

23 December 2022

Committee Secretary  
Senate Standing Committees on Environment and Communications  
PO Box 6100  
Parliament House  
Canberra ACT 2600

Via email: [ec.sen@aph.gov.au](mailto:ec.sen@aph.gov.au)

Dear Secretary

The South Australian Chamber of Mines and Energy (SACOME) is the leading industry association representing the South Australian resource and energy sector, the powerhouse of the State's economy.

We thank the Senate Standing Committees on Environment and Communications for the opportunity to comment on the Environment and Other Legislation Amendment (Removing Nuclear Prohibitions) Bill 2022 (the Bill), as introduced by Senator the Hon Matt Canavan.

### **The energy transition**

The role of nuclear power in Australia cannot be divorced from the broader context of the current state of the energy market.

Australia's energy market is undergoing a period of transformation and nowhere has this been more pronounced than in South Australia, which has been at the forefront of the energy transition nationally. South Australia's experience is that of a disorderly transition, where energy policy goals have been set and pursued in relative isolation, resulting in unintended consequences elsewhere in the energy grid.

This is now exacerbated by unprecedented Commonwealth Government intervention in the gas market, which, SACOME submits, is guided by short term considerations that will perversely lead to higher prices, and exposes the lack of long term policy thinking underpinning Australia's energy transition.

As a key 2022 State Pre-Election priority, SACOME called for the establishment of an Energy Advisory Board with representation from industry, government and regulatory bodies for the purpose of developing a South Australian Energy Transition Roadmap that would guide this long term policy thinking and provide much needed certainty.

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As outlined in [SACOME's Energy Policy](#), appended to this submission as Attachment A, SACOME's longstanding position is that all low-emission technologies should be considered as part of the future energy mix to ensure both rapid decarbonisation and energy reliability.

In line with our Policy, SACOME's member companies continue to express clear public statements of support for the Paris Agreement and have made significant commitments and progress to reduce emissions well ahead of 2050 targets. However, meeting Net Zero at the speed and scale required cannot be achieved with renewables alone, despite South Australia's success with the same.

Nuclear energy offers a zero-emissions energy source with the ability to provide reliable and dispatchable baseload power in extremely large quantities, with the potential to complement the existing use of renewables.

This notwithstanding, the lead time for the development of a country's first nuclear installation, pursuant to the International Atomic Energy Agency's (IAEA) [Milestones Approach](#), is between 10-15 years. If nothing else, Australia needs to create the optionality for the consideration of nuclear power in the 2030s.

### **The prohibition**

SACOME notes the Bill has five substantive clauses in Schedule 1, all of which have the effect of repealing the various legislative prohibitions on Government instrumentalities or the responsible Minister from approving or authorising the construction or operation of:

- Nuclear fuel fabrication plants;
- Nuclear power plants;
- Enrichment plants; and
- Reprocessing facilities.

The Bill also prescribes that it would come into operation the day following Royal Assent. SACOME notes these prohibitions were inserted as amendments to the *Environment Protection and Biodiversity Conservation Act* and *Australian Radiation Protection and Nuclear Safety Act* by the parliamentary crossbench in 1998 during a debate on radiation safety. They attracted little debate and occurred in a time when decarbonisation was of minor concern to Governments and business.

The justification for the retention of these prohibitions is unclear, with the decline of detractors citing nuclear safety (as would have been the case in 1998) in favour of cost concerns.

It is axiomatic that laws should exist only where a clear justification remains.

SACOME submits the economic viability of a project is not a legitimate reason to prohibit an undertaking in law; rather, the risks or rewards thereof should be borne by the market.

Moreover, SACOME notes the Bill is supported by the findings of the 2019 Commonwealth Parliamentary Inquiry, which recommended that the prohibition on Generation III+ and Generation IV reactors be repealed.

### **The international context**

Australia is an outlier internationally.

We are the only G20 country with a legislative prohibition on the development of nuclear power. Of those in the G20 that currently do not have nuclear, [Indonesia](#) is planning to introduce nuclear, [Italy](#) imports nuclear electricity, and [Saudi Arabia](#) has established a new agency to develop nuclear power.

All five permanent members of the United Nations Security Council – the United States, France, the United Kingdom, Russia, and China – are planning a significant expansion of their civil nuclear programmes.

[More than 50 countries](#) who do not currently use nuclear power are considering the introduction of nuclear power; 23 are in a pre-decision phase and 27 are actively pursuing the introduction of nuclear power, pursuant to the IAEA's Milestones Approach. It is incongruous to suggest that all these countries – or private operators in these countries – are acting against their own economic interests.

Of particular interest was Canada's development of its own [Small Modular Reactor \(SMR\) Roadmap and Action Plan](#), with input from the federal and provincial governments, industry, First Nations peoples, academia, and civil society. It was characterised as a "pan-Canadian" effort to not only secure SMRs for the purposes of decarbonisation but to position Canada to capture the full economic value of the manufacturing chain and to innovate in this highly complex field.

This long term policy thinking has culminated in the Canada Infrastructure Bank finalising an agreement with Ontario Power Generation and committing \$970 million towards site and preparatory work for Canada's first SMR. The SMR is due to be built and operational by 2029.

### **The South Australian context**

Canada offers salutary lessons for Australian and, particularly, South Australian policymakers.

It should be noted that South Australia is already a nuclear jurisdiction and, were it not for the Commonwealth prohibitions, has the potential to capture the full value of the entire nuclear fuel cycle. This is a view shared by [Kevin Scarce](#), South Australia's former Royal Commissioner for the Royal Commission into the Nuclear Fuel Cycle, despite his original findings in 2016 that the construction of a nuclear power plant at that time would be uneconomic.

Like Western Canada, South Australia is a world class uranium province and a major exporter of uranium oxide, with 28% of the world's uranium resources and 80% of Australia's uranium. The State is also home to the world's largest known single deposit of uranium at Olympic Dam and hosts one of the only ports in the nation approved for the export of uranium products with a well-developed regulatory regime governing the uranium supply chain.

Uranium is one of the state's major mineral commodities produced, with total sales values of \$521 million in 2020. Between 2000 and 2020, South Australia produced and exported over \$6.7 billion of uranium oxide from several mines across the State including Olympic Dam, Beverley and Beverley North, Four Mile, and Honeymoon. During that same time, mineral exploration companies spent \$470 million exploring for uranium in South Australia.

In addition to our natural advantages, South Australia is host to the Australian Radioactive Waste Agency, has been chosen as the site of the Australian Radioactive Waste Management Facility, and will host Australia's nuclear submarine fleet; four of which will likely be in dry dock at any one time, all equipped with SMRs and will require regular maintenance. These are nationally and internationally competitive advantages awaiting capitalisation.

Were the Parliament unable to agree on repealing the prohibitions on nuclear energy for the country at large, it is SACOME's submission that the alternative of excising South Australia from these prohibitions should be considered owing to our unique jurisdictional advantages, underpinned by bipartisan support at the State level for nuclear powered submarines and uranium production, and increasing public support for nuclear energy as part of our energy mix.

## Public support

In July 2022, SACOME commissioned a sentiment survey to evaluate the views of the South Australian public and see if they were open to a balanced conversation on nuclear energy.

The survey included 600 South Australians from Greater Adelaide and regional South Australia, with the results reflecting the sentiment of other surveys conducted nationally.

The results found that more than six in 10 adults (63%) agree that given recent cost and reliability issues of the Australian electricity market, all energy sources, including nuclear, should be on the table for consideration.

Importantly, the survey highlights a significant knowledge gap in the community. Of those surveyed, only 22% have some knowledge or understanding of SMRs, and only 31% are aware of the environment and decarbonisation benefits of nuclear energy.

In addition to the survey commissioned by SACOME, other recent polls reveal an increase in community support for nuclear energy:

- A True North poll conducted in 2021 revealed [63% of South Australians support nuclear power](#) and increasingly there is a call for an informed public debate – youth in particular are calling for it.
- A [Lowy Institute poll](#), released in June 2022, reported a majority – 52% of Australians – favoured overturning the ban on nuclear power, up from 47% in the previous year.
- A [poll commissioned by the Institute of Public Affairs in June 2022](#) identified that a majority of Australians backed nuclear power, with 53% agreeing that Australia should build nuclear power plants to supply electricity and reduce carbon emissions.
- In an online [poll by the Advertiser on 9 June 2022](#), 83% of respondents voted 'yes' to the question 'Should Australia dump its nuclear ban?' from 739 votes.
- In a further online [poll by the Advertiser on 4 August 2022](#), 85% of respondents voted 'yes' to the question 'Do you support a nuclear energy future for South Australia?' from 883 votes.

## Conclusion

SACOME concludes by noting the passage of this Bill would impose no obligations or involvement – financial or otherwise – on Government; nor is industry seeking Government funding for the construction or acquisition of nuclear power.

Rather, the Bill would merely remove the legislative prohibitions for Australia to advance under the IAEA's Milestone's Framework and, in time, for proponents to apply for project approvals that would remain in Government hands. It represents but one way they can demonstrate long term policy thinking by creating optionality in the 2030s for a proven emissions-free technology.

South Australia has been at the forefront of the energy transition and is already a nuclear jurisdiction. Removing these legislative impediments would give South Australia the opportunity to capture the full value of the nuclear fuel cycle in a State with many clear advantages.

Once again, SACOME thanks the Committee for the opportunity to provide comment and welcome the opportunity to make a verbal submission if the Committee convenes hearings.

Yours sincerely



**Rebecca Knol**

Chief Executive Officer

South Australian Chamber of Mines & Energy