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Future Gas Strategy Taskforce
Department of Industry, Science and Resources
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Dear Future Gas Strategy Taskforce

FUTURE GAS STRATEGY – CONSULTATION PAPER

The Chamber of Minerals and Energy of Western Australia (CME) is the peak representative body for the resources sector in WA. CME is funded by member companies responsible for 44 per cent of Australia's corporate income tax receipts by value¹ and 29 per cent of Australia's 'new energy' projects.² Our members comprise gas and LNG producers, domestic gas consumers (i.e. gas-fired electricity generators, fertiliser and explosives manufacturers and heavy industry such as alumina production, lithium chemicals and silicon) and gas transmission and distribution pipeline owners and operators.

CME and its members support the Paris Agreement goals of limiting warming to well below 2 degrees Celsius, and preferably to 1.5 degrees Celsius, by reducing greenhouse gas emissions (emissions) to net zero as soon as possible and no later than 2050.³ We therefore welcome the Australian Government's commitment to long-term policy clarity on the role of gas through development of the national Future Gas Strategy (the Strategy).

The Strategy should maintain Australia's international cost-competitiveness, support a flexible pathway to least-cost abatement and be consistent with the development of federal and state sectoral decarbonisation plans. To ensure sufficient availability and maintain price stability, the Strategy should:

- Identify Australia's strategic priorities for natural gas use, including both domestic and export uses.
- Enable adequate gas supply to meet these priorities.
- Support and facilitate technologies that enable net emission reductions of domestic industrial processes and our trading partners to net zero by 2050.
- Support improvements in the efficiency and effectiveness of federal-state approval processes.

To meet net zero in the long term (by 2050), CME acknowledges there needs to be a global transition to very low-or zero-carbon energy sources.⁴ However, we note artificial reductions in gas demand or supply may risk energy security, affordability and reliability during this challenging phase of the global energy transition in the near to medium term (to 2035). For example, the Australian Energy Market Operator (AEMO) forecasts total domestic gas demand in Western Australia (WA) will increase by 16 per cent to 2032 to ensure the reliability, and support the decarbonisation, of the electricity grid, and support the extraction and processing of critical minerals required for the energy transition.⁵

¹ Australia-wide operations of companies with direct, equity joint venture or subsidiary interests in WA-based member projects. Commonwealth of Australia, [2020-21 Report of Entity Tax Information](#), Australian Taxation Office, 3 November 2022.

² 33 of 112 projects from 2024 onwards. Commonwealth of Australia, [Resources and energy major projects list](#), Department of Industry, Science and Resources, spreadsheet data at 31 October 2022.

³ CME, [Climate change](#), policy areas, published 24 September 2021.

⁴ With demand-side and carbon dioxide removal measures, including substantial reduction in overall fossil fuel use and minimal use of unabated fossil fuels. Intergovernmental Panel on Climate Change (IPCC), [Climate Change 2023: Synthesis Report](#), contribution of Working Groups I, II and III to the Sixth Assessment Report of the IPCC, March 2023, pp 86-87 and 104.

⁵ Gas demand for electricity generation is expected to double between 2023 and 2032 to ensure the reliability of a grid with a much higher share of renewables generation, while gas demand for mineral processing (including for lithium) is expected to increase by 18 per cent. Australian Energy Market Operator (AEMO), [2022 WA Gas Statement of Opportunities](#), December 2022.

Background

Natural gas and LNG have an established role in facilitating the global energy transition to net zero in this decade.⁶ While the share of global gas-fired generation is expected to remain stable to 2025,⁷ it plays a significant role in providing critical energy security during market turbulence and meeting incremental increases in baseload power supply in markets with declining shares of coal-fired generation.⁸

In Australia, the Australian Energy Market Operator (AEMO) expects a domestic gas supply shortfall in WA to 2026 until new supply comes online from the Scarborough project,⁹ and on the east coast a domestic gas supply shortfall is expected from 2027.¹⁰

CME's members are each on their own unique, technology-led decarbonisation trajectory towards net zero, whilst maintaining continuity of operations. As an established fuel source, gas provides operational resilience, and for some hard-to-abate sectors with high-temperature heat requirements gas may be an interim transition fuel for reducing emissions in the medium term.¹¹

In preparing this submission, we have sought to provide the WA perspective on the consultation paper's questions and liaised with the Australian Energy Producers. The submission is framed by our existing energy and climate policies, and draws on previous submissions regarding gas, hydrogen and critical minerals.¹²

Questions 2-9: Gas demand and use

Gas-fired generation

In Australia, gas is 'tightly entwined' in the electricity market.¹³ The International Energy Agency (IEA) forecasts Australia will see natural gas use and emissions rise beyond 2035 should grid infrastructure development be slower than required to facilitate increasing renewables penetration.¹⁴ Although gas supply risks in the National Electricity Market (NEM) have eased relative to the winter 2022 crisis,¹⁵ access to longer term gas supply is still a vulnerability. Gas-powered plants supplied six per cent of electricity in 2022 across the NEM¹⁶ and AEMO expects a doubling of this capacity by 2050 to firm renewable energy. Regardless of price, gas will retain a firming role in providing stable, reliable supply of electricity in the medium term.¹⁷

In the WA Wholesale Electricity Market, the minimum operational demand for grid-provided electricity has declined year-on-year reaching an all-time low due to increasing maximum output from distributed photovoltaic (rooftop solar) output.¹⁸ This trend of system reliability gaps caused by intermittent renewables, coupled with reliability challenges for coal-fired generation, will require expediting of projects to provide additional capacity in the South West Interconnected System (SWIS).¹⁹ To mitigate the impact of sudden changes in weather conditions (i.e., low output or variable generation), gas-fired generation is fast-ramping and can respond quickly to supplement a centralised grid. Similar to the NEM, the SWIS Demand Assessment also expects a doubling of gas-fired generation capacity by 2042.²⁰

Flexible gas firming capacity, complemented by energy storage, will also be required in the North West Interconnected System and off-grid remote applications.²¹ It is expected mining electricity demand in the

⁶ Peak demand for coal, oil and natural gas before 2030. International Energy Agency (IEA), [World Energy Outlook 2023](#), 10 October 2023.

⁷ IEA, [Electricity Market Report 2023](#), 1 February 2023, p 21.

⁸ Ibid, pp 72 and 98. Australia's gas production met 19% of growing needs for gas in power generation. IEA, [Australia 2023: Energy Policy Review](#), 19 April 2023, p 151. AEMO, [Quarterly Energy Dynamics Q1 2023](#), 28 April 2023. ABC News, [Alinta calls for new gas, green energy capacity as coal exodus threatens supply crunch in WA](#), 22 February 2023.

⁹ AEMO, [2022 WA Gas Statement of Opportunities: Market outlook to 2032](#), 15 December 2022; [WA domestic gas market finely balanced to 2032](#), media release, 15 December 2022.

¹⁰ Australian Energy Market Operator (AEMO), [Gas Statement of Opportunities: For central and eastern Australia](#), 28 April 2023.

¹¹ Australian Industry Energy Transitions Initiative, [Pathways to industrial decarbonisation: Positioning Australian industry to prosper in a net zero global economy](#), phase 3 report, February 2023.

¹² CME, [Energy policy](#), published 28 September 2021; [Climate policy](#), published 5 October 2021; [Towards competitive clean hydrogen](#), position paper, November 2021; [Accelerating opportunities in WA's critical minerals sector](#), position paper, 17 June 2023; [WA Renewable Hydrogen Strategy Refresh: Stakeholder Consultation Paper](#), submission to the Department of Jobs, Tourism, Science and Innovation, 20 October 2023.

¹³ Commonwealth Government, [Competition in energy markets: Note by Australia](#), item 3 contribution to the 74th OECD Working Party 2 on Competition and Regulation, 10 November 2022.

¹⁴ Grid Delay Case trajectory. IEA, [Electricity grids and secure energy transitions](#), 10 October 2023, pp 102-103.

¹⁵ Australian Energy Regulator, [State of the Energy Market 2023](#), October 2023, p 36.

¹⁶ Ibid, figure 3.18, pp 59-60.

¹⁷ AEMO, [2022 Integrated System Plan](#), 30 June 2022, p 58.

¹⁸ AEMO, [Quarterly Energy Dynamics Q3 2023](#), 23 October 2023, figure 99, p 58.

¹⁹ AEMO, [2023 Wholesale Electricity Market Electricity Statement of Opportunities](#), 17 August 2023.

²⁰ Government of Western Australia, [SWIS Demand Assessment 2023 to 2042: A future ready grid](#), Energy Policy WA, Department of Mines, Industry Regulation and Safety, 9 May 2023.

²¹ To date, almost all hybrid microgrid applications in remote regions have combined gas, diesel, energy storage batteries and renewables (wind or solar). There are no standalone low emission technologies which have a capacity of more than four hours to support 24/7/365 operations.

Pilbara will triple by 2040,²² with gas a reliable balancing fuel for transition in the near to medium term whilst a network solution for renewable energy generation, transmission and storage is developed.

Until other firming and storage technologies of least sustainable cost, low emissions and duration length become commercially viable at the scale required to support a successful whole-of-grid transition, the role of flexible, gas peaking generation and storage in delivering secure, affordable electricity in the near to medium term should be recognised in the Strategy. The Australian Government should support research and development and investment into alternative energy storage technologies.

In WA, where there is a higher proportion of electricity and gas used for industrial processes, power system security and reliability are vital. In the medium to longer term (post-2035), gas-fired generation fuelled by hydrogen or biomethane may play a crucial role in providing grid security and stability in the National Electricity Market (NEM) as coal retires.²³ Gas will be key to ensuring a timely, orderly and secure energy transition.

Infrastructure planning and scenario development for electricity, heating, transport, gas pipelines, hydrogen and different industrial decarbonisation trajectories needs to be coordinated²⁴ to align generation and transmission development opportunities, particularly if it can be designed to cater for multiple users.

Gas as a fuel source and feedstock

Modelling by the Australian Industry Energy Transitions Initiative indicates that between 15 and 40 petajoules of hydrogen could be produced in the SWIS by gas or electricity by 2040.²⁵ We recommend the Australian Government be technology-neutral to different abatement pathways, provided they support net zero goals.

The WA Gas and Downstream Opportunities Study²⁶ found gas priced between \$3 and \$5 per gigajoule was one of three critical success factors to unlocking export scale urea, ammonia and methanol projects. Combined, these opportunities could generate an additional \$18 billion in gross domestic product over their 20-year operating lives. However, the gas spot price in WA averaged \$9.42 per gigajoule in October.²⁷

Carbon capture, utilisation and storage

Depending on rates of technological advancement, the IEA forecasts global deployment of carbon capture, utilisation and storage (CCUS) will increase between three- and ten-fold by 2030.²⁸ The IEA notes that reaching the latter will require policy support and strategic investment in infrastructure to support technological maturity and scalability.

The WA operations of our members are responsible for 34 per cent of Australia's reported covered emissions under the Safeguard Mechanism.²⁹ Some of our members believe CCUS may be a significant abatement opportunity, particularly in managing cumulative emissions in gas-fired power generation used to firm heavy industrial processes in the medium term.

To capitalise on synergies in transport and storage infrastructure, successful CCUS technology hubs could co-locate with existing natural gas supply, low-carbon hydrogen production and renewable energy areas.³⁰

Questions 12-15 and 19: The role of gas and LNG in achieving Australia's and the world's decarbonisation

CME's comments on the role of gas in Australia's net zero transformation are captured in our responses to questions 2-9 above.

LNG could be used to support global decarbonisation as a replacement interim fuel source for coal or diesel-fired generation or as firming support to the expansion of renewable power generation. However, certainty and stability in policy, regulatory and taxation settings is needed to ensure international investment in Australian LNG projects remains competitive. With new liquefaction capacity now expected to be sufficient

²² APA Group, [Acquisition of Alinta Energy Pilbara](#), equity raising investor presentation, 23 August 2023.

²³ AEMO, [2022 Integrated System Plan](#), 30 June 2022, p 25.

²⁴ IEA, [Electricity grids and secure energy transitions](#), 10 October 2023, pp 110-111.

²⁵ Australian Industry Energy Transition Initiative, [Pathways to industrial decarbonisation: Positioning Australian industry to prosper in a net zero global economy](#), phase 3 report, February 2023, pp 43-44.

²⁶ ACIL Allen, [Western Australian Gas and Downstream Opportunities Study](#), report to the Department of Jobs and Tourism, Science and Innovation, 13 August 2021.

²⁷ GasTrading Spot Market, [Historical prices and volumes](#), average monthly price for October 2023, accessed 9 November 2023.

²⁸ Stated Policies Scenario and Announced Pledges Scenario. IEA, [World Energy Outlook 2023](#), 10 October 2023, pp 152-153.

²⁹ Clean Energy Regulator, [Safeguard facilities data](#), National Greenhouse and Energy Reporting scheme, 2021-22 reporting year, updated 17 March 2023.

³⁰ Australian Energy Producers, [Federal Budget 2023/2024 Submission](#), p 5.

to meet global demand to 2040, the IEA is warning about the long-term profitability of new LNG projects.³¹ The Australian Government can help support international investment by providing:

- Clear acknowledgement of the role of gas in the energy transition in the near to medium term, and the role of LNG in assisting the decarbonisation of our key trading partners.
- Stable and predictable policy settings.
- Efficient and streamlined approvals processes. Of particular importance to the Australian LNG industry is clarity and certainty regarding offshore approval processes (including environmental plans), especially regarding consultation requirements.

We also note security of LNG supply has helped countries such as the European Union respond to their energy crisis during periods of market turbulence.³² While gas has a role in the net zero transition, for some countries, it has a more crucial role in ensuring energy security and affordability. The Australian Government should consider how reducing our LNG supply to key trading partners will affect regional energy security.

Of global LNG exports last year, WA accounted for 12 per cent.³³ Looking forward, more than half of global new LNG projects coming online over the second half of this decade are located in the United States and Qatar.³⁴ Over a third of this new supply will target premium short-term buyers in Asia.³⁵

Questions 23-24: Barriers and opportunities to regulation of oil and gas resources

The federal approvals system for offshore projects is in urgent need of reform, as following recent case law regulations are too open to interpretation and there is an ongoing lack of clarity over consultation requirements. A backlog of more than 40 Environment Plans are under assessment by the regulator.³⁶

In WA, expenditure on petroleum exploration has continued to decline since its peak in December 2012, now sitting at a third of its 30-year average.³⁷

Question 28: How can Australia support the potential for cost-effective, safe and verifiable CCS projects, including for the gas sector, other industries and our region?

We support strengthened lifecycle regulation of abatement technologies such as carbon capture and storage (CCS). Effective uptake of proven CCS technologies could mitigate the risk of 'economic carbon leakage'³⁸ in high-emission, hard-to-abate sectors such as LNG, alumina, low-carbon hydrogen production, steel, ammonia and cement.

Supported by appropriate geological settings and large storage capacities (i.e., stable natural environments), multi-user, commercial scale CCS facilities could support the ongoing operation of existing strategic industrial areas³⁹ and enable a more holistic definition of 'project ready' land for attracting energy-intensive industries. For example, should there be a robust business case, further support to progress the South West Hub CCS Project⁴⁰ past the initial stage of research could be committed.⁴¹ Similarly, and business case-dependent, there could be an opportunity to conduct further research into mineral carbonation.⁴²

³¹ IEA, [World Energy Outlook 2023](#), 10 October 2023, p 78.

³² European Commission, [Liquefied natural gas](#), accessed 2 November 2023. IEA, [Electricity Market Report 2023](#), 1 February 2023, pp 72 and 98.

³³ Australia is the second largest LNG exporter and WA makes 59 per cent. Government of Western Australia, [WA LNG Profile – September 2023](#), Department of Jobs, Tourism, Science and Innovation, monthly profile, 5 October 2023.

³⁴ IEA, [World Energy Outlook 2023](#), 10 October 2023.

³⁵ Ibid.

³⁶ The Australian, [Broken oil and gas approvals system 'to drive away energy investment'](#), 2 October 2023.

³⁷ Australian Bureau of Statistics (ABS), [8412.0 Mineral and Petroleum Exploration, Australia](#), March 2023 reference period, released 5 June 2023, table 7.

³⁸ Refers to the cessation of industrial activity and emissions in one country that leads to the import of emissions-generating goods from another country. See Australian Academy of Science, [Review of four methods for generating Australian carbon credit units](#), October 2022, p 21.

³⁹ CME, [Consultation on updating the Authority's advice on meeting Australia's Paris Agreement commitments](#), submission to the Climate Change Authority, 30 August 2019.

⁴⁰ Stalker L and Van Gent D, [South West Hub CCS Project – Research Outcomes 2017](#), report to ANLEC R&D, February 2018.

⁴¹ CME, [Climate change in WA: Issues paper](#), submission Department of Water and Environmental Regulation, November 2019.

⁴² Ibid; CME, [Emissions Reduction Fund method development priorities for 2022](#), submission to the Department of Climate Change, Energy, the Environment and Water, September 2021.

Questions 30-31: Role of current and future gas transmission and distribution network

Our comments on leveraging existing gas infrastructure have been weaved into the relevant sections above. In addition, we highlight a Boston Consulting Group research article⁴³ commissioned by two of our members which recommends the following actions to ensure gas infrastructure can play a role in the energy transition:

- Avoid natural gas supply shortfalls in the near term, particularly as increasing electricity demand and electrification will likely lead to an increase in natural gas consumption for gas-powered generation to firm renewables and replace declining coal-fired generation.
- Align planning, regulatory and pricing mechanisms for an increasingly integrated energy system (i.e., gas and electricity along generation, transmission and distribution).

Question 34: Are you able to attract and retain the workforce and skills you need? How will these shift as we transition to net zero emissions?

The gas industry requires specialist skill sets for exploration, development, operation, and decommissioning roles. Similar to the rest of the economy, employment demand remains strong and availability of labour is challenging. Strength in resources employment is occurring within a strong WA labour market more broadly. The WA unemployment rate averaged 3.5 per cent in 2022/23, almost two full percentage points below the average of the past decade.⁴⁴ Similarly, the WA underemployment rate averaged 6 per cent in 2022/23, well below the 8.7 per cent average of the past decade.⁴⁵

Ongoing investment in the skills needed for a sustainable and competitive gas industry will support Australia's energy transition and the transition of our trading partners.

Questions 39-45: Domestic gas supply security

To ensure sufficient availability and maintain price stability for domestic gas, governments should enable adequate gas supply to the domestic market. In WA specifically, the WA Government should maintain the existing 15 per cent reservation amount under the WA Domestic Gas Policy, further build upon their response to the WA Gas and Downstream Opportunities Study⁴⁶ and provide greater clarity and transparency around commitment holders' requirements under the policy.

More broadly, both the state and federal governments should:

- Acknowledge the important role of gas in the energy transition in the near to medium term, including for firming renewable electricity generation. With several state⁴⁷ and federal⁴⁸ strategies forthcoming in this space, there is an opportunity to bring the various tools of government together and better communicate the role of gas for the benefit of both the public and private sectors.
- Support and facilitate viable technologies that enable net reductions in emissions to ensure the availability of domestic gas for industrial processes and transition needs while reducing emissions to net zero as soon as possible but by no later than 2050. This support and facilitation will need to include ensuring appropriate legislation for these technologies and increasing the efficiency and effectiveness of federal-state approval processes.

For further detail, please defer to our submission⁴⁹ to the Parliamentary Inquiry into the WA Domestic Gas Policy.

⁴³ Members APA Group and Australian Gas Infrastructure Group. Boston Consulting Group, [The role of gas infrastructure in Australia's energy transition](#), released 15 August 2023, p 16.

⁴⁴ Decade average of 5.4 per cent. ABS, [Labour Force, Australia](#), table 8.

⁴⁵ ABS, [Labour Force, Australia](#), table 23.

⁴⁶ Government of Western Australia, [WA Government response to the WA Gas and Downstream Opportunities Study](#), Department of Jobs and Tourism, Science and Innovation, 13 August 2021.

⁴⁷ In WA, this currently includes the upcoming Sectoral Emissions Reduction Strategies, AEMO's roadmap of actions to support the State's Energy Transformation Strategy, AEMO's upcoming Gas Statement of Opportunities, legislated climate change targets in Parliament by end of 2023, Advanced Manufacturing Blueprint, rollout of the Climate Risk Framework post-pilot, refresh of the WA Renewable Hydrogen Strategy and Battery and Critical Minerals Industries Strategy.

⁴⁸ Nationally, this includes the current consultation, review of the National Hydrogen Strategy, Joint Statement on Accelerating Methane Mitigation from the LNG Value Chain, Net Zero 2050 and the underlying six sectoral decarbonisation plans.

⁴⁹ CME, [Inquiry into the WA Domestic Gas Policy](#), submission to the Economics and Industry Standing Committee, Legislative Assembly of the Parliament of Western Australia, 18 August 2023.

Conclusion

The Strategy should maintain Australia's international cost-competitiveness, support a flexible pathway to least-cost abatement, be consistent with the development of federal and state sectoral decarbonisation plans and support Australia achieving net zero by 2050. To ensure sufficient availability and maintain price stability, the Strategy should enable adequate gas supply for both the domestic and international LNG market within climate commitments.

Should you have questions regarding this submission, please contact Adrienne LaBombard, Director – Policy and Advocacy, on 0400 912 525 or at A.LaBombard@cmewa.com.

We agree to the department's Privacy Collection Statement and consent to publishing of this submission publicly on the department's website.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Rebecca Tomkinson', with a decorative flourish at the end.

Rebecca Tomkinson
Chief Executive Officer