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The Wooden Spoon Award: The Nuclear Energy Prohibitions in Australia

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The Energy Policy Institute of Australia (EPIA) is Australia's only independent and apolitical energy policy body. EPIA focusses on high-level policy, governance and regulatory issues affecting the national interest, the economy as a whole, the environment and the community.

The Institute advocates that Australia must maintain a secure investment climate and be internationally competitive, whilst moving towards and contributing as much as it can to global efforts to build a low-carbon society.

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Key Points

- The Australian Senate is considering a minority member's bill to remove the longstanding prohibitions on nuclear installations under Australian legislation.
 The bill is not supported by the current government but been referred to a Senate Committee to report in early 2023.
- The Energy Policy Institute of Australia has always opposed legislation that discriminates against particular energy forms. The current prohibitions are highly discriminatory, they are damaging to the economy as a whole and are likely to become more damaging the longer they remain in place.
- The current prohibitions should be removed. Alternatively, they should be tailored to apply to individual Australian states by leaving it to each state to regulate nuclear installations within its own borders.
- Potential hubs for nuclear energy innovation and development should be identified through community engagement and developed with community, federal and state government and trade union support.

The IAEA Report

According to the report, 'Climate Change and Nuclear Power 2022', published by the International Atomic Energy Agency (IAEA) in time for the Sharm El Sheikh Climate Change Conference (COP27), nuclear power plants in 33 countries presently produce more than one quarter of all low-carbon electricity.

The IAEA envisages a 120% increase in this rate of production by 2050. The IAEA provides guidance on how nuclear energy can work alongside other technologies to achieve a decarbonised global economy. There is much for Australia to learn from these countries.

The Current Prohibitions in Australia

The development of domestic nuclear power facilities in Australia is currently prohibited by both federal and state legislation. At the federal level, the prohibitions are contained in the Australian Radiation Protection and Nuclear Safety Act 1998 (ARPANS Act) and the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The Australian Senate is presently considering a minority members' bill to remove the longstanding prohibitions on nuclear installations under Australian legislation. The bill is not supported by the current government but been referred to a Senate Committee to report in early 2023.

The Energy Policy Institute of Australia opposes any legislation that discriminates against particular energy forms. The current legislative prohibitions are highly discriminatory, they are damaging to the economy as a whole and are likely to become more damaging the longer they remain in place.

The prohibitions should be removed for the reasons specified in my May 2018 Public Policy Paper Number 2/2018 'Nuclear Power and its Potential Role in Economic Development in Australia'.

As elaborated in my 2018 Paper, Australia's nuclear ban has:

- i. contributed to the destabilisation of Australia's power supply system;
- ii. disregarded a means of significantly reducing greenhouse gas emissions;
- iii. failed to enhance Australia's scientific and engineering skills; and
- iv. failed to optimise the development of the Australian economy.

In the process, Australia has turned a blind eye to Australia's energy security and its national security, surely winning the International Wooden Spoon award.

Regaining Lost Ground

Over the next decade, Australia could regain some of its lost ground by completely lifting the nuclear ban and allowing nuclear energy innovation to flourish under appropriate regulation.

As a possible alternative to complete removal, the federal legislative prohibitions could be tempered by leaving it to each individual state to authorise and regulate nuclear installations within its own borders.

Australia should now capitalise on its small but world-class nuclear research base. This stems from 60 years' successful and incident-free experience in operating nuclear research reactors and producing nuclear medicine from its facilities at Lucas Heights in Sydney.

A strategic initiative for any Australian state or territory would be to sponsor the development of a model town, or hub, for energy innovation and economic development. A hub could be anchored to safe, complementary, zero-emissions technologies, including the latest nuclear technology. A nuclear innovation hub should be connected to the transmission grid to enhance system optimisation at least cost.

Potential hubs for nuclear energy innovation and development should be identified through community engagement and developed with community support. It is also that trade unions would support the development of the new facilities and associated infrastructure.

Introducing nuclear as part of Australia's energy infrastructure mix may turn out to be a key way that Australia achieves a 2050 net zero climate target.

A History-Making Opportunity

It is possible for Australia to rid itself of the Wooden Spoon award. Australia has a unique, history-making chance of moving to the front of the energy innovation stakes and enhancing its prosperity through nuclear power generation, at the same time as widening the base for development of its sovereign natural resources.

Australia's governments have an opportunity to achieve the 2050 climate change targets, while expanding the nation's economic development and job creation. This opportunity can assist the dying coal industry workforce by re-skilling and introducing new local Australian businesses and supporting the development of a new industry involving safe Small Modular Reactors. This new industry can be positioned in key industrial hubs around the country to support Australia's energy-dependent industries.

Adding nuclear power to the Australian energy system could provide an affordable, reliable, safe and low-emissions energy alternative for both city and remote communities.

About the Author

Robert Pritchard is Executive Director of the Energy Policy Institute of Australia.

Robert has over 40 years' experience as a lawyer and adviser to industry, governments and organisations on energy projects and policies, both in Australia and overseas, and as a director of companies in the energy sector. This includes serving as chairman of the St Baker Energy Innovation Fund and SMR Nuclear Technology Pty Ltd. Robert was the first chairman of the Energy Law Section of the International Bar Association. He served for nine years on the Finance Committee of the World Energy Council.