



26 May 2023

Foreign Affairs, Defence and Trade Committee Department of the Senate  
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### **Defence Legislation Amendment (Naval Nuclear Propulsion) Bill 2023 [Provisions]**

The MCA supports an orderly transition to net-zero emissions by 2050 to achieve Australia's commitment to the Paris Climate Agreement. Importantly, the government should include nuclear energy as a low-emissions option to support renewables in the medium term.

Australia has bipartisan support to establish a nuclear defence industry, and the proposed legislation (the Defence Bill) makes the necessary amendments to the *Australian Radiation Protection and Nuclear Safety (ARPANS) Act 1998* and the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* for the acquisition, operation and maintenance of a nuclear fleet.

It is worth noting these amendments are largely similar to those proposed by another bill before the Senate: *Environment and Other Legislation Amendment (Removing Nuclear Energy Prohibitions) Bill 2022* (the Prohibition Bill) – legislation focussed on the peaceful use of nuclear energy to replace retiring fossil fuel generation and support the rollout of solar and wind energy.

On Monday 15 May 2023, the MCA gave evidence to the Environment and Communications Legislation Committee regarding the Prohibition Bill and, as part of an opening statement, noted parallels in the two proposed pieces of legislation:<sup>1</sup>

The aims of that bill are very similar to what we're debating today, facilitating construction and operation of nuclear power reactors. Effectively, the Navy will acquire (Small Modular Reactors), expanding Australia's nuclear sector beyond the exceptional nuclear research reactor at Lucas Heights.

That Australia is willing to invest upwards of \$370 billion on nuclear technology while intentionally excluding its capacity to reduce emissions and complement renewables is simply extraordinary.

Over the course of the hearing, no evidence presented to the committee demonstrated a technical or environmental reason to maintain the ban on nuclear energy for civilian purposes. While some witnesses questioned the economics and others expressed concerns surrounding the management of spent fuel, no one argued that removing of the current ban would compel either the public or private sector to adopt the technology.

The aims of the Defence Bill highlight the absurd inconsistency of using nuclear technology for naval propulsion while intentionally excluding its potential for low-emissions domestic energy generation. In fact, the manner of which this fact is overtly expressed within the bill's Explanatory Memorandum suggest that the position is political rather than technical or environmental (NB: emphasis added by the MCA):

While these amendments are necessary to enable decisions to be made in relation to activities for the nuclear submarine enterprise, they will not disrupt Australia's moratorium on civil nuclear power. **The Bill**

<sup>1</sup> [Public Hearings – Minerals Council of Australia - Opening Statement on Nuclear Prohibition \(aph.gov.au\), 15 May 2023](#)

**does not change the existing protections regarding the health and safety of people and the environment that are currently contained in the ARPANS Act and the EPBC Act.<sup>2</sup>**

This paragraph confirms, in the government's own words, that the same protections for people and the environment in the Defence Bill would remain in place as a result of proposed amendments within the Prohibition Bill.

Acknowledging this fact is important. In 2021-22, MCA-member uranium miners exported material for 178TWh of zero-emission nuclear energy – equivalent to 67% of Australia's total electricity production during that period. This benefit was deliberately and intentionally sent offshore to the advantage of other economies and their efforts to decarbonise.

There is clearly an opportunity for Australian uranium resources to underpin an expanded civilian nuclear industry that utilises a highly-skilled workforce to deliver low-emissions energy. Such a strategy can strengthen the necessary submarine recruitment program by showcasing the Australian nuclear sector as a worthy vocational choice.

International examples clearly show that a nuclear workforce is typically high-trained and well paid. According to the United States Bureau of Labor Statistics, civilian nuclear engineers have an average wage of AU \$180,000.<sup>3</sup> This makes career transition from submariner to a civilian nuclear engineer an enticing option. Importantly this reduces the risk of losing established expertise to international markets – simultaneously bolstering energy security and national security.

As such the MCA recommends government takes a consistent approach with respect to the legitimacy of nuclear energy in defence and civilian contexts. Amendments should be made to this Bill to ensure the ARPANS Act and the EPBC Act facilitate the use of nuclear energy to the benefit of all Australians.

Yours sincerely

**TANIA CONSTABLE  
CHIEF EXECUTIVE OFFICER  
MINERALS COUNCIL OF AUSTRALIA**

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<sup>2</sup> [Defence Legislation Amendment \(Naval Nuclear Propulsion\) Bill 2023, Explanatory Memorandum](#), viewed 22 May 2023

<sup>3</sup> [Nuclear Engineers : Occupational Outlook Handbook: US Bureau of Labor Statistics](#), viewed 22 May 2023