

2025 consultation

Submission type	Upload
Submitter	0EJ0E0;[~]
Response ID	277507

Disclaimer

This document is a submission to the Net Zero Commission's 2025 consultation. As part of the consultation process, the commission has committed to publishing the submissions it receives. Submissions do not represent the views of the commission.

APA

Australia's energy
infrastructure partner

New South Wales Net Zero Commission Consultation Paper

APA Submission

11 July 2025



Maria Atkinson
Commissioner
NSW Net Zero Commission

Lodged online

11 July 2025

RE: APA Submission to NSW Net Zero Commission

Dear Ms Atkinson,

Thank you for the opportunity to comment on the Consultation Paper that will inform the work and advice of the New South Wales Net Zero Commission (Consultation Paper).

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. 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 692 MW of renewable generation and battery storage infrastructure.

We support the transition to a low carbon future. In September 2024, we published our FY24 Climate Report, detailing our progress against our Climate Transition Plan, which outlines our commitments to support Australia's energy transition and pathway to net zero operations emissions by 2050.

We support the work being done by the Commission and consider that energy security is essential for a smooth transition to a low emissions economy. Our submission below outlines the critical role gas will play in supporting renewables and helping NSW meet its net zero ambitions targets.

If you have any questions about our submission, please contact John Skinner on

[REDACTED]

Regards,

[REDACTED]

[REDACTED]

[REDACTED]

Strategy and Corporate Development

1. Submission

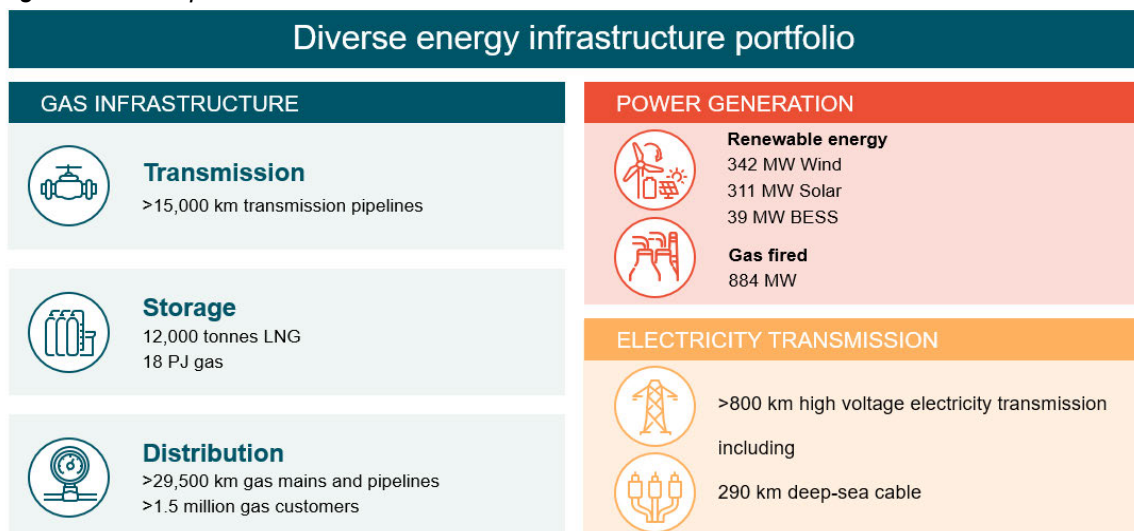
Key Points

- APA supports the transition to a low carbon future.
- The energy sector will play an important role in reducing emissions and providing energy reliability and security, essential for a resilient economy.
- Greater investment is required in Gas Powered Generation (GPG) and other energy infrastructure to support renewable generation and ensure reliability in the system.
- We support consideration of and collaboration across stakeholders and communities, particularly First Nations peoples, to ensure a just and timely transition.
- The monitoring framework should align with existing mechanisms and create no additional reporting burden.

1.1. APA as a partner of choice in Australia's energy transition

APA is a leading ASX listed energy infrastructure business. Consistent with our purpose of securing Australia's energy future, our diverse portfolio of energy infrastructure delivers energy to customers in every Australian state and territory. For decades we have owned, operated, and maintained some of Australia's most important energy infrastructure.

Figure 1: APA's portfolio



APA is a major owner and operator of a number of Australia's most critical electricity transmission interconnectors, as well as 692 MW of renewable generation and battery storage. We also own and operate some of the nation's most efficient gas-fired power generators and more than 15,000 kilometres of gas pipelines which deliver energy to families and businesses across every corner of Australia.

With our extensive portfolio of assets and expertise across gas, electricity and renewables, APA is well-placed to support the energy transition towards net zero.

1.2. APA supports the transition to net zero

APA supports the work being done by the Commission to support the NSW transition to net zero emissions. The Consultation Paper acknowledges the need for urgent action to mitigate the impacts of severe climate change, particularly to mitigate increasing community vulnerability.¹

The Consultation Paper recognises that the electricity and energy sector is currently the largest source of emissions in NSW. The sector accounted for around 40% of NSW net emissions in 2022, with electricity accounting for 98.4% of these emissions.² The speed of deployment of renewable generation and new transmission infrastructure is a key risk that needs to be managed to support the decarbonisation target.

As outlined further in section 1.5, we support the development of a monitoring framework to monitor progress and act as an accountability measure.³ We consider such a framework should build on and align with existing frameworks to maintain consistency and avoid creating an additional reporting burden. It is important to have clear guidelines for the decarbonisation pathway that maintains flexibility and efficiency for a sustainable transition. We support a balance between whole-of-economy approach and sector-specific metrics to enable appropriate benchmarking.

The NSW Government's climate change adaptation strategy intends to work on making the state more resilient and adaptable to the impacts of climate change.⁴ Reliable energy supply will be crucial to the economy's resilience and sustainability.

1.3. The energy sector will play a critical role in meeting emissions reduction targets

This section relates to below question of the Consultation Paper.

Question 6: The speed of deployment of electricity generation and infrastructure is a key risk to emissions reduction targets. What more could be done to fast-track deployment?

To achieve NSW's 2030 roadmap target, the construction of renewable generation capacity will need to accelerate, along with increases in storage and transmission capacity.⁵

Timely delivery of energy infrastructure is critical to achieving Australia's emissions reduction targets. Current environmental, planning, land access, and cultural heritage

¹ Net Zero Commission, 2025 Consultation, pg. 4

² Net Zero Commission, 2025 Consultation, pg. 6

³ Net Zero Commission, 2025 Consultation, pg. 18

⁴ NSW Climate Change Adaptation Strategy 2022

⁵ Net Zero Commission 2024.

approvals are often fragmented and duplicative, adding time, cost, and complexity—particularly for cross-border infrastructure.

Early clarity on a defined regulatory pathway is critical to investor and developer confidence. It is critical that this is at all levels of government; local, state and Commonwealth, to greater support schemes that function as a facilitator, streamlining processes and speeding up project completion.

While it might not be feasible to combine all agency conversations into a single process, streamlining interagency interactions is essential to increase efficiencies. A co-ordinated facilitation service across all levels of government would be helpful provided the service works as a unified team to provide clearly defined:

- approvals process flows
- consultation requirements
- timeframes
- clear criteria by which projects would be approved for each level of government and for each geographic jurisdiction.

1.3.1. Greater investment in gas-powered generation is essential to support the roll-out of renewables

Gas Powered Generation (GPG) will play a key role in firming renewables as coal exits the system and will be critical during peak demand periods. This firming capacity enables faster and greater uptake of renewable energy.

AEMO's 2024 Integrated System Plan (ISP) forecasts the National Electricity Market (NEM) will need 15GW of GPG by 2050—a 50% increase from the 2022 ISP. With 9.3GW of the current 11.5GW of GPG expected to retire, about 12GW of new GPG is needed.⁶

While policy mechanisms like the Capacity Investment Scheme support renewables, GPG lacks equivalent incentives. South Australia's proposed Firm Energy Reliability Mechanism (FERM) is a positive step, offering long-term contracts for dispatchable capacity of more than 8 hours, providing greater certainty than WA's short-term Reserve Capacity Mechanisms.⁷

The Federal Government's review of NEM market settings, with a final report due in December 2025, is a key opportunity. We support reforms that create long-term certainty for long-duration firm capacity, helping ensure renewables can thrive while maintaining system reliability. This will help support the development of renewable energy projects, ultimately helping to achieve emissions reduction targets.

1.3.2. Secure gas supplies are critical during the energy market transition

The East Coast Gas Market (ECGM) is at risk of gas shortfalls this decade, as flagged by both the Australian Energy Market Operator (AEMO) and the Australian Competition

⁶ AEMO, '2024 Integrated System Plan (ISP)' (Report, June 2024) p 69.

⁷ South Australia Government, [Firm Energy Reliability Mechanism – Stage 2 Consultation | YourSay](#), July 2025

and Consumer Commission (ACCC).⁸ This puts at risk the vital role gas will play in 'unlocking' renewables for a secure energy transition. AEMO has also pointed to an overall reduction in system resilience which will add further pressure to the gas markets.⁹

Gas storage is crucial in this context to maintain reliability during shortfalls. Pipeline storage bottles have the ability to provide storage where required in the gas grid and the potential to be repurposed in the future.

APA has invested in the development of the Kurri Kurri Lateral Pipeline project to support Snowy Hydro's Hunter Power Project (HPP). The HPP will provide up to 750MW of firm, dispatchable generation when the needs of electricity consumers are at their highest.¹⁰

APA has also announced plans for additional gas storage in the Riverina region of NSW, to support AEMO's forecast need for peaking GPG as more variable renewable energy is added to the NEM. The project also includes new compression and pipeline infrastructure.¹¹

1.3.3. Repurposing existing infrastructure has the potential to expedite the delivery of low carbon energy options.

Energy Ministers have recognised that gas will play a crucial role in the energy transition, and that the continuing use or repurposing of gas infrastructure could therefore be important for both gas and electricity users.¹²

Gas infrastructure has an essential role to play in helping Australia achieve least cost gas decarbonisation. Repurposing natural gas pipelines to transport renewable gases has significant advantages:

- Converting existing gas networks is more cost-efficient in comparison to constructing new, dedicated hydrogen pipelines.¹³
- Gas pipeline networks are already available and socially accepted (routes, including rights of way and use).¹⁴
- Technologies for converting the natural gas infrastructure to hydrogen operation are already being applied.

A BCG Report also found that existing gas infrastructure will play an important role in supporting sectors where electrification will be too hard or expensive (peaking applications in particular). During the transition phase, preserving gas infrastructure was

⁸ AEMO, *2025 Gas Statement of Opportunities*, pg. 4; ACCC, *Gas Inquiry 2017-30, Interim update on east coast gas market*, December 2024

⁹ AEMO, *2025 Gas Statement of Opportunities*, pg. 77

¹⁰ APA, <https://www.apa.com.au/operations-and-projects/gas/gas-transmission/kurri-kurri-lateral-pipeline-kklp-project>

¹¹ APA, <https://www.apa.com.au/news/asx-and-media-releases/apas-east-coast-gas-expansion-plan>

¹² Energy Ministers, *Incorporating an emissions reduction objective into the national energy objectives* (Consultation Paper, 20 December 2022) 8.

¹³ Amber Grid et al, *European Hydrogen Backbone* (Report, April 2022) <<https://ehb.eu/files/downloads/ehb-report-220428-17h00-interactive-1.pdf>>.

¹⁴ European Union Agency for the Cooperation of Energy Regulators, *Transporting Pure Hydrogen by Repurposing Existing Gas Infrastructure: Overview of existing studies and reflections on the conditions for repurposing* (16 July 2021) 6.

also considered to enable the development of low-carbon gases like green hydrogen, which will likely be needed in a net zero future, for industrial use at a minimum.¹⁵

The ability of pipelines to store large amounts of energy is another factor supporting the repurposing of gas pipelines. The gas network is a flexible, affordable, and safe store of energy, making it ideal to help support energy supply during extreme weather or periods of reduced supply. While gas pipelines are currently used for storing natural gas, it is likely that they will be repurposed and used as a hydrogen store in the years to come.

1.3.1. The challenges of mid-stream operations

Mid-stream gas operations, such as gas transmission pipelines, have unique challenges to decarbonisation due to the infrastructure being located far from the electricity grid. APA has many facilities that cannot be easily electrified such as gas compressor stations that are remotely located and require large amounts of gas.¹⁶ When coupled with the need of continuous operations, electrification becomes very challenging.

Low carbon gas, such as biomethane, is one option to decarbonise remote compressor stations. At present, there is very little low carbon gas production in Australia and it is an expensive option to reduce emissions.

There is very little funding available to decarbonise mid-stream gas operations. If funding was available through grant or incentive schemes for low carbon gas replacement or electrification of compressors, it would enable significant emissions reduction.

1.4. Effective consideration and collaboration with stakeholders and communities is critical

This section relates to below question of the Consultation Paper.

Question 2: What actions can the commission take to engage across the community to help drive the shifts needed for the net zero transition and for effective climate change mitigation and adaptation?

Question 7: Are the measures now in place sufficient to ensure community engagement and benefit sharing from the build out of infrastructure for the energy transition?

As part of the net zero transition, it is important to acknowledge that development has a impact on local community stakeholders. This needs to be adequately considered and planned for, to ensure that community stakeholders are not unfairly bearing the brunt of transition. To do this, we support transparent consultation and collaboration between the government and its stakeholders to ensure sufficient community engagement and benefit sharing. It is important to continue working with other jurisdictions, industry participants, and the community stakeholders to ensure that the net zero pathway manages the impacts and the practical challenges.

For over 20 years, APA has been operating in competitive markets, developing large scale infrastructure projects across Australia. We have first-hand experience in

¹⁵ Boston Consulting Group, *The role of gas infrastructure in Australia's energy transition* (Report, June 2023).

¹⁶ APA Group, *Why biomethane's role in the energy transition is just beginning*, May 2025

managing the significant issues that arise when planning, building and operating linear infrastructure. Our experience has shown that continuing to strengthen the role of social performance and community relationships is key to the success of projects.

We support clear and consistent consideration of community and community engagement throughout all phases of projects particularly the assessment, planning, construction and ongoing operational phases for the life of the assets. This helps facilitate positive relationships between community stakeholders, including Traditional Owners, landholders and local communities and enable impact management

1.4.1. APA supports nationally consistent expectations for early, genuine engagement and transparent benefit-sharing.

Working closely with community to address impacts and deliver positive community outcomes is key to the success of an energy project. The social dynamics surrounding a project are often complex and changing, and stakeholders are increasingly voicing their expectations about proposed infrastructure projects. A focus on early engagement with community throughout a project lifecycle is required to understand and address these expectations.

In collaborating with various parties, it is important to recognise clear and effective allocation of responsibilities arising from the engagements to support efficient planning processes.

There are currently a range of parties and publications surrounding various energy planning processes, some with overlap in issues and projects. Processes to identify and agree on community engagement guidelines have been inconsistent across different groups. Any prescribed process should be equitable and transparent on developing benefit sharing, such that provided benefits adequately balance localised impact, transition benefits and commercial viability. It is vital that there is a coordinated planning approach and jurisdictional applications to prevent inefficient cost pass throughs to consumers and industry participants. Without a common baseline, communities face uncertainty and proponents face reputational and delivery risk.

That said, it is important that any reforms or planning reviews do not slow down the progress made in bringing new generation online to meet NSW's emissions reduction targets.

Frameworks like the NSW Benefit Sharing Guideline¹⁷ improve clarity and we consider it vital they are embedded from the outset - not added late in the process. Effective benefit-sharing is key to securing social licence and delivering enduring value to regional communities. APA remains committed to responsible infrastructure delivery that supports local partnerships and equitable outcomes.

¹⁷ NSW Government, *Benefit Sharing Guideline*, November 2024
Page 8

1.4.2. Engagement with First Nations people is essential in equitably managing the impacts of energy related developments.

This section relates to below question of the Consultation Paper.

Question 3: How should the commission best engage with First Nations people to learn about cultural knowledge and practices to support adaptation, and what information and evidence should it draw on to inform its understanding of these practices.

Question 4: What additional mechanisms, support, or incentives can meaningfully empower and enhance First Nations people's involvement in climate mitigation, adaptation, and environmental stewardship.

Question 8: Are First Nations communities adequately engaged and included in sharing the benefits of the transition? What more could be done, and by whom?

First Nations people have significant connections to the land and hold refined knowledge on the climate, ecological and cultural factors influencing their lands. Understanding these factors is vital in appropriately managing developments and respecting existing practices.

As the Commission acknowledges, engagement with First Nations people through the energy transition presents a real opportunity to enable sustainable and equitable development of projects.¹⁸ Such engagement would provide valuable opportunities to work on building the system's resilience by caring for and adapting for climate change and vulnerabilities using proven Indigenous-led approaches.

First Nations engagement across the sector is often late, under-resourced, or lacking cultural capability. This increases project risk and weakens social licence.

APA is committed to improving engagement through our Reconciliation Action Plan, including internal capability building, stronger governance, and expanding First Nations participation in our supply chain.

We support:

- Clear requirements for early engagement across all projects;
- Defined processes and timeframes to ensure consistency and transparency;
- Capacity-building for both proponents and Traditional Owners;
- Fit-for-purpose benefit-sharing, including local jobs, training, and procurement.

The NSW First Nations Consultation Guidelines provide a strong model for respectful engagement that meets community expectations, and provides jobs and income opportunities.¹⁹ We support their national application, with resourcing and oversight to ensure they are implemented effectively.

Improved First Nations engagement supports APA's reconciliation commitments and is essential to delivering infrastructure that is responsible, respectful, and enduring.

¹⁸ Net Zero Commission, 2025 Consultation, pg. 4,5

¹⁹ NSW Government, *The First Nations Guidelines*, May 2024

1.5. The monitoring framework should align with existing mechanisms and create no additional reporting burden.

This section relates to below question of the Consultation Paper.

Question 5: What additional information and evidence should the commission consider when assessing progress towards NSW's targets for reducing net greenhouse gas emissions?

Question 18: What measures should be considered beyond the Safeguard Mechanism to reduce emissions of the resources sector, particularly methane emissions, to meet NSW's emissions reduction targets?

Question 22: What should be included in a monitoring framework for NSW in the context of the transition to net zero, including any specific metrics and indicators?

We support clear targets within a practical monitoring framework that would guide the decarbonisation pathway and progress in the energy transition. An efficient framework is vital for assessing the progress to both short- and long-term targets. Any framework should provide sufficient flexibility to account for the uncertainties and changing forecasts in the energy market, as well as the evolving economics of the energy system.

Any specific metrics or indicators should not create an additional reporting burden on companies and should align with existing mechanisms. This is an important consideration when evaluating implementation concerns and barriers to the speed of deployment of energy projects.

A good example is the existing benchmarking that is provided by the Safeguard Mechanism. Best practice emissions performance is determined for all new Safeguard facilities and existing facilities have established emissions baselines that decline each year. The Commission should align with this Commonwealth benchmarking.

1.5.1. Alignment with the existing NGER reporting framework and addressing the gap in methane measurements.

The Commonwealth Department of Climate Change, Energy, Environment and Water maintains the National Greenhouse and Energy Reporting scheme (NGER).²⁰

Reporting of methane emissions for natural gas transmission facilities under NGER Method 1 is based on high-level calculations using a default emission factor based on pipeline length. The data underpinning this emission factor is out of date and there is limited confidence in the accuracy of these estimates. In its December 2023 NGER scheme review, the Climate Change Authority recognised this and recommended the phase out of Method 1 estimates.

Method 3 is the highest order NGER reporting methodology for gas transmission networks but still does not accurately reflect real methane emissions as it relies on generic emission factors for each component to estimate the total methane emissions of a facility. This is a barrier to the prioritisation and investment in methane reduction

²⁰ National Greenhouse and Energy Reporting Scheme | Clean Energy Regulator, March 2025
Page 10

opportunities as the emission reductions cannot be verified and reported under the NGER scheme. This is particularly relevant for Safeguard Mechanism facilities with declining baseline obligations.

There is a short-term opportunity for incremental improvement to NGER scheme methodologies to act as an interim solution while the panel of Australian and international experts develops advice on development of enhanced NGER scheme emission estimation methods to be delivered by June 2027. Providing optionality on reporting methods would allow emissions reduction outcomes on non-leaking components through leak detection and repair (LDAR) programs or valve replacements to be reported.