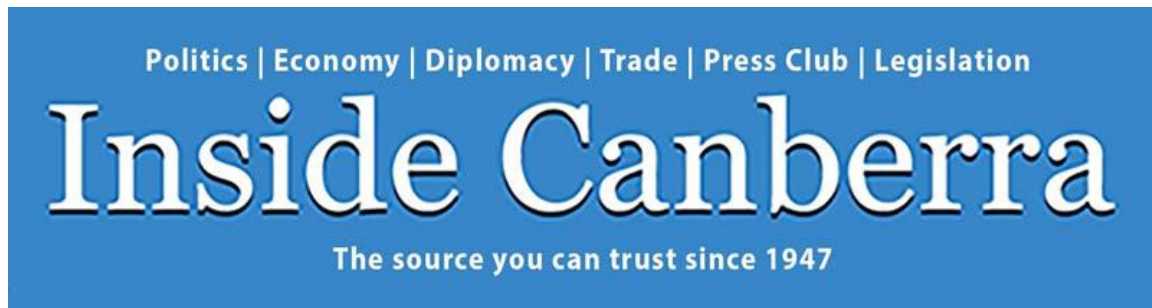


EXTRACT FROM



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Nuclear Energy is the Best Answer to Australia's Energy Problems

Renewable energy is not only a poor source of energy when reliability is the priority, it is a poor source of energy as far as emissions reduction is concerned.

A submission to the Energy Security Board by SMR Nuclear Technology Pty Ltd revealed the following data:

“Australia’s annual emissions from electricity generation for the year to December 2012 were 191 million tonnes CO₂-e (National Greenhouse Gas Inventory).

“Five years later, and billions of dollars spent on wind and solar, Australia’s annual emissions from electricity generation for the year to March 2017 were 188 million tonnes CO₂-e. Australia has one of the world’s highest emission intensities, typically 820 kg CO₂-e /MWh (Finkel Review).

“Countries with low emissions intensities have large hydro resources (Norway) or have nuclear as part of their energy mix (France, Belgium).”

The breakthrough in the development of nuclear technology that makes it hard to resist as part of the energy generation mix is the arrival on the market of small modular reactors (SMRs). SMRs can range in size from 50MW to 300MW and operate at 90% of their specified capacity. It is possible to configure these SMRs in banks of twelve which delivers a generator of 600MW. This increases serviceability because a single SMR can be taken off line with a loss of only 8% of overall capacity. The usual downtime is only a matter of hours.

Significantly the wholesale generated cost of power from an SMR is possibly the lowest of any generation source. The submission says:

“The most recent cost analysis by the UK Energy Options Network shows the LCOE [the levelised cost of electricity] for nuclear as an average of US\$60/MWh and as low as US\$36/MWh. At the lowest level, new nuclear plants could be the lowest-cost generation available.”

The refusal to countenance nuclear technology reveals the hypocrisy of the progressive left. Nuclear power is a zero emissions technology with the capacity to supply dispatchable power continuously. The South Australian Nuclear Fuel Cycle Royal Commission called for the removal of federal and state prohibitions on the use of nuclear energy. At the moment Australia is making very little headway on the reduction of CO2 emissions from electricity generation however if nuclear energy was approved then we could have 300MW of installed capacity by 2030 and 2000 MW by 2040. This would facilitate a quicker transition to renewables and a more radical reduction in emissions.

It is hard not to think that the left’s obsession with renewables is more ideological than practical. There seems to be a lack of understanding of the reality that energy is not the end game but a means to an end. The objective is to sustain a high growth global economy while eliminating CO2 emissions, not to kill CO2 emissions by killing growth.

George Walker

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