SUBMISSION

DISR – FUTURE GAS STRATEGY CONSULTATION PAPER

13 NOVEMBER 2023

INTRODUCTION

The Energy Users' Association of Australia (EUAA) is the peak body representing Australian commercial and industrial energy users. Our membership covers a broad cross section of the Australian economy including significant retail, manufacturing, building materials and food processing industries. Combined our members employ over 1 million Australians, pay billions in energy bills every year and in many cases are exposed to the fluctuations and challenges of international trade.

Thank you for the opportunity to make a submission under DISR's Future Gas Strategy consultation paper. The EUAA can see many potential near-term issues but also medium to long-term opportunities with the future of gas in Australia and considers that it is the right time to develop a robust and transparent national strategy to secure the gas sector. We understand that this consultation paper, broad as it is, will set the direction of travel for future gas strategy and that additional consultation on more specific issues will ensue over the coming 12 months. We look forward to remaining engaged in this process.

The EUAA and its members propose that the Future Gas Strategy has four steps to secure industry in Australia while transitioning to a net-zero economy. These steps are:

1. Ensuring access to secure and affordable natural gas supply to Australia's domestic market: while gas consumption is expected to drop as those who can electrify do so, those industries who rely on the methane molecule for its particular combustion properties and/or those converting from coal, will require natural gas during the transition. In addition, some EUAA members are expecting to expand production (and therefore increase gas consumption) to supply critical products to support Australia's transition to net-zero.

2. Prioritising Natural Gas utilisation: to ensure that in the short to medium term, natural gas is utilised by industry that needs natural gas (because it has no realistic alternatives) while electrification opportunities are developed and a renewable gas industry is stood up, should it prove commercially viable.

3. Standing up a Renewable Gas Industry: most currently operating biogas plants supplying small electricity generation units or being flared. There are currently few projects either operating, in construction or planned to supply biogas to industry or the existing natural gas network. This lack of access to commercial quantities of biomethane presents a barrier to industry trying to decarbonise, as does the geographic distance between biomass resources and industrial plant locations for some businesses. While we recognise that it is highly unlikely that biogas will be capable of meeting current demand for methane, it could still play a significant role in decarbonisation of the industry. The EUAA considers that a certification scheme to support renewable gases will assist in delivering commercial quantities of renewable gases.

4. Continue to accelerate domestic gas market maturity: This would include an ongoing role for the ACCC in its market monitoring and compliance role, the continuation of the gas industry code of conduct until we have achieved a "workably competitive market", incentives for new supply and suppliers of gas (including biogas), continued gas pipeline reform including strategies to manage potential stranded asset risk/cost as customers electrify and creating fungible green gas certificates that would allow those who can't decarbonise to continue to decarbonise by purchasing certificates. The safeguard mechanism architecture could prove to be a useful platform to help facilitate this.

SECURING GAS SUPPLIES

The EUAA has long had a focus on reducing the barriers to the availability of reliable and competitively prices gas supplies for domestic gas users.

The EUAA believes that natural gas will continue to play a central role for manufacturing, heavy industry and flexible electricity generation for during the transition to new-zero and also has a critical role to assist many industries with decarbonising the Australian economy.

Electrification, where possible, could have the most meaningful impact on decarbonising some of Australia's harder-to-abate sectors but is reliant on new, large-scale renewable energy, including solar, wind, hydro and battery storage at competitive prices. While some members are looking closely at alternatives fuels such as biomethane and green hydrogen, until a commercially viable renewable gas industry is developed in Australia, natural gas will continue to be critical to the continued operation of industry. This is particularly pertinent to industry who cannot electrify and for the decarbonisation of the industrial sector who currently utilise coal. Even where electrification options may be commercially viable, the long investment cycle of industry means that these technologies wont/can't be deployed immediately, and may be further delayed due to a lack of acceptable non-fossil fuel electricity sources.

Therefore, securing adequate quantities of reliable and affordable natural gas supplies must be the first priority of the Federal government.

The EUAA has supported the Federal Government's Mandatory Code of Conduct that we trust will see a reduced cost of natural gas and improved commercial behaviour from gas producers. The ADGSM will also continue to play a role in ensuring adequate supply of gas as will the ongoing market monitoring role of the ACCC. However, the EUAA sees these as part of an overall strategy that will secure adequate quantities of reliable and affordable natural gas for domestic energy users.

The EUAA sees it as a priority that the Federal Government support the exploration and tapping of new natural gas supplies to place downward pressure on domestic gas prices. This includes implementing active tenement management for the efficient exploration through to production of new natural gas fields, including "use-it-or-lose-it" approaches as recommended by the ACCC in their July 2020 Gas Inquiry 2017-2025 Interim Report. We emphasise the point that while more gas supplies are required, a greater diversity of suppliers is equally important to ensure we move towards a workably competitive domestic gas market as described by the ACCC. We believe the Federal Government can be proactive in this space.

Many smaller gas producers require long-term gas offtake agreements (15+ years) to underwrite financing arrangements for new projects. Unfortunately, not many domestic gas users are able to take on a long-term arrangement of this nature. To resolve this issue, we strongly suggest that the Federal Government consider a form of underwriting arrangement, similar to what is occurring in electricity markets, to provide the necessary assurances for smaller gas producers to increase gas outputs. Whether increasing output of existing small gas producers, or creating new supplies, the EUAA believes there are opportunities for the Federal Government to play a positive role to ensure domestic gas supply and accelerate us towards a workably competitive market.

We note that the Mandatory Code has set an "anchor price" of $12/GJ which is workable in the short-term but not ideal for many EUAA members. Members have pointed out that the $12/GJ is ex-producer and has transportation, retailer and other charges added prior to purchase by industry, making the "as-delivered" cost much higher.

Some members are also reporting that the $12/GJ is proving to be above the current international price of gas and makes it difficult for foreign owned companies to invest in Australian plant. With higher gas prices (even at $12/GJ), the products industry produce will increase in price, all the way down the supply chains to retail products and household. We strongly suggest that government ensures the ACCC are empowered to act on evidence of market abuses of power and require the ACCC to expressly report on market behaviours and how they have responded in each instance, to ensure the anchor price does not become a "floor price" that restricts downward pressure on contract prices.

Access to reliable and affordable natural gas will become a particular concern to industry and households in Victoria and New South Wales due to those states policies on new developments. It is envisaged that the "as-delivered" price of gas in those two states will increase significantly as local gas supplies are replaced with gas transported from Queensland and Northern Territory. The Federal Government should be working with those state governments to ensure continuity of supply to industry in those states, which may include accessing new gas supplies in the short to medium term.

Finally, while state governments control on-shore gas reserves we would encourage the Federal Government to consider options to secure domestic gas supply via off-shore reserves that it does have jurisdiction over. This could include attaching some form of domestic gas obligation to future off-shore gas licencing arrangements.

PRIORITISING NATURAL GAS CONSUMPTION

The EUAA strongly believes that the Federal Government should be coordinating the parts of the economy that can electrify, to electrify (i.e. residential, commercial buildings, personal vehicles, light commercial vehicles and some industrial heating), freeing up quantities of gas for industry where electrification is not a viable alternative. However, the transition away from natural gas needs to be considered and implemented in an orchestrated manner, to ensure that those that transition away from the natural gas do not leave increased costs (i.e. those left using gas will pay an increasing proportion of the network bill) for the remaining natural gas consumers.

Some EUAA members have expressed a concern regarding recent gas market reforms that may allow the market operator to curtail customer gas load in favour of gas-powered generation (GPG). With up to 3GW of additional GPG proposed by AEMO to meet growing gaps in capacity, the EUAA and its members are concerned about supply constraints and pipeline capacities being prioritised to GPG. While supportive of using gas as peaking generation

this should not be achieved by load shedding of gas customers so a clear and transparent method for the prioritisation of lights versus industry needs to be developed.

We encourage the Federal Government and market bodies to ensure there are fair and transparent policies in place to ensure that adequate supplies of natural gas are available to those with firm contracts, while ensuring that electricity supply is secure. This may require adequate notification and compensation mechanisms for consumers who are unable to maintain access to natural gas during these periods of high GPG output. To alleviate these issues, establishing a hierarchy that, for example, DER, energy efficiency, curtailment and load shifting are prioritised prior to large volumes of GPG being deployed to the NEM, ensuring a balance between increased gas demand from GPG and decreased output of electricity generation, while taking into account the needs of industry.

One of EUAA's members has advised that in the short to medium term, large quantities of natural gas is being consumed by producers for the purpose of processing LNG. The Federal Government should give some thought to moving this gas to the domestic market by encouraging LNG production to use alternative energy sources in their processes. This may be facilitated via the Safeguard Mechanism as there may be opportunities for LNG producers to meet their Safeguard Mechanism requirements by moving the electricity used for LNG processing from GPG to renewable energy sources. This could have the additional benefit of moving existing GPG plant into the NEM to provide peaking and/or firming capacity, alleviating the need for new GPG.

RENEWABLE GASES

The EUAA notes that it is likely that Australia is limited to supplying only 22.5% of the current natural gas consumption from biomethane,[1] with most currently operating biogas plants supplying small electricity generation units or flaring the biomethane. There are currently few projects either operating, in construction or planned to supply biogas to industry or the existing natural gas network. This lack of access to commercial quantities of biomethane presents a barrier to industry trying to decarbonise, as does the geographic distance between biomass resources and industrial plant locations for some businesses.

Similarly, green hydrogen faces difficulties in being rolled out and scaled up to meet governments emissions targets. One EUAA member has run tests operating on 100% hydrogen, and had difficulties with the high moisture flue gas, embrittlement of the boiler and different steam pressures for use in existing plant operations. However, some have had relative success with hydrogen trials, and others continue to work on opportunities for industrial application. Given the production of a MWh equivalent of hydrogen requires 1.2 MWh of electricity, the EUAA considers that there is a risk of undue strain on electricity infrastructure during a time when Australia is undergoing its biggest transformation in the electricity sector. The additional electricity infrastructure requirements are in addition to the NEM upgrades identified in AEMO's 2022 Integrated System Plan.

It is from this perspective that the EUAA strongly believes that the parts of the economy that can electrify, should electrify (i.e. residential, commercial buildings, personal vehicles, light commercial vehicles and some industrial heating), and that the limited biomethane and initial tranche of green hydrogen production should be directed to the industries that cannot electrify. Further, biomethane should have enhanced protections to ensure that the limited supplies go to those industries that cannot electrify and cannot utilise hydrogen.

[1] RACE for 2030, B5: Opportunity Assessment – Anaerobic digestion for electricity, transport and gas Final Report, May 2023

However, the transition away from natural gas needs to be considered and implemented by the Federal Government in an orchestrated manner, to ensure that those that transition away from the natural gas do not leave increased costs for the remaining natural gas consumers, and that sufficient volumes of renewable gases and natural gas are available at all times during the gas transition to meet the total gas demand.

To resolve some of the issues around utilisation of renewable gases, including collection of feedstocks for biomethane, the EUAA strongly urges the Federal Government to orchestrate the transition, identifying industry that requires biomethane and assisting in co-locating biomethane production either onsite or nearby. EUAA considers that food harvesting and processing regions make ideal early candidates for biomethane production and consumption.

Similar orchestration could also be performed for the green hydrogen industry. In particular the costs associated with any green hydrogen production facility built for export (including additional electricity infrastructure to support it) should be borne entirely by the hydrogen exporter and not cross subsidised by domestic electricity and gas users.

Globally, the bioenergy sector is far more mature with many countries already possessing biomethane manufacture and distribution, reducing emissions at a lower cost than green hydrogen. The green hydrogen industry by comparison has relatively few operational large-scale plants globally, requires additional investment in electricity generation and networks, and is currently much higher in cost. Further, to distribute green hydrogen, existing gas pipelines may need to be upgraded and/or new transport mechanisms established (i.e. tankers).

With the maturity of the biomethane sector globally, the EUAA considers that the immediate concern (to 2035) is replacing the methane molecule for the hard to abate sector and industries that rely on the methane molecule in their production process (e.g. industry that utilise methane as a feedstock or the particular properties of methane combustion). At the same time, we should be seeking to move hydrogen down its cost curve with targeted funding.

GAS PIPELINES

Of major concern to EUAA and its members is the impact of reducing gas consumption and decommissioning of the existing natural gas pipelines throughout Australia. This has the potential to become a significant intergenerational equity issue where future gas users, unable to electrify their homes or businesses, will pay an ever-increasing network bill that is unavoidable.

The EUAA encourages the Federal Government to develop a policy for the allocation of costs associated with the reduction in gas consumption and decommissioning of pipelines, taking into account the accelerated depreciation and the impact to tariffs and gas transportation costs. The transition away from natural gas needs to be considered and implemented by the Federal government in an orchestrated manner, to ensure that those that transition away from the natural gas do not leave increased costs for the remaining natural gas consumers

DECARBONISATION

EUAA urges the Federal Government to consider geographic barriers to emissions reductions by industry, noting that many industries located plant close to feedstocks, energy inputs and/or ports which now places them at a disadvantage for supply of appropriate renewable gas volumes and/or space restrictions due to encroaching industry or residential zones.

The EUAA is also aware of several industry consumers looking to expand production to (among other markets) assist with Australia's energy transition. This increase in production will likely necessitate increased natural gas (and electricity) consumption. Conversely, some members have adjusted production down to assist meeting Safeguard Mechanism targets, which has the effect of increasing per production emissions. Government would be advised to consider a fair and equitable method for determining emissions liabilities, as one member has reported that their financial obligation now prevents them from investing in emissions reductions.

These issues could be resolved through the Federal Government creating fungible certificates for renewable gases. The safeguard mechanism could provide a useful platform to facilitate this.

Certificate schemes are best implemented Federally with fungible certificates, rather than state based, allowing for industry to apply one rule across all jurisdictions and to transfer the benefits to plant that are geographically or technically difficult decarbonise. Including renewable gases in the proposed "Certificate of Origin" certificate scheme would help businesses to decarbonise.

While the EUAA supports a fungible certification system for renewable gases, there are various policy options be pursued in this space. For biomethane, we do not believe it is appropriate to support a RET style subsidy scheme as this would simply increase the cost of gas for all consumers. At this point in time a combination of grant funding and/or a government supported underwriting scheme to support deployment would be most appropriate. For hydrogen, due to it immaturity we believe that grant funding for early stage trial facilities is most appropriate. We do not support RET style subsidy schemes or the cross subsidisation of the transport sector by stationary energy users as is the case in NSW.

A useful approach from government would be in the area of orchestration and facilitation, where government identifies the consumer with the specific renewable gas requirement, e.g. identifying industry that requires biomethane and facilitating the co-location of biomethane production either onsite or nearby. Another example is for government to identify regions with co-located resource (biomass) from food harvesting with food processing located nearby. The second component of the policy would allow for grants to either or both the production facility (to reduce the cost of the renewable gas) and the consumer (to reduce the cost of implementation, particularly where the business is transitioning to green hydrogen). This follows the "sectorial" decarbonisation approach being pursued by government.

The EUAA believes that a market-based certificates scheme for renewable gases would not be appropriate at this time and is concerned about cross subsidisation of one sector at the expense of another.

CONCLUDING REMARKS

The EUAA encourages the Federal Government to firstly secure domestic natural gas supplies at suitable quantities and affordable price, continue to pursue measures that move us closer to a workably competitive domestic gas market, prioritise natural gas by redirecting the limited supplies away from those who can utilise other technologies, look to options to stand-up a renewable gas market and ensure we manage the intergenerational equity issues associated with potential stranded asset risks associated with gas pipelines.

The EUAA has included responses to selected consultation questions in the table below.

Do not hesitate to be in contact should you have any questions.

Andrew Richards
Chief Executive Officer

Selected Consultation Questions	EUAA and Members responses
1. Do you use any international and/or domestic forecasts to inform your outlook of the gas market? We want your views on which scenarios best reflect the demand outlook. Are there any limitations or additional factors impacting the demand outlook you would like to note?	EUAA and its members use several different forecasts depending on their needs and consumption including the GSOO, JKM netback, Wood MacKenzie Asia-Pacific, crude oil price. Industrial demand for natural gas is linked to consumer demand for their products. Therefore, long-term estimates of natural gas consumption become less accurate the further into the future the estimate is for. Government policies are looking at gross reductions in natural gas consumption, however industry is looking at increasing outputs (in-part to supply materials for the energy transition), which will increase natural gas consumption. Government should look at natural gas efficiency measures (i.e. a reduction in the per unit production natural gas consumption).
2. What role do you see gas-fired generators playing in supporting Australia's 82% renewable energy targets and beyond?	EUAA and its members see GPG potentially playing many roles depending on its location and size and noting the ISP calls for an additional 10GW of GPG), including baseload generation, peaking plants and firming of renewables, particularly inter-day. There are concerns that GPG will set the NEM wholesale price, which could drive up the wholesale prices, costing consumers more for electricity (and in contrast to the messaging from government that electricity prices will be cheaper).
3. How will the expected trends in demand from gas-fired generators impact other gas users?	GPG consumption of natural gas will impact the price of gas, making gas more expensive, particularly when GPG demand is high. GPG will be able to withstand a higher price shock in the price of natural gas meaning peakier pricing and demand of natural gas, potentially limiting supply of natural gas at peak GPG generation. GPG will also compete for pipeline capacity during winter when it is likely that more GPG will be required.

4. What should government do to consider managing these impacts and to mitigate energy peaks caused by regional or seasonal variations?	The EUAA and its members are concerned about how government and the AER intend to prioritise pipeline capacity and natural gas supply between GPG and firm gas consumers. However, establishing priorities for the NEM may alleviate these concerns, e.g. Establishing a hierarchy that DER, energy efficiency, curtailment and load shifting are prioritised prior to large volumes of GPG being deployed to the NEM, ensuring a balance between increased gas demand from GPG and decreased output of electricity generation.
5. How feasible, and at what scale, are alternatives to natural gas for the electricity sector? You may wish to consider renewable gas alternatives for peaking generation, for example, biomethane and low-emissions hydrogen and other forms of grid-firming technologies like batteries and pumped hydroelectricity. What barriers exist to using these alternatives?	Biomethane and hydrogen generation are both feasible for utilisation in the electricity sector, however, with limited biomethane available (up to 22.5%) and hydrogen requiring 120% of its output in VRE to produce green hydrogen, government needs to be cautious that ○ Alternative gases are utilised for the industries who require them as inputs, not just who will pay the most (e.g. biomethane should be reserved for those that require the methane molecule like chemical feedstocks and high temperature kilns) ○ Competing interests do not unnecessarily increase the cost of these renewable gases
6. How much longer will you continue using gas as a fuel source or feedstock for your business? Do you think your consumption of gas will decline over time, and if yes, at what rate?	Many EUAA members are investigating reductions in natural gas consumption, however: ○ Several members are reliant on the methane molecule as either a feedstock, source of carbon in a process or to achieve high (dry) temperatures that are unavailable through electrification or hydrogen. ○ Several members are planning for increased at increasing outputs (in-part to supply materials for the energy transition), which will increase natural gas consumption in the short to medium term.

7. Are there alternatives that your business can use instead of gas (for example electrification, hydrogen, biomethane or circular economy inputs)? What barriers exist to using these alternatives? How can the substitution of gas be accelerated?	Many of EUAA's members have considered alternatives to natural gas, including electrification, hydrogen and biomethane. For renewable gases, some of these considerations have been for "behind-the-meter" facilities, others have been for third party supplied renewable gases. There are several barriers to implementation of these projects: ○ The lack of a renewable gas industry. ○ Difficulty in securing reliable biomass feedstocks. ○ Geography – being physically constrained to include on-site production of renewable gas and/or being too far from sufficient and reliable biomass sources to create biomass or water to create hydrogen. The substitution of natural gas could be accelerated by government through: ○ Incentives for the renewable gas sector to be established ○ Mechanisms to secure biomass and water resources for renewable gas production ○ Fungible certificates for renewable gas that allows geographic transfer of the decarbonisation
39. What are the risks to Australia's domestic gas security in the medium (to 2035) to long term (to 2050) for your industry and how can these be addressed?	Supply, network constraints and cost are the biggest constraints facing domestic gas security for consumers. In the first instance, government should be looking to assist small gas producers expanding operations, including opening new extraction sites as appropriate. Another method to address these issues is for government to stand-up a renewable gas industry, with fungible certificates. Government action to mitigate pricing issue is twofold: ○ Ensure the price cap remains in place until there is ACCC evidence of a competitive workability and ensure it acts as a ceiling rather than a floor. Current evidence is that it is acting as a floor. ○ Ensure ACCC are empowered to act on evidence of market abuses of power and require the ACCC to expressly report on

	market behaviours and how they have responded in each instance.
40. What do you see as the biggest risk to the ongoing affordability of Australia's domestic gas supply? For example, what are risks to affordability in the wholesale or retail market?	There are several competing mechanisms driving affordability of natural gas in the domestic market: ○ Decreased supply from producers ○ Increased demand from GPG ○ Increased constraints in pipelines, either from reduced gas production in the south requiring gas to be transported from the north, or from increased demand from GPG ○ Reduced demand from the residential and commercial sectors transferring infrastructure (distribution) costs to manufacturers and industry that require natural gas.
41. What reforms can be made at a Commonwealth, state, territory, or industry level to allow gas supply to be more responsive to domestic demand signals?	For Victoria and NSW to open up suitable gas extraction to allow for a smooth transition to net-zero. Use it or lose it tenement management as recommended by the ACCC in their July 2020 Gas Inquiry 2017-2025 Interim Report, Government should look to "active tenement management" to ensure gas acreage is not being withheld to the detriment of domestic gas users and is efficiently brought to market.
42. What actions are available to lower gas costs, including substitution and new supply, to provide certainty to consumers? How would these actions further the Australian Government's decarbonisation goals?	Government needs to increase gas supply, through expanded operations, new gas fields and electrification of those who can. Government needs to ensure that there are mechanisms to incentivise the renewable gas sector to invest, while also ensuring that natural gas producers are supplying the shortfall between renewable gas supply and the total gas demand. The transition will require orchestration by governments to ensure that biomass and hydrogen plants are built in appropriate locations, that businesses that require methane have access to methane, and that those who electrify do not leave those remaining to fund the natural gas systems. any green hydrogen production facility built for export should have a domestic reservation applied to its production levels to avoid a repeat

	of the Queensland LNG export program's impact on domestic fossil gas prices