APA submission

Energy Officials' Consultation Paper

Extending the national gas regulatory framework to hydrogen blends & renewable gases

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Mr Sean Sullivan
Deputy Secretary
Department of Industry, Science, Energy and Resources

Lodged by email: renewablegas@industry.gov.au

19 May 2022

RE: APA Submission to the Energy Officials' Consultation Paper: Extending the national gas regulatory framework to hydrogen blends and renewable gases

Dear Mr Sullivan,

Thank you for the opportunity to comment on the Energy Officials' March 2022 Consultation Paper into the changes necessary to extend the national gas regulatory framework to accommodate hydrogen blends and renewable gases (Consultation Paper). We appreciate officials' ongoing engagement in relation to these issues.

APA is an ASX listed owner, operator, and developer of energy infrastructure assets across Australia. Through a diverse portfolio of assets, we provide energy to customers in every state and territory on mainland Australia. As well as an extensive network of natural gas pipelines, we own or have interests in gas storage and generation facilities, electricity transmission networks, and over $750 million in renewable generation.

APA fully supports the development of a hydrogen industry in Australia and we are investing in a range of projects that have the potential to support Australia's transition to a low-carbon future. We therefore support bringing hydrogen blends and renewable gases within the regulatory framework. Doing so will provide regulatory certainty for trials currently underway and support the development of renewable gas industries in Australia.

However, we do not support Energy Officials' revised approach for bringing hydrogen and renewable gases within the regulatory framework. This is because Energy Officials propose applying the regulatory framework to new hydrogen pipelines, without adequate consideration of the risk to investment or whether doing so is in the long-term interests of customers.

Our concerns with Energy Officials' proposals, as well a potential way forward, are outlined in our submission below. If you wish to discuss our submission in further detail, please contact John Skinner on 02 9693 0009 or john.skinner2@apa.com.au.

Regards,

Peter Bolding
General Manager
Economic Regulation & Policy

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1 Executive Summary

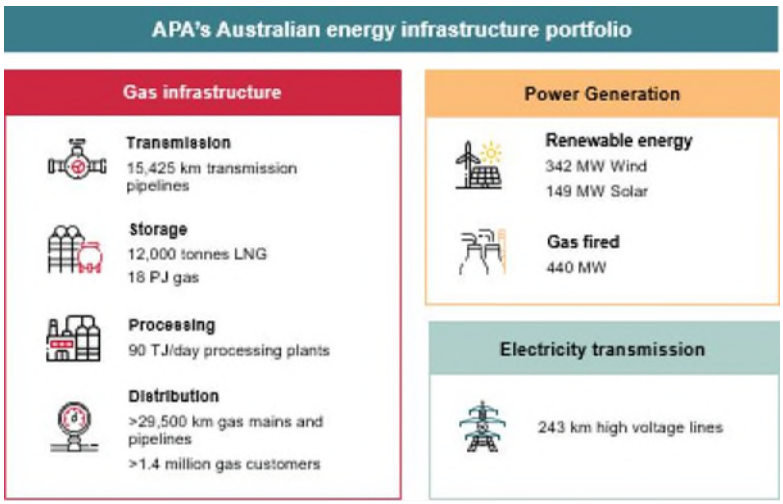
Key points

- APA supports bringing hydrogen blends and renewable gases within the regulatory framework.
- However, we do not support applying the regulatory framework to new hydrogen pipeline investment without adequate consideration of the risk to investment or whether doing so is in the long-term interests of customers.
- The hydrogen industry is in its infancy. There is no clear rationale why hydrogen pipelines and associated infrastructure should be subject to economic regulation in the early days of industry development.
- Regulation, or the threat of regulation, increases investment risk, and could lead to hydrogen projects being delayed, reduced in size, or abandoned altogether.
- We maintain the view that a more gradual approach to the regulation of the hydrogen industry is appropriate. This is more consistent with the European Commission's proposed approach, which recognises that significant regulatory flexibility will be required until at least 2031 while the hydrogen industry ramps up.

APA is a leading Australian Securities Exchange (ASX) listed energy infrastructure business. Consistent with our purpose to strengthen communities through responsible energy, our diverse portfolio of energy infrastructure delivers energy to customers in every state and territory on mainland Australia.

Our 15,000 kilometres of natural gas pipelines connect sources of supply and markets across mainland Australia. We operate and maintain networks connecting 1.4 million Australian homes and businesses to the benefits of natural gas. And we own or have storage facilities, gas-fired power stations.

Figure 1



Our investments include over $750 million in renewable generation, making APA one of the largest renewables investors in Australia. Our high voltage electricity transmission connects Victoria with South Australia and New South Wales with Queensland.

APA is supporting the transition to a lower carbon future. Our ambition is to achieve net zero

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operations emissions by 2050. Through our Pathfinder Program, we are investing in hydrogen projects and other technologies such as batteries and microgrids, which can support a lower carbon future.

For example, we are currently investigating the viability of converting a section of our Parmelia Gas Pipeline into a 100 per cent green hydrogen service, potentially making it Australia's first 100 per cent hydrogen ready natural gas transmission pipeline. We have a proposal before the Australian Energy Regulator to test Victoria's high pressure gas transmission system to safely blend hydrogen. And we're also participating in a number of feasibility projects involving both green and blue hydrogen.

We therefore support bringing hydrogen blends and renewable gases (natural gas equivalents, or NGEs) within the regulatory framework. Doing so will resolve any ambiguity about whether hydrogen blends and renewable gases fit within the regulatory framework and will provide regulator certainty for various trials currently underway.

However, we do not support Energy Officials' proposed approach, set out in the Consultation Paper, for bringing NGEs within the national framework. This is because Energy Officials propose to do so by applying the natural gas regulatory framework to new hydrogen pipeline investment, without adequate consideration of the risk to investment or whether doing so is in the long-term interests of customers.

The hydrogen industry is very much in its infancy. As explained in our submission below, there is no clear rationale why hydrogen pipelines and associated infrastructure should be subject to economic regulation in the early days of industry development:

- There is currently no evidence that the factors which gave rise to the risk of market failure in the infrastructure market for natural gas pipelines will exist in the market for hydrogen and renewable gas pipelines.
- Regulation, or the threat of regulation, increases investment risk, and could lead to hydrogen projects being delayed, reduced in size, or abandoned altogether. Given the decarbonisation challenge that lies ahead for the Australian economy, these are not insignificant risks. It is not clear that Energy Officials have carefully considered the impact of economic regulation on investment in the hydrogen and renewable gases industry.
- A majority of stakeholders who made submissions to Energy Officials' Initial Consultation Paper did not support extending economic regulation to other gas products (OGPs) such as hydrogen.

For these reasons, we maintain the view we expressed in our November 2021 submission to the Initial Consultation Paper that a more gradual approach to the regulation of the emerging hydrogen industry is appropriate. Such an approach would be more consistent with the European Commission's proposed approach, which recognises that significant regulatory flexibility will be required until at least 2031 while the hydrogen industry ramps up.

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Such an approach could be achieved by:

- Bringing NGEs within the national gas framework from day one. This will provide regulatory certainty for trial projects and support the development of the market for renewable gases
- Establishing regulatory principles that set out the type of network regulation that could apply in future, and under what circumstances
- Market monitoring of the emerging renewable gas industry to inform a flexible regulatory approach
- Providing new hydrogen pipelines with broad exemptions from the regulatory framework until circumstances dictate that economic regulation should apply.

Our submission to the Consultation Paper is structured as follows:

- PART A contains the key issues we wish to raise in response to the Consultation Paper
- PART B contains answers to the questions for stakeholders

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2 PART A – Summary of key issues

2.1 Support for hydrogen blends and renewable gases

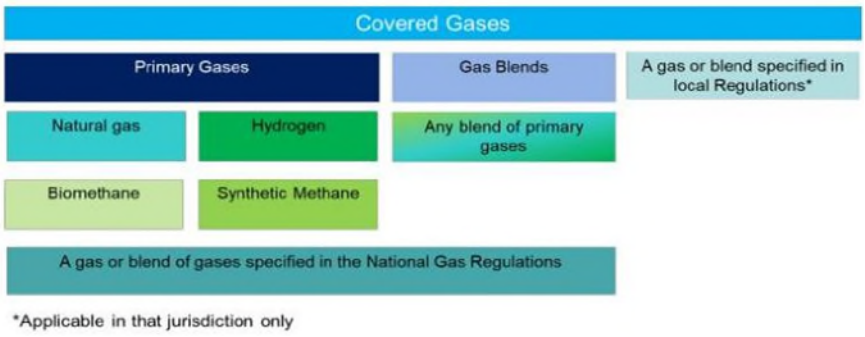
In response to Energy Ministers' October 2021 Consultation Paper (Initial Consultation Paper), APA, along with most other stakeholders, supported extending the national gas framework to NGEs such as hydrogen blends and renewable gases. APA supported this approach to resolve any ambiguity about whether hydrogen blends and renewable gases fit within the regulatory framework. Accommodating NGEs within the regulatory framework will ensure that various trials currently underway or in development can proceed with regulatory certainty.

APA maintains its support for bringing hydrogen blends and renewable gases within the regulatory framework. Given that natural gas pipelines are regulated under the natural gas framework, it seems appropriate to regulate NGEs under the same set of regulatory arrangements.

However, we do not support Energy Ministers' revised approach, outlined in the Consultation Paper, for bringing NGEs within the national framework.

In August 2021, Energy Ministers agreed that the proposed reforms should initially focus on hydrogen blends and renewable gases that can be used in existing natural gas appliances.[1] Energy Officials' revised approach goes beyond the scope of Energy Ministers' original objective. This is because Energy Officials propose bringing hydrogen and renewable gases (as opposed to just hydrogen blends and renewable gases) within the national gas framework (see Figure 2).

Figure 2: Revised scope of the NGL



Source: Energy Ministers' Information Session, 1 April 2022

In this submission we explain why we do not consider that bringing hydrogen and renewable gases within the scope of the NGL, in the manner proposed, is the appropriate way to bring blends within the national gas framework.

1 Energy Officials' Information Sheet: *Extending the national gas regulatory framework to hydrogen blends and renewable gases*

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2.2 Why do we need regulation?

Before commenting on Energy Officials' proposal to bring hydrogen and renewable gases within the scope of the National Gas Law, it is useful to consider why regulation is imposed in the first place.

It is clearly preferable to avoid regulation wherever possible. Any policy intervention in the emerging hydrogen and renewable gases market should therefore target a clearly identified and existing set of problems.[2]

In the case of infrastructure assets, regulation is generally applied when there is evidence of market failure, due to a lack of competition and misuse of market power. For services provided by means of natural monopoly infrastructure, market failure could be demonstrated by a refusal to grant third party access or monopoly pricing. Both types of market failure could be evidence of misuse of market power on the part of the monopoly infrastructure owner.

The Productivity Commission has also suggested that there must be an *enduring* lack of effective competition, due to the presence of natural monopoly, to justify regulation (see Box 1).[3]

Box 1

In sum: under what circumstances might access regulation be warranted?

A market failure occurs when there is an enduring lack of effective competition, due to natural monopoly, in markets for infrastructure services. In these circumstances, access regulation might be warranted where the infrastructure service provider's market power is not constrained by the existence of substitutes, countervailing power or the threat of entry.

Source: Productivity Commission, 2013

The national gas access regime was established given concerns about market failure in the market for natural gas infrastructure services. The regime sets out a national framework for third party access to gas pipelines that prevents abuse of monopoly power and promotes a competitive market for natural gas in which customers may choose suppliers, including producers, retailers and traders.[4]

The National Gas Law we have today was enacted following a long period of reform starting with the Hilmer Review. The purpose of the National Gas Law is to establish a framework to

2 Productivity Commission, *Review of the Gas Access Regime,* Final Report, p87, 2004
3 Productivity Commission, *National Access Regime,* Inquiry Report, p76, October 2013
4 Gas Pipelines Access (South Australia) Act 1997.

ensure the efficient operation of pipeline services, efficient investments, and the effective regulation of gas networks.[5]

Central to the National Gas Law is the National Gas Objective, which is an economic concept designed to promote the long-term interests of consumers. The Explanatory Memorandum to the NGL explained that through the promotion of an economic efficiency objective in access to pipeline services, competition will be promoted in upstream and downstream markets.[6]

2.3 Is there a clear rationale for regulating the hydrogen and renewable gas industries?

The national gas framework was established when gas infrastructure was decades old and there were many producers and customers of natural gas. It was argued by policy makers that natural gas transmission pipelines and distribution networks should be subject to a national access regime given:

- gas pipelines and distribution exhibit natural monopoly characteristics, such as high fixed costs, low marginal costs and markets that can be served at a lower cost by having one supplier rather than two; and
- there are weak constraints on their use of monopoly power, such as substitute goods or services, access seekers with countervailing power, and the threat of entry from competitors.

There is currently no evidence that the factors which gave rise to the risk of market failure in the infrastructure market for natural gas pipelines will exist in the potential market for hydrogen and renewable gas pipelines.

Despite this, Energy Officials are proposing to bring hydrogen and renewable gases within scope of the national gas framework on the basis that there might be market failure in the future. In the Consultation Paper, Energy officials said:[7]

> *...it is clear that if Energy Ministers wait until there is 'evidence' of a market failure, it could stymie the development of a competitive and cost-efficient hydrogen and renewable gas industry. It could also have a range of other adverse effects on economic efficiency, market participants and consumers.*

APA does not support the assertion made by Energy Officials that a nascent industry needs to be regulated. A decision to subject an entire industry to access and price regulation should be based on more than a possibility that a pipeline could exercise market power. Making public policy without evidence of market failure is contrary to best practice.

Furthermore, Energy Officials appear not to have considered in sufficient detail two other important issues related to whether economic regulation should be imposed:

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5 National Gas (South Australia) Bill, Explanatory Memorandum

6 National Gas (South Australia) Bill, Explanatory Memorandum

7 Energy Ministers, Consultation Paper - Extending the national gas regulatory framework to hydrogen and renewable gases and blends, 31 March 2022, p56

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1. **Whether the provider of pipeline services is constrained from exercising its market power**

Even though an infrastructure provider might be in a monopoly position, there are often constraints on its ability to exercise that market power. If those constraints exist, regulation should not be imposed.

In the emerging hydrogen industry, there are many reasons why hydrogen and renewable gas pipelines are likely to be constrained in their ability to exercise market power:

- the cost of hydrogen and renewable gases mean they are currently uncompetitive compared to other energy sources. This means there will be vigorous competition on price to secure customers and ensure that new projects are able to proceed
- compared to gas producers, who were geologically constrained as to the source of their gas, hydrogen producers have far more discretion about where to locate their electrolyser (with access to water being one of the few constraints).

In its November 2021 Information Paper *Regulating gas pipelines under uncertainty,* the AER acknowledged that effective competition exists when the market power of suppliers is constrained. The AER stated:[8]

> *If electricity becomes more competitive against natural gas, and switching costs become immaterial, gas network services may no longer have substantial market power or the incentive to charge monopoly prices absent regulation. The threat of a natural gas substitute, such as electricity or other types of primary energy used for distributed electricity generation, may exert sufficient competitive constraints on the price of gas pipeline services in the future.*

APA is already witnessing inter-energy competition, such as competition between natural gas, diesel, renewables and batteries, in various situations:

- in competitive tender processes for new industrial customers, such as large mines, who now have many options for their energy supply, beyond just natural gas
- when large customers come to the end of contract and look for new ways to produce their energy.

APA's Gruyere Microgrid in WA is a good example of where new technologies are competing with gas to provide energy solutions. The Gruyere Gold Mine in Western Australia will soon source much of its energy from a 13MW solar farm backed up by a 4.4MW battery and gas-powered generation.[9] This trend is expected to continue, given the falling cost of renewables and rapid improvements in the technology to support them.

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8 AER, *Information Paper, Regulating Gas Pipelines Under Uncertainty,* November 2021, p61

9 APA Media Release, *APA Makes First Hybrid Energy Microgrid Investment,* 8 December 2020

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2. **Whether the benefits of economic regulation outweigh the risks**

As the ACCC has previously stated, it is not possible to design access regulation that avoids distorting incentives for infrastructure investment.[10] It is therefore important to understand the potential impact of regulation on the development of the hydrogen industry.

The decision to invest in a pipeline depends on an investment's risk profile and expected return. The greater the risk associated with a project, the higher the return that is likely to be required.

The risk associated with an investment can never be known with certainty, and there are many factors that influence the riskiness of a project, including potential cost overruns, uncertain market growth, and technology changes. The regulatory risk associated with pipeline projects is another key risk that must be considered.

The Productivity Commission has previously identified three key regulatory risks, which could each have a negative impact on investment in the hydrogen industry:[11]

- **regulatory error –** given the information asymmetry between the Regulatory and infrastructure owner, mistakes will inevitably be made in applying regulation, potentially over or under compensating service providers. Both type of regulatory error will distort investment. Given the hydrogen industry is in the very early stages of development, under-compensating service providers could have a very detrimental impact on investment.
- **regulatory risk –** uncertainty about how regulation is applied, and the potential for regulators to overregulate, increases the riskiness of investment. The dramatic changes to the national gas regulatory framework over the past five years, and uncertainty about the Regulator will use its expanded powers under changes to the gas pipeline regime, will increase regulatory risk associated with pipeline investment.
- **asymmetric truncation –** there is a risk that above-normal returns in new hydrogen pipelines will be viewed by the Regulator as evidence of monopolistic behaviour, rather than better than expected returns resulting from innovation or other competitive behaviour. Under the proposed changes to the gas pipeline regulatory framework, there is a risk that the Regulator will seek to expropriate those returns by moving the pipeline to a scheme pipeline.

It is not yet known how the hydrogen industry will develop, but these regulatory risks may not be immaterial when considering the overall risk of new hydrogen projects. As the Productivity Commission has pointed out, this might result in a project being abandoned altogether, or the investor choosing to:[12]

10 ACCC, *Submission to Issues Paper,* February 2013
11 Productivity Commission, *Review of the Gas Access Regime,* Final Report, p102, 2004
12 Productivity Commission, *Review of the Gas Access Regime,* Final Report, p107

- **build capacity that is fully contracted and incrementally expand pipelines as needed –** this would result in pipelines being smaller than otherwise might be the case and be costly to expand in future
- **underinvest in the capacity of pipelines –** in order to avoid regulation
- **delay investment –** new projects are delayed for longer than necessary while investors wait until demand is more certain**.**

In the context of an emerging hydrogen industry, regulatory risk therefore has the potential to significantly impede investment that is needed to get the hydrogen industry off the ground. Riskier projects, which have the potential to deliver significant benefits, might not proceed as early as they otherwise would have.

Submissions to the Productivity Commission's 2013 Review of the National Access Regime also pointed out the detrimental impact access regulation could have on investment by access seekers. For example:

- a right to access the incumbent's facility reduces the incentives for potential entrants to find a more innovative way of providing the service;[13]
- even the prospect of obtaining access decreases the access seeker's incentive to invest in developing its own facility, therefore reducing the prospect of future competition.[14]

It is not clear that Energy Officials have carefully considered the impact of economic regulation on investment in the hydrogen and renewable gases industry, both by pipeline investors and access seekers. These impacts should be assessed.

2.4 Do stakeholders support regulation of hydrogen and renewable gases?

Consultation on the future laws, rules and procedures that will apply to the hydrogen and renewable gas industries is vitally important, and we appreciate Energy Officials' consultation to date on these issues.

From our reading of the 19 submissions received from stakeholders, we agree with Energy Officials that there is widespread support for the proposed extension of the national framework to NGEs. As outlined in Section 2.1 of this submission, APA also supports bringing NGEs within the national framework, as doing so will remove ambiguity and ensure that hydrogen and renewable gas trials can proceed with regulatory certainty.

The Consultation Paper also states that stakeholders were "divided on whether the national framework should extend to OGPs, with around half supporting the proposed extension as part of this process".[15]

13 RBB Economics, *Submission to the National Access Regime Inquiry Report,* 2013

14 Allan Fels, *Submission to the National Access Regime Inquiry Report,* 2013

15 Energy Ministers, Consultation Paper - Extending the national gas regulatory framework to hydrogen and renewable gases and blends, 31 March 2022, pv

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We have carefully reviewed the submissions and do not share Energy Officials' view that around half of stakeholders support bringing OGPs, such as hydrogen, within the national framework.

Obviously, submissions are open to different interpretations, but in our view only seven of the 19 stakeholders can be said to offer some level of support to extending the national framework to OGPs. In a complex area like economic regulation, it is understandable that many stakeholders offered qualified support for regulation, or opposition to it.

To explain how we came to this view, Table 1 identifies whether stakeholders support, oppose, or are undecided about the future regulation of NGEs and OGPs. If the stakeholder:

- supported extending the NGL to NGEs or OGPs, the respective column has a green dot;
- was undecided or did not express a firm view either way, the respective column has an orange dot;
- opposed extending the NGL to NGEs or OGPs, the respective column has a red dot.

To give an indication how we formed the view we did, key quotes from the submission in question have been included in the table.

Table 1: Stakeholder views on bringing renewable gases within the NGL

Submitter	Support for NGEs in the NGL	Support for OGPs in the NGL	Key quotes from submission
APA			• APA supports accommodating hydrogen blends through the new term 'natural gas equivalents.' • We propose a more gradual approach to regulation that supports the development of the market for renewable gases and applies regulation if there is evidence of market failure.
AGL			• It is not clear that there is a need to apply the full suite of national gas regulation to infrastructure that does not transport natural gas. • The rationale for expanding the natural gas regulatory framework to other products is currently not well defined and seems contrary to the current NGO.
APGA			• OGP infrastructure operating in commercial, competitive markets should not be subject to economic regulation
ATCO			• ATCO supports the conditional application of the regulatory framework to constituent gases and related facilities and activities. • ATCO supports the conditional application of the regulatory framework to OG products under an 'opt-in' approach where each jurisdiction can seek to apply the economic regulation framework.
AusNet Services			• We support the application of economic regulation to CG under the NGL and NGR to facilitate the potential growth of open access 100% hydrogen pipelines • AusNet supports a regulatory framework that allows jurisdictions to extend the NGL to Other Gas (OG) products, noting that the framework should only be applied once OG products are market-ready.

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Submitter	Support for NGEs in the NGL	Support for OGPs in the NGL	Key quotes from submission
AEC	🔴	🔴	• The AEC does not see the need to establish arrangements for OGs as they are unable to be utilised without significant capex across networks. • The AEC does not support resources being expended on 'other gases' that are even further removed from natural gas than low level hydrogen blends.
AGIG	🟢	🟢	• We support the proposal to amend the NGL to enable the national gas regulatory framework to apply to the constituent gases and related facilities and activities involved in the supply of NG equivalents. • We support the potential approach to allowing the NGL to accommodate OG products as a 'future proofing' exercise now but lying dormant until the Rules and Procedures are amended.
Australian Hydrogen Council	🟢	🟡	• There are potentially many reasons why economic regulation of constituent gas pipelines is entirely necessary. Due to a fundamental difference in the infrastructure required to produce some constituent gases (namely hydrogen), it may however, be more appropriate to ensure that regulatory tests to identify the existence/creation of a market failure are relied upon to determine whether regulation is necessary.
Bioenergy Australia	🟢	🟢	• We support the potential approach to allowing the NGL to accommodate OG products as a 'future proofing' exercise.
Energy Australia	🟢	🔴	• We consider it is premature to develop a comprehensive set of legislative or rule amendments to accommodate 'other' gas blends that would, by definition, require material changes to physical infrastructure and associated costs to consumers.
ENA	🟢	🟡	• The market competition of Pipelines involved in shipping renewable gas should be the driving principle when considering the appropriate requirements of the gas regulatory framework that should be applied.
Engie	🟢	🟡	• ENGIE's preferred starting point would be that constituent gas pipelines are subject to the general Part 3A access regime under the Competition and Consumer Act (CCA) • OG products should be considered a new industry and as such there should be no presumption that the regulatory framework for natural gas is the best option for OG products.
Evo	🟢	N/A	• The definitions relevant to the integration of NG equivalents and other gases within the National Gas Law framework need to be adjusted to ensure operators are provided with adequate flexibility to facilitate a renewable gas market
Fortescue Future Industries	🟢	🟢	• Fortescue is supportive of the proposal to extend the regulatory framework to cover constituent gases for the purposes of market transparency mechanisms and for gas markets and economic regulation. • It is generally accepted that economic regulation is the most effective defence to the potential misuse of market power.
GAMAA	🟢	N/A	• A nationally consistent and coordinated approach.... is required in the transition to hydrogen blends and renewable gases

Submitter	Support for NGEs in the NGL	Support for OGPs in the	Key quotes from submission
Jemena			• it will not be true in all circumstances and in all future scenarios that constituent gas pipelines 'are likely to be natural monopolies and have a significant degree of market power'. • A robust analysis of the unique market dynamics faced by these assets is required to determine whether regulation will deliver the best outcomes for consumers and other market participants.
Origin			• We understand that rules and regulations may need to change to include constituent gases used in blending with natural gas. • We agree that a more cautious approach is needed from a regulatory point of view. We therefore support the Officials' approach to future proofing the legal framework.
PIAC			• PIAC opposes the extension of the NGL and NERL to accommodate the introduction of other gases (OG)
Shell			• Shell considers it critical that the regulatory framework provides a level of flexibility that allows the development of a wide range of technologies/new forms of gas, as business opportunities are being explored/under development.

The purpose of this exercise is to show that while around 90% of stakeholders expressed support for bringing NGEs into the national framework, only around 35% expressed support for bringing OGPs into the national framework. Stakeholders are far more uncertain about applying economic regulation to an emerging industry than the Consultation Paper suggests.

2.5 The draft European approach provides regulatory flexibility as the industry develops

On 15 December 2021 the European Commission published a comprehensive package of draft rules (Draft Package) to set the groundwork for the development of hydrogen markets in Europe.[16] The Draft Package provides members of the European Union (Member States) with guidance on how to establish regulatory frameworks for their emerging hydrogen industries.

The Draft Package addresses many areas of industry development, including two that are the focus of this submission:

- Hydrogen infrastructure and hydrogen markets
- Renewable and low carbon gases in the existing infrastructure and markets[17]

Importantly, the Draft Package explains that the European Commission carried out an Impact Assessment of several policy options prior to identifying the preferred option. In relation to the area of hydrogen infrastructure and hydrogen, the European Commission's preferred option is to:[18]

16 European Commission, *Hydrogen and decarbonised gas market package,* 15 December 2022
17 European Commission, *Directive of the European Parliament and of the Council,* pp2-3
18 European Commission, *Directive of the European Parliament and of the Council,* p10

…introduce key regulatory principles from the start whilst providing clarity on the final (future) regulatory regime.

The European Commission explained that the benefit of this option is that it:

- fosters market integration,
- provides clarity for investors,
- avoids the emergence of non-competitive market structures and the need for ex-post adjustments and
- leaves flexibility to tailor the regulation to the staged ramp-up of the hydrogen sector.

As the Florence School of Regulation points out in its March 2022 article, the Draft Package has been:[19]

...envisaged to be flexible and progressive, catering to an immature hydrogen value chain. It comprises a phased approach for the introduction of market and network regulation, whilst establishing some clear main regulatory principles to give certainty to the investors and avoid high costs for ex-post regulatory interventions.

The European Commission's proposed changes will be integrated in a two-stage approach, before and after 2030:

- Before 2030, the Draft Package is intended to provide regulatory flexibility and Member States may choose to divert from, and not apply the standard rules, particularly relating to third party access, ring fencing, regulated tariffs and financial rules
- From 1 January 2031, a clear regulatory framework with strict rules will apply

The European Union Agency for the Cooperation of Energy Regulators (ACER) and the Council of European Energy Regulators (CEER) have questioned whether the Draft Package provides enough flexibility, and that a gradual approach to regulation is more appropriate. ACER and CEER argue that a gradual implementation:[20]

…would ensure that the challenges are addressed at the pace set by the policy objectives, with regulatory oversight and minimising the cost of 'getting it wrong'.

2.6 Is Energy Officials' revised approach consistent with what is happening in Europe?

While there are aspects of the Draft Package that are consistent with the approach set out in the Consultation Paper, Energy Officials in Australia are clearly progressing much further and more quickly than the Europeans in their approach to regulating hydrogen infrastructure.

19 Florence School of Regulation, https://fsr.eui.eu/the-eu-hydrogen-and-decarbonised-gas-package-revising-the-governance-and-creating-a-hydrogen-framework/, 21 March 2022

20 ACER and CEER, *Position Paper on the Key Regulatory Requirements to Achieve Gas Decarbonisation,* December 2021, p2

For example, while the European Commission's Draft Package is setting the groundwork for a consistent regulatory framework that will apply across Member States from 2031, there will be significant flexibility in how the rules will be applied up to that point. In contrast, Energy Officials in Australia are proposing that hydrogen infrastructure be subject to economic regulation from day one, with only limited mechanisms available to hydrogen and renewable gas pipelines to reduce the costs and risks associated with regulation. Those mechanisms are:[21]

- Greenfields incentive for new hydrogen or renewable gas pipelines, which would mean they are exempt from being a scheme pipeline (the stronger form of regulation) for up to 15 years. These pipelines would still be subject to the lighter handed form of economic regulation
- Exemptions from ring fencing and associate contract arrangements, and the upfront information disclosure obligations for non-third party access pipelines.

2.7 What does this mean for Energy Officials' proposed approach?

As the European Commission's Draft Package recognises, the hydrogen industry is in its infancy, and may take until the 2030s to become established. To provide certainty for investors and avoid the high costs of ex-post regulatory intervention, the Draft Package sets a clear vision for the future of the hydrogen industry but provides plenty of flexibility to allow the industry to develop. It achieves this by allowing Member States to derogate, or provide exemptions from, key aspects of the rules.

In contrast, Energy Officials propose subjecting hydrogen and renewable gases to economic regulation from day one, with few derogations and exemptions available.

As outlined in Section 2.3 of this submission, there is little basis for subjecting new hydrogen pipelines to economic regulation. Such an approach increases regulatory risk and will distort investment signals for both pipeline investors and access seekers.

For these reasons, we maintain the view we expressed in our November 2021 submission to the Initial Consultation Paper that a more gradual approach to the regulation of the emerging hydrogen industry is appropriate. Such an approach could be achieved by:

- Bringing NGEs within the national gas framework from day one. This will provide regulatory certainty for trial projects and support the development of the market for renewable gases
- Establishing regulatory principles that set out the type of network regulation could apply for new pipeline investment, and under what circumstances
- Market monitoring of the emerging renewable gas industry to inform a flexible regulatory approach

21 Energy Ministers, Consultation Paper - Extending the national gas regulatory framework to hydrogen and renewable gases and blends, 31 March 2022, p51

- Providing new hydrogen pipelines with broad exemptions from the regulatory framework until circumstances dictate that economic regulation should apply

This approach recognises that there is a great deal of uncertainty about the demand and supply of hydrogen and other renewable gases, and also that applying economic regulation too early could stifle industry development. Monitoring of the renewable gas industry will give policy makers comfort that market failure is not occurring and that regulation can be imposed should the need arise.

2.8 National consistency and jurisdictional collaboration remains essential

Action 4.3 of Australia's national hydrogen strategy recommended that when reviewing legal and regulatory models and frameworks to support the development of the hydrogen industry, that a nationally consistent approach should be adopted as far as practicable.[22]

In APA's response to the Initial Consultation Paper in November 2021, we strongly supported consistency of arrangements across jurisdictions. National harmony will help reduce costs and red tape for national energy businesses like APA.

In our November 2021 submission, APA also proposed that a working group of the Commonwealth, State, Territory and industry representatives be established to consider and progress harmonisation of regulations and the timing of their introduction. Such a working group could also work together to solve legal and regulatory issues that are likely to arise as hydrogen projects are developed.

A good example of the type of issue that will need to be resolved is the conversion of existing property easements to carry gases other than hydrocarbons. Jurisdictions should work together to ensure that the conversion of existing pipeline easements to carry alternative gases, including blends, does not hinder the development of hydrogen projects.

2.9 Proposed ring-fencing changes

As part of Energy Ministers' review, the AER was asked to provide advice on whether the ring-fencing arrangements in the NGL and NGR needed to be amended in the context of hydrogen and renewable gases.[23] This request has not been published by Energy Ministers. In its advice (AER Advice), the AER provided advice about the development of the hydrogen and renewable gases markets and also proposed changes to the ring fencing and associate contract arrangements in the National Gas Law.[24]

We recognise the important role played by ring fencing in promoting competition. It does this by putting in place measures to prevent discriminatory behaviour and cross subsidies.

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22 COAG Energy Council, *Australia's National Hydrogen Strategy,* p81

23 Energy Ministers, *Consultation Paper - Extending the national gas regulatory framework to hydrogen and renewable gases and blends*, 31 March 2022, p22

24 AER, *Advice on Gas Ring-Fencing for Hydrogen and Renewable Gas Blending,* 21 February 2022

In the emerging hydrogen industry, it is not yet clear whether services such as blending will ultimately be provided by regulated or contestable businesses. As the AER Advice acknowledges, there is presently little or no competition in this market.[25]

APA's recent experience has demonstrated that in these very early stages of industry development, ring fencing has the potential to impede hydrogen development. This is because getting early projects off the ground requires a significant amount of collaboration both within and across organisations, often in different parts of the supply chain. In contrast to projects in well-established industries that just 'run themselves', development projects are much more dynamic and need greater flexibility in bringing projects together.

Under the approach set out by Energy Ministers in the Consultation Paper, however, many of the conversations needed to get projects off the ground cannot take place, because service provider marketing staff cannot also be staff of a related business (for example, a business trying to establish an electrolyser to create hydrogen).

We therefore support as much flexibility as possible in ring fencing arrangements to help facilitate these early projects. This flexibility could include broad exemptions, of the type afforded to electricity distribution network service providers (DNSPs), for the provision of stand alone power systems (SAPS) in their network operating area. Under those arrangements, DNSPs have:

- an exemption to provide generation services for SAPS up to a cap on the revenue they may earn from those services; and
- reporting obligations to provide transparency on the services they are providing.

We consider that this sort of arrangement could support service providers establishing blending and other renewable gas projects across distribution and transmission networks.

The AER Advice raised two other issues that we would like to comment on:

- **Class orders –** the AER has recommended amending the NGL so it can impose additional ring-fencing obligations on classes of service providers, on the basis that it may inadvertently miss a service provider when making a class order determination. Under sections 143 to 145 of the NGL, the AER has the power to impose additional ring-fencing obligations on a service provider or associate of a service provider, rather than a whole class.

  In our view, the risk of inadvertently capturing a service provider when making a class order is far greater than the risk of missing a service provider when making a determination under current arrangements. This is because of the compliance and reputational risks that could occur from an inadvertent 'non-compliance'. Given the AER has not demonstrated that a significant problem exists, we therefore support maintaining existing arrangements in this area.

25 AER, *Advice on Gas Ring-Fencing for Hydrogen and Renewable Gas Blending,* 21 February 2022, p1

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- **Associate contracts –** the AER has suggested that the current approach for approving associate contracts be amended to:

    a. require the service provider to demonstrate that an associate contract does not contravene the anticompetitive rule or competitive parity rule, and

    b. allow the regulator to request further information.

  In our view, neither of these required amendments are necessary. The current rules provide the regulator with an appropriate level of oversight of associate contracts, and the AER Advice does not provide sufficient evidence that there needs to be a change in approach. The fact that there may be 'increased complexity in assessing associate contracts' is not a sound basis for a significant change to existing associate contract arrangements. If a service provider is required to seek the regulator's approval before entering into an associate contract, this would significantly increase the regulatory burden for service providers and the AER.

3 PART B – Responses to questions for stakeholders

Feedback on the refined approach (see Chapter 3)

No.	Questions	Feedback
Related to:	**Proposed approach to specifying the gases and blends within scope of national gas regulatory framework**	
1	What are your views on the refined approach to identifying the gases and blends that could fall within the scope of the national framework (see section 3.1)?	As outlined in section 2.1 of our submission, we do not support the refined approach to identifying the gases and blends that could fall within the scope of the national framework. While we support bringing hydrogen blends and renewable gases within the scope of the national framework, we do not support applying the natural gas regulatory framework to new hydrogen pipeline investment, without adequate consideration of whether doing so is in the long-term interests of customers.
Related to:	**Proposed extension of the NGL and National Gas Regulations**	
2	What are your views on the refined approach to extending the NGL to covered gases (see section 3.3)? Where appropriate, please comment in relation to the subheadings below.	
2.1	What are your views on the proposed extension of the pipeline access regime to all pipelines transporting covered gases (i.e. natural gas, biomethane, synthetic methane, hydrogen and blends of these gases) and the impacts it may have on smaller players or new entrants? In responding to this question please consider: - the proposal to extend to the regime in this way from the commencement of the reforms; - the potential impact on industry development, including where it may support the development a competitive and cost-efficient hydrogen and renewable gas industry, or may create barriers; - the proposed changes to the pipeline ring-fencing arrangements; and - the proposed power to exempt remote pipelines.	As outlined in section 2.3 of our submission we do not support the application of economic regulation to new pipelines carrying hydrogen and renewable gases.

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No.	Questions	Feedback
2.2	What are your views on the proposed new light-handed access regime for blend processing facilities?	As Energy Officials note in the Consultation Paper, blend processing services are a potentially contestable activity which service providers will therefore be prohibited from undertaking without a ring-fencing waiver.[26] At present, the AER has identified that there is currently little or no competition in this market. Given the fact that the market is potentially contestable, it is not clear why a form of economic regulation needs to apply to an emerging market. As the ACCC has noted, it is not possible to design access regulation without distorting investment signals. The risks of applying economic regulation to an emerging, contestable industry do not appear to have been considered.

26 Energy Ministers, *Consultation Paper - Extending the national gas regulatory framework to hydrogen and renewable gases and blends*, 31 March 2022, p12

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No.	Questions	Feedback
2.3	When developing the refined approach, a number of steps have been taken to minimise regulatory costs and risks for industry participants and new entrants. Do you think any additional steps are required? If so, please explain what they are and why they are required.	As outlined in section 2.7 of our submission, we maintain the view we expressed in our November 2021 submission to the Initial Consultation Paper that a more gradual approach to the regulation of the emerging hydrogen industry is appropriate. Such an approach could be achieved by: • Bringing NGEs within the national gas framework from day one. This will provide regulatory certainty for trial projects and support the development of the market for renewable gases • Establishing regulatory principles that set out the type of network regulation could apply for new pipeline investment, and under what circumstances • Market monitoring of the emerging renewable gas industry to inform a flexible regulatory approach • Providing new hydrogen pipelines with broad exemptions from the regulatory framework until circumstances dictate that economic regulation should apply This approach recognises that there is a great deal of uncertainty about the demand and supply of hydrogen and other renewable gases, and also that applying economic regulation too early could stifle industry development. Monitoring of the renewable gas industry will give policy makers comfort that market failure is not occurring and that regulation can be imposed should the need arise.

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No.	Questions	Feedback
2.4	Do you agree with the AEMC's recommendations (see section 3.2) that the NGL be amended to: - enable rules to be made so that AEMO can collect information for the purposes of the VGPR and capacity modelling from facilities that do not otherwise participate directly in the DWGM? - limit the potential for the unintended application of the GSOO provisions in the NGL? If you disagree with either of these recommendations, please explain why.	No comment
2.5	Do you agree with the AER's recommendations (see section 3.2) that the NGL be amended to: - accord the regulator the power to impose additional ring fencing requirements on a class of service providers or associates through a ring-fencing order? - allow conditions to be imposed on minimum ring-fencing exemptions issued under the NGR? If you disagree with either of these recommendations, please explain why.	As outlined in section 2.9 of our submission, we do not support amending the NGL to provide the regulator with the power to impose additional ring-fencing requirements on a class of service providers.
2.6	Are any transitional arrangements required in the NGL to accommodate the extension to covered gases? If so, explain what they are and why they are required.	Section 2.7 of our submission outlines our preferred approach to accommodating hydrogen and renewable gases in the national gas framework. Regulatory arrangements should provide new hydrogen pipelines with broad exemptions from the regulatory framework until circumstances dictate that economic regulation should apply. Applying economic regulation too early could stifle industry development. Monitoring of the renewable gas industry will give policy makers comfort that market failure is not occurring and that regulation can be imposed should the need arise.

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No.	Questions	Feedback
Related to:	**Proposed extension of the NERL and National Energy Retail Regulations**	
3.0	What are your views on the refined approach to extending the NERL to covered gases (see section 3.3)? Where appropriate, please comment in relation to the questions below.	No comment
3.1	What are your views on the approach to identifying NGEs and defining prescribed covered gases?	No comment
3.2	What are your views on the separate authorisation and exemption of natural gas and NGEs (as one group) and prescribed covered gases (as separate products)?	No comment
3.3	Are any transitional arrangements required in the NERL to accommodate the extension to covered gases? If so, explain what they are and why they are required.	No comment

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