

**SUBMISSION TO ENVIRONMENT and OTHER LEGISLATION**  
**AMENDMENT (REMOVING NUCLEAR ENERGY PROHIBITIONS) Bill 2022**

To learn that I am a citizen of the only country on Planet Earth which has in place a ban on the development of nuclear power does not give rise to any sense of smug satisfaction in my mind; fortunately we have among us some forward thinking politicians, the most high-profile of whom currently is South Australia's Labor Premier Peter Malinauskas, who has been outspoken on the need to open a discussion on the use of nuclear energy as a means of combating global warming.

He has expressed the hope that the construction of nuclear submarines which are essentially small modular reactors, will dispel the myths that have grown up around nuclear energy.

'In respect of my position on nuclear power for civil use I've always thought that the ideological opposition that exists in some quarters to nuclear power is ill-founded. Nuclear power is a source of baseload energy with zero carbon emissions. So, for someone like myself, who is dedicated to a decarbonisation effort, I think we should be open-minded to those technologies and I think it would be foolhardy to have a different approach,' he has said.

Notably Malinauskas took aim at the nature of the nuclear debate in Australia, which he said ‘has been consumed by the culture wars rather than an evidence-based discussion.’

Australia is rich in deposits of both uranium and thorium, the latter having the advantage of not being suitable for weaponization owing to the low amount of recoverable plutonium produced from it. Nuclear power, owing to its tremendous energy density in comparison with wood, coal and oil continues the upward trend of human development through the mastery of increasingly high levels of energy density: from fossil fuels to nuclear fission and on possibly to nuclear fusion. This ever-increasing energy density in turn supports a greater population at a higher living standard, with decreasing depletion of overall resources per capita. As well, the extreme energy density of nuclear power suits it to secondary industrial processes such as water desalination and industrial heating. Construction uses fewer materials and resources in comparison with other forms of power, in particular low-energy density renewables that require a larger quotient of land, concrete, steel and minerals to produce the batteries needed to make them workable.

Harnessing nuclear power for domestic consumption is a concept whose time has come. Governments of third world countries are using nuclear energy to lift their citizens out of poverty. The western world should embrace it rather than allowing low density renewables to take us backwards to the eighteenth century.