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## **SUBMISSION ON ADDITIONAL MATERIAL PROVIDED BY THE DEPARTMENT AND SANTOS**

Thank you for the opportunity to comment on the Department's response to the IPC's questions about the Narrabri Gas project and on new material submitted by Santos. The focus of my submission is on the 'need' for this project and the repeated failure of the Department to brief the IPC on existing policy and program initiatives in NSW to *reduce* the use of fossil gas in our economy.

In the Department's letter dated 14 August 2020, Mr Kitto stated that there "*are no express policy initiatives at present that would lend any support to calls to phase out gas use in NSW over the next 20-30 years*".<sup>1</sup> The letter also makes the claim that emissions "*associated with the ongoing use of gas in NSW over the next 20-25 years by heavy industry, business and over 1.4 million households*" are "*likely to occur whether the Narrabri Gas Project is approved or not.*" These statements are quite misleading. The NSW Government does have policy initiatives to reduce the use of fossil gas in NSW; but the IPC has not been briefed on their existence. These initiatives exist in a policy environment where NSW is committed to a 35% reduction in GHG emissions by 2030, with the policy goal of net zero by 2050.

## **EXPRESS POLICY INITIATIVES IN NSW THAT *DO* LEND SUPPORT TO CALLS TO PHASE OUT FOSSIL GAS USE IN NSW OVER THE NEXT 20-30 YEARS**

A briefing on demand management, energy efficiency, zero emission gaseous fuels and electrification policy initiatives that are likely to impact future fossil gas demand in NSW should be provided to the IPC before a final determination on Narrabri Gas is made.

### **Phasing out 'gas' versus phasing out 'fossil gas' use**

There are plans in NSW to reduce the use of fossil gas in line with NSW Government policy to get to net zero, however, the Department's assessment ignores these plans and fails to describe the current policy environment on this issue. In this context, I hope it will be helpful for the Commissioners if I share this succinct statement from the ACT-based energy company Evoenergy, on how they plan to decarbonise their gas supply. This statement is a good indicator of the policy discussion that is either already occurring within the NSW Government, or soon will. In the ACT, Evoenergy –

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<sup>1</sup> NSW DPIE, '[Response to Independent Planning Commission Questions](#)', provided to the Commission on 14 August 2020, pg 4

responding to the ACT Government's Climate Change Strategy - identified three pathways to achieving net zero emissions from the gas sector:

- 1) powering the ACT entirely with green electricity;
- 2) transitioning to "renewable gas" supply; or
- 3) adopting a "hybrid" model which included a mix of the two energy sources.

This information is relevant to the assessment of Narrabri Gas because it is evidence of an emerging and accelerating trend away from the use of fossil fuel gas. It is also directly relevant to an assessment of fossil gas supply and demand in NSW as Evoenergy runs the gas network in Queanbeyan and Palerang LGA (which is part of NSW).<sup>2</sup> Please also note that the ACT Government's Climate Change Strategy is predicted to result in fewer new gas connections, higher rates of disconnection, and lower overall usage per customer.<sup>3</sup>

### Zero emission gaseous fuels and gas efficiency

There is no mention of *zero emission gaseous fuels* in the Department's assessment of Narrabri gas. In April 2020, NSW DPIE published a 'NSW Energy Savings Scheme – Draft Statutory Review Report' which found that:

*"[u]nlike slowly declining emissions from electricity, NSW emissions from on-site use of gas and other fuels in factories, farms and homes are projected to remain stable at about 15 Mt CO<sub>2</sub>-e per year without further action. Until zero emission gaseous fuels become cost effective, there remains a need to reduce these emissions through gas efficiency."*<sup>4</sup>

There are a multitude of gas efficiency measures in NSW that are supported by the NSW Government. None of these are mentioned in the Department's assessment of Narrabri gas (including in the 14 August letter).

## **SUMMARY OF RELEVANT POLICY INITIATIVES NOT MENTIONED AT ALL IN NSW DPIE'S ASSESSMENT REPORT AND SUBSEQUENT CORRESPONDENCE WITH THE IPC DESPITE A SPECIFIC REQUEST FROM THE IPC FOR INFORMATION ON "HOW THE NET ZERO PLAN STAGE 1: 2020-2030 RELATES TO THE NARRABRI GAS PROJECT"**

### 1. 10% hydrogen target (Net Zero Plan Stage 1: 2020–2030)

The Net Zero Plan Stage 1: 2020–2030 has a goal of injecting up to "10% hydrogen in the gas network by 2030".<sup>5</sup> The Department has failed to provide any modelling to the IPC on the impact of this policy initiative on the displacement of Narrabri's fossil gas in the network over the next 20-25 years. This is very curious given the central importance of hydrogen in the Net Zero Plan and in the NSW Chief Scientist's

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<sup>2</sup> Evoenergy owns and operates the gas distribution network in the ACT and in the Queanbeyan-Palerang local government area of NSW. They have about 150,000 customers connected to their gas network.

<sup>3</sup> Attachment 7, Demand forecasts, Access arrangement information ACT and Queanbeyan-Palerang gas network 2021–26, Submission to the Australian Energy Regulator, June 2020, <file:///Users/mac/Downloads/Evoenergy-Attachment%207%20Demand%20forecasts-June%202020-Public.pdf>

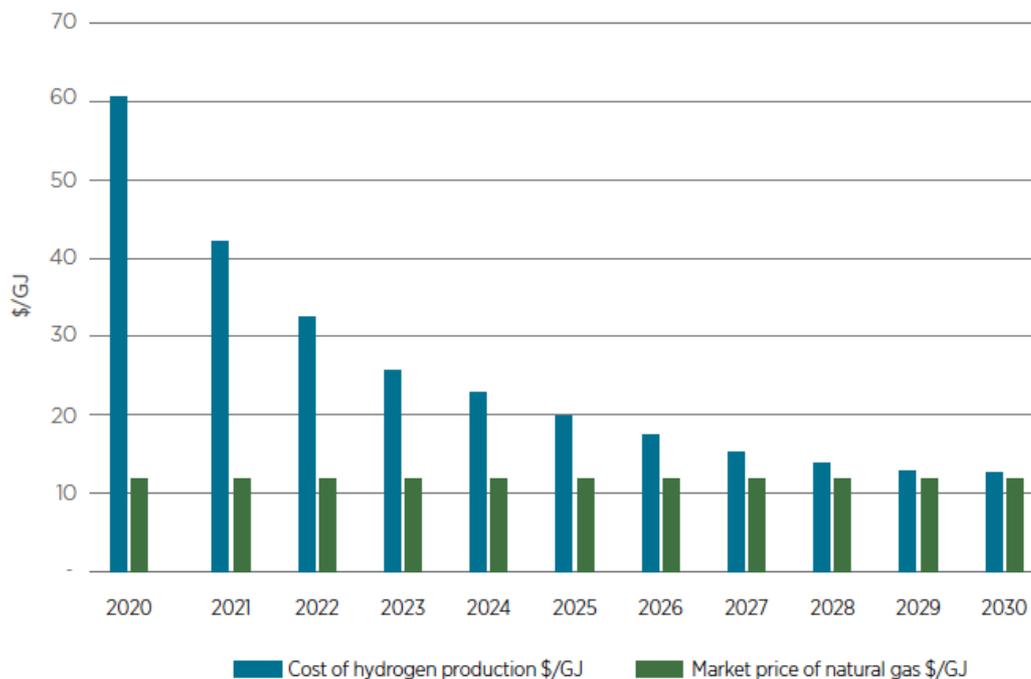
<sup>4</sup> NSW DPIE, NSW Energy Savings Scheme – Draft Statutory Review Report, April 2020, pg 15

<sup>5</sup> NSW DPIE, Net Zero Plan Stage 1: 2020–2030, March 2020, pg 30

Decarbonisation Innovation Study (the final report from the Chief Scientist identifies hydrogen as a big opportunity for NSW). The Net Zero Plan Stage 1 describes the versatility and potential of hydrogen:

*“Hydrogen can be used as a fuel to generate electricity in gas turbines or to power vehicles and is a feedstock in industrial processes. It can be produced using electricity and water, and it can be stored and transported. Research into hydrogen use in vehicles indicates fuel costs for hydrogen fuel cell vehicles are likely to fall as supply scales up. Hydrogen has the potential to transform large sectors of the economy, such as transport and manufacturing, as it can be produced with low or no emissions. New South Wales is well placed to take advantage of this opportunity.”<sup>6</sup>*

The Net Zero Plan Stage 1 also indicates the cost of hydrogen reaching near parity with fossil gas in about 2030.



**Figure 1** Projected hydrogen production costs

Source: Australian Gas Infrastructure Group. The natural gas 2020 market price is estimated using market data and held constant over time.

Net Zero Plan Stage 1: 2020–2030

Hydrogen is not mentioned in NSW DPIE’s Narrabri Gas assessment nor in the Department’s ‘Response to Independent Planning Commission Questions’, provided to the Commission on 14 August 2020.

<sup>6</sup> NSW DPIE (2020) Net Zero Plan Stage 1: 2020 – 2030, pg 8

## 2. ENERGY SECURITY SAFEGUARD (NET ZERO PLAN STAGE 1: 2020–2030)

This is the NSW Government’s flagship energy efficiency scheme, which will “accelerate the deployment of energy efficiency technologies which reduce demand on ... gas networks”. The Plan says the NSW Government will “establish an **Energy Security Safeguard (Safeguard)**” which will “extend and expand the Energy Savings Scheme” and will support the uptake of “energy savings activities that reduce the demand of businesses and households on the electricity and gas network, such as energy-efficient lighting upgrades or replacing the use of grid gas with onsite biomass.”

This policy initiative is not mentioned in NSW DPIE’s Narrabri Gas assessment nor in the Department’s ‘Response to Independent Planning Commission Questions’, provided to the Commission on 14 August 2020.

## 3. Making the existing gas supply ‘greener’ (Net Zero Plan Stage 1: 2020–2030)

NSW DPIE says that NSW “has significant opportunities to switch to cleaner fuels” and that bioenergy and solar thermal solutions “can replace significant amounts of natural and liquefied petroleum gas (LPG) in industrial use across Australia (IT Power 2015) ... Much of this potential is in regional New South Wales (Energetics 2018, p. iii-iv).”<sup>7</sup>

The Net Zero Plan Stage 1: 2020–2030 found that there is “significant potential to cut emissions from onsite fuel use through electrification using renewable energy, commercialising hydrogen production, improving fuel efficiency and making the existing natural gas supply ‘greener’ through the injection of hydrogen and biogas.”<sup>8</sup>

Electrification using renewable energy, commercialising hydrogen production, improving fuel efficiency and making the existing natural gas supply ‘greener’ through the injection of hydrogen and biogas policy initiatives are not mentioned in NSW DPIE’s Narrabri Gas assessment nor in the Department’s ‘Response to Independent Planning Commission Questions’, provided to the Commission on 14 August 2020.

## 4. Clean Technology Program (Net Zero Plan Stage 1: 2020–2030)

The NSW Government is establishing a substantial Clean Technology Program (with very significant funding) to develop and commercialise emissions reducing technologies. The Clean Technology Program will be supported by a review by the NSW Chief Scientist and Engineer into the commercial opportunities in New South Wales of low emissions technologies.<sup>9</sup> The NSW Chief Scientists’ Review has been completed and is currently with Minister Kean. The March 2020 scoping paper for

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<sup>7</sup> NSW DPIE, Energy Security Target and Safeguard: Consultation Paper, April 2020, pg18

<sup>8</sup> NSW DPIE (2020) Net Zero Plan Stage 1: 2020 – 2030, pg 29

<sup>9</sup> NSW DPIE (2020) Net Zero Plan Stage 1: 2020 – 2030, pg 29

the Chief Scientists' review - NSW Decarbonisation Innovation Study, Scoping Paper - gave a clear indication of the relevance of this work to the Narrabri gas assessment. The paper describes decarbonisation as the shift from activities which are greenhouse gas (GHG) emissions-intensive to activities with low or no GHG emissions, or that capture emissions. The NSW Chief Scientist reckons "NSW must pursue multiple decarbonisation pathways". The Department's Narrabri Gas assessment mentions none of these. These pathways are:

Pathway 1: Transition to renewable and low-emission electricity generation

Pathway 2: Electrify transport, industry and infrastructure

Pathway 3: Improve energy and material efficiency and productivity

Pathway 4: Develop new alternative processes for hard-to-abate emissions<sup>3</sup>

Pathway 5: Use emissions capture and sequestration

Neither the Clean Technology Program, nor the NSW Chief Scientist's review was mentioned in NSW DPIE's Narrabri Gas assessment nor in the Department's 'Response to Independent Planning Commission Questions', provided to the Commission on 14 August 2020.

**THE IMPLICATIONS FOR THE FUTURE OF FOSSIL GAS USE IN NSW OF A 35% REDUCTION IN GHG EMISSIONS BY 2030 IN NSW, TOGETHER WITH THE POLICY GOAL OF NET ZERO BY 2050 HAVE NOT BEEN PROPERLY CONSIDERED.**

### **35% reduction in GHG emissions by 2030**

In his Ministerial message in the Net Zero Plan Stage 1, Matt Kean wrote:

*"The NSW Government is committed to taking decisive and responsible action on climate change. That's why we've already set a goal of net zero emissions by 2050 and today, we're releasing this Net Zero Plan Stage 1: 2020–2030 to fast-track emissions reduction over the next decade and prepare the State to take further action in the decades to follow."*

It makes no sense at all that this statement could be interpreted in the 14 August letter from David Kitto as having no impact at all on the decarbonisation of gas supply in NSW. NSW is progressing with emissions reduction measures. These *must* include the decarbonisation of gas supply in order to get onto the pathway to net zero. This *will* have an impact on future demand in NSW for Narrabri gas, therefore this should have been considered by the Department in their assessment.

The 14 August correspondence did finally at least recognise the existence of the **35% reduction in GHG emissions by 2030** target contained within the Net Zero Plan, however it still managed to ignore policy efforts to reduce the use of fossil gas. As the policies and programs mentioned above demonstrate – and this is by no means an exhaustive list – there *are* policy initiatives to reduce the use of fossil gas in line with the net zero plan.

## Net zero by 2050

All states and territories in Australia – and for that matter in the eastern Australian gas market - have the shared policy goal of net zero emissions by 2050 or earlier (the ACT plans to get to net zero by 2045). With no policy initiatives for carbon capture and storage from fossil gas use in eastern Australia planned, the net zero goal means fossil gas use must decline to zero, or close to zero over this time.

I understand that there *are* gas use projections from AEMO and others for NSW and the eastern Australian gas market that assume flat demand for the next two decades, however it is not in the public interest to base an entire new fossil gas project assessment on *only* this scenario. This scenario assumes the failure of shared state and territory policy to reduce fossil gas use and get to net zero. It also ignores the potential of and existing targets for the substitution of zero emissions gaseous fuels into the gas network.

## CONCLUSION

NSW DPIE has informed the IPC that the NSW Climate Change Policy Framework endorses the Paris Agreement and commits to taking action that is consistent with the level of effort to achieve Australia's commitments to the Paris Agreement and complement national action. Decarbonising gas use in NSW is an action that is consistent with the level of effort to achieve Australia's commitments to the Paris Agreement and complement national action. It is also something that is already embedded within existing NSW policy initiatives.

**The IPC should urgently seek a briefing from the Department on policy initiatives of the NSW Government to *reduce* the use of fossil gas in NSW over the next 20-30 years and the likely impact of these policy initiatives on future demand for Narrabri gas.** This is required in order to ensure that the IPC has the necessary information to determine whether or not a 'critical need' for a new supply of fossil gas from the Narrabri Gas Project exists and whether an approval is in the public interest.