scope, we consider that it is worth considering how hydrogen incentives would support a purely domestic hydrogen scheme.
3.1 Polic	y objectives	
3.1(a)	Regarding specific technology development, do you think the objective should be to: i. consider all renewable gases neutrally (e.g., the lowest cost is supported); or ii. target specific technologies (e.g.,	In AGL's opinion, we consider that all renewable gases should be considered neutrally, with the lowest cost supported. This is particularly important in the C&I sector, where incentives should support the lowest-cost outcome, allowing innovation to drive technology-neutral outcomes. Having said that, we also consider that there may be some utility in having specific targets for specific sectors at some point in the future
	renewable hydrogen)? Consider this on the basis of commercial readiness, emissions and energy intensity.	Ultimately, the key objectives of the policy should be to enable supply and bridge the gap between fossil gas and biomethane/green hydrogen at the lowest cost.
3.2 Market-based approach		
3.2(a)	Should a renewable gas policy in Victoria be government-funded or market-based? Why?	AGL supports any potential renewable gas policy being market- based, especially for the residential sector. However, we need to ensure that the market incentives allow renewable gas options to compete equally with electrification options and other decarbonisation pathways to ensure that the overall objectives are



		 met (i.e. energy security and reducing emissions and reliance on fossil fuel for the least cost) We also consider that different sectors may require different approaches. For example, a combination of tax incentives and/or production credits may be good for businesses, while a certificate-style scheme is best suited for the residential sector. Please see our response to question 3.3 below for further details.
3.2(b)	Have we captured the advantages and disadvantages of a market- based approach? Are there any missing?	 Some additional advantages of a market-based approach include that market-based approaches: generally provide longer-term certainty for investment. can be more flexible and allow the market to take multiple approaches. can be more effective and more cost-efficient. Some additional disadvantages of a market-based approach include that: if there is a lack of regulation/policy drivers, the market may not operate efficiently. it can impose costs on end users, and sometimes in an unequal way. It is important that complementary policies are considered to avoid adverse impacts.
3.3 Туре	s of policy mechanisms	
3.3(a)	Have we captured the potential policy options (and their advantages and disadvantages) to drive the uptake of renewable gas?	A further policy mechanism not captured in the Consultation Paper is tax incentives or production credits, which we believe could be a good option for the C&I and business sectors. At the small customer scale, instead of a certificate scheme, government could implement a small charge or levy on customers to fund renewable gas projects that is based on customer usage.
3.3(b)	Which policy mechanism would be best suited to deploy renewable gas in Victoria? Why?	In the absence of direct government support, AGL considers that generally a certificate-style scheme may be best suited to support renewable gas in Victoria, where certificates are purchased from renewable gas producers and surrendered according to overall gas load. This would have the effect of providing some certainty of demand for renewable gas projects in the future. Alternately, a simpler form of this mechanism may be a small levy or charge that is recovered by retailers from customers based on their gas usage; however, the challenge would be that redistribution of this charge may not provide as much certainty to renewable gas producers. AGL would also recommend that self-contracting users also be captured under the obligation. Some of the largest industrial energy users do not have a contract with an energy retailer and purchase direct from the wholesale market. If these parties and their load were not part of the obligation, then some of Victoria's large emitters would be exempt from this emissions reduction effort



		which AGL believes would be contradictory to the intended purpose of the scheme.		
		We would also strongly encourage that an administered price for certificates is a feature of the scheme. In our view, a shortfall price is critical to provide some backstop that scheme costs will not put a disproportionate burden on VIC gas users in the event that renewable gas production does not scale as forecast by the VIC Government. This is particularly important given recent gas commodity price increases and forecast high prices into the future.		
		It is also equally important that the target is set at an appropriate level, which can be challenging as it needs to be ambitious enough to drive investment while also being attainable.		
		It would also be useful if the revenue from the scheme was put into specific policies and programs that support scheme objectives and drive more equal outcomes.		
		Finally, we consider that different sectors may require different approaches. For example, businesses that require significant capital investment to transition to renewable gas use could perhaps benefit from tax incentives or production credits, whereas small customers who are more likely to have an electrification pathway may be best covered by a certificate scheme with liability on retailers and other large gas users.		
3.3(c)	What are the critical factors or policy design elements that are needed for successful project investment?	Some of the critical factors that are needed for successful project investment in AGL's opinion include confidence, bankability, delivery time, transparency, certainty, measurable and attainable targets, and clear scheme policy/governance frameworks.		
3.4 Managing consumer impacts				
3.4(a)	Do you agree with the energy consumer types most impacted above? Are any user types, or potential impacts, missing?	Yes. However, we would also include body corporates/apartments.		
3.4(b)	What potential consequences should we consider in analysing the impact of potential policy costs?	As flagged in the Consultation Paper, caution should be exercised when considering policy options that could increase consumer energy bills. Especially given the gas price increases already being experienced by consumers.		
		Also, the number of gas users is likely to shrink as consumers seek to electrify their homes and businesses, which will result in a diminishing pool of users still connected to the gas network. As outlined in the Consultation Paper, those still connected could face even higher gas bills, with the remaining gas users likely to comprise low-income households, households experiencing hardship, renters, businesses and industries that cannot electrify.		
		As such, it is important that the policy provides optionality, allowing for the lowest-cost decarbonisation pathway to be taken. It is also		



		 important that the government considers providing some further support to the remaining gas users to help ease the cost burden. We also submit that the policy should support electrification and encourage customers to move away from gas where possible. For example, if the liable entity is a retailer, perhaps there could be some sort of policy design where retailers are incentivised to electrify residential customers rather than just passing through scheme costs. Some consideration should also be given to the potential increases in electricity costs if input costs for gas generators are increased because of a scheme. Although the intention of a renewable gas scheme is to reduce reliance on the use of fossil gas, gas generation may be critical for system reliability and security
		opoolary as violona transitions away norr thermal coal generation.
3.4(c)	What are the best support policies for the different energy consumer types?	AGL considers there to be merit in considering the different types of customers and use cases individually as each sector will most likely need different supporting policies because of the potential adverse impacts of the policy.
		The different customer sectors include:
		 Residential Small business Commercial Large industrial GPG
		Some supporting policies could include direct subsidies for low- income households, investment properties, and body corporates to install energy-efficient appliances and/or help customers electrify by replacing gas cooking, gas water, and gas HVAC appliances.
		Businesses could be supported through either direct funding or tax incentives to retrofit existing gas appliances with electric options, or by supporting capital investment to support biomethane and/or hydrogen applications where possible.
		Large commercial and industrial customers could be supported by initiatives that support fuel switching such as government-funded projects or targeted subsidies for specific sectors and/or businesses.
		Gas-powered generation should not be disincentivised given its significant benefit in supporting the replacement of more emissions-intensive coal generation over time.
3.5 Target design		
3 5(2)	Have we captured the relevant	Satting a target for the renewable gas policy will be challenging. In
5.5(a)	considerations for target design? If not, what aspects are missing?	AGL's view, the target needs to be ambitious enough to drive investment, while also being achievable.



		We also believe that the target should be set in TJ or PJ terms rather than a moving decarbonisation-linked target given that the latter will change and be challenging to measure. Furthermore, we agree that any target needs to be expressed in energy (rather than volume) terms. As stated above at 3.3(b), having an appropriate scheme penalty price or overall scheme price cap is also important to prevent undue burden on liable entities and customers. It is also important that the methodology for the target is clear.
3.5(b)	 What are your views on: i. the final target year and scheme duration? ii. target levels, including in intervening years? iii. target design? iv. target basis, including whether the target should be based only on distribution - connected sales or include transmission (i.e. Victoria-wide) sales? 	If there is a certificate-based scheme, there would need to be annual targets with an annual surrender of certificates, allowing for some banking and borrowing. As above, the target should be set in TJ or PJ terms rather than a moving decarbonisation-linked target, but consideration will need to be given to whether the annual targets should be fixed or tied to overall system demand. If a fixed target is maintained regardless of fluctuations in total gas demand, consideration should be how banking, borrowing, and administrative pricing could support overall scheme efficiency. Another issue for consideration is whether the targets should be linear towards a final target or ramp up over time. In our view there is merit to both approaches, but a fixed target may result in a heavier reliance on borrowing and/or shortfall pricing in the early stages.
3.6 Hyc	Irogen sub-target	
3.6(a)	Have we captured the issues, and the advantages and disadvantages, of including a renewable hydrogen sub-target? If not, what is missing?	
3.6(b)	Should there be a renewable hydrogen sub-target in any policy design?	AGL does not believe that there should be a hydrogen sub-target. We support the lowest-cost approach.
3.6(c)	Does hydrogen have a greater role in the decarbonisation of the gas network following the announcement of recent Australian and international policies (e.g., the Hydrogen Headstart program and United States Inflation Reduction Act)?	AGL believes that hydrogen will have a role to play in Australia's and the international decarbonisation journey, in particular to replace high heat applications currently provided by the combustion of fossil fuels and also for export. For this reason, the Australian Government along with many other governments internationally are investing in the future of hydrogen. However, the scope of that role still remains unclear. In the short term, the role of hydrogen in the decarbonisation of the gas network is challenging due to high costs and the inability to use hydrogen with the same infrastructure and appliances at high



		concentrations. In our view, biomethane provides a much more promising short-term solution to substitute fossil gas.	
3.7 Proje	ect eligibility	1	
3.7(a)	Have we captured all the potential end uses of renewable gases?	One other potential end-use of renewable gases is exportation.	
3.7(b)	Have we captured the advantages and disadvantages of broad project eligibility?		
3.7(c)	Should any Victorian renewable gas policy allow behind-the-meter, transport and/or electricity firming projects to be eligible?	Yes, we are generally supportive of the scheme extending to all renewable gas that is being produced if it is displacing existing fossil gas or replacing other energy sources. Biomethane, in particular, may often be utilised behind-the-meter, and this use case should be encouraged. Consideration should also be given to the merit in expanding the scheme to include a broader range of products and technologies such as e-methane (synthetic methane). While some care should be taken to not incentivise renewable gases for applications where electrification is a more cost-effective option, this may not be clear in the case of heavy transport and some specific use cases. This may point towards a scheme that incentivises production regardless of end-use.	
3.8 Bene	3.8 Benefits of a policy mechanism		
3.8(a)	Have we captured the co-benefits of a renewable gas policy mechanism? i. What is missing or needs to be changed?		
3.9 Barri	ers to increasing the uptake of renev	vable gas	
3.9(a)	Have we captured the barriers to increasing the uptake of renewable gas? What is missing or needs to be changed?	 Some additional barriers AGL would add include: Lack of confidence in the supply and use of renewable gases. Challenges regarding connecting biomethane projects to existing gas distribution infrastructure. 	
3.10 Certification and administration			
3.10(a)	Have we captured the key certification and administration issues?	AGL encourages the Victorian Government to consider looking beyond the VEU Program when considering the appropriate framework for any potential renewable gas scheme. While the VEU has been effective in achieving its purpose, the continual phase-out of older activities and introduction of newer activities has caused some issues in recent times.	



		We also think this is a good opportunity for the Victorian Government to look and see if it can rationalise and streamline the administration of some of its schemes with a view to making them more efficient to administer in the future.	
3.10(b)	What options exist for a Victorian- based scheme for renewable gas production and how could this align with and/or complement the Guarantee of Origin scheme once legislated?	In AGL's view, any Victorian-based scheme should align with the Guarantee of Origin Scheme (GO scheme), as this will help minimise the compliance costs and the administrative burden on participants.	
		In aligning with the GO scheme, the Victorian Government should look to adopt the definitions of renewable gases as laid out in the GO Scheme, currently being developed by the federal government. It should also rely on the GO scheme's registry and participants should not need to provide any additional evidence beyond the records held in that registry.	
		The Victorian Government should also establish data-sharing arrangements with other scheme administrators to ensure the robustness of data.	
5.1 Austr	alian policies and schemes		
5.1(a)	Do you think measures taken in other jurisdictions are an effective way of increasing the uptake of renewable gas? If so, what can Victoria learn from these other jurisdictions?	Some of the key learnings that can be taken from the policies being implemented in other jurisdictions like NSW and WA include to:	
		 ensure that the target is reasonable; have a penalty price that can limit the scheme's costs; support gas substitution efforts elsewhere in the economy more directly; and ensure any incentives are placed on the parties in the best position to act. 	
5.2 Intera	action with the Commonwealth Safeg	juard Mechanism	
5.2(a)	Should a Victorian renewable gas target and/or certificate be additional to an Australian Carbon Credit Units (or the proposed new Safeguard Mechanism Credits)?	No, in AGL's opinion, the government should consider the incentives already on safeguard liable facilities and take care not to impose additional costs and effort on these customers.	
		The Victorian Government needs to carefully consider the interaction of any renewable gas scheme with the ACCU Scheme and federal Safeguard Mechanism to ensure additionality of certificates and minimise risks of double counting.	
		Landfill gas projects, for example, are already incentivised through the ACCU Scheme and currently make up a significant portion of ACCU issuances. Concerns have been raised in the past around the generous issuance of ACCUs for landfill gas projects, with the Independent Review of Australian Carbon Credit Units (ACCUs), led by Professor Ian Chubb, recommending that Landfill gas projects should earn fewer ACCUs.	



5.2(b)	To what extent would, for current gas distribution companies, the Safeguard Mechanism create an incentive and an incentive to implement renewable gas?	There is definitely an incentive to move away from fossil gas under the Safeguard Mechanism. Although for many facilities this will be electrification, for some the right pathway will be renewable gas.
5.2(c)	Is it likely that any Victorian Safeguard-regulated company would develop renewable gas production projects to meet their Safeguard obligations? How might a Victorian renewable gas scheme assist in this regard?	Given that AGL is not a Safeguard-regulated company, we are unable to comment on this. However, when would encourage the Victorian Government to speak directly to the Victorian Safeguard- regulated companies.
5.3 Victo	rian water corporations: Renewable	gas opportunities?
5.3(a)	What opportunities are there for water corporations to enhance their biogas production in order to fulfill their, and Victoria's net zero obligations (both for onsite and offsite use)?	
5.3(b)	What are the opportunities and challenges water corporations could encounter when transitioning from producing biogas to biomethane?	
5.3(c)	What opportunities and challenges are there for water corporations to consider when investing in renewable hydrogen projects?	
5.3(d)	All things considered, what is the current strategic focus for water corporations: biogas, biomethane or renewable hydrogen?	
5.4 United States Inflation Reduction Act		
5.4(a)	What aspects of the Inflation Reduction Act will have the largest impact on Victoria's energy transition?	The Victorian Government should think carefully when developing the renewable gas policy about how they can make the investment environment for renewable gas attractive to foreign investors. One potential way is through the introduction of clear targets.
5.4(b)	How can Victoria capitalise on and respond to, global clean energy investment, such as the Inflation Reduction Act and the Compact?	