

# Switch to nuclear would cost \$387b, says Bowen

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Climate Change Minister Chris Bowen says replacing Australia's coal-fired power stations with small modular nuclear reactors would cost taxpayers \$387 billion, suggesting the option would not get backing from industry.

More than 70 small modular nuclear reactors would be needed to offset the power generation lost when the existing coal-fired station fleet is retired, according to analysis from the Climate Change Department, which Mr Bowen said showed nuclear was not a viable option for power generation.

"The opposition wants to trump the benefits of non-commercial [small modular nuclear reactor or SMR] technology, without owning up to the cost and how they intend to pay for it," Mr Bowen said.

The debate over whether Australia should adopt nuclear power as part of its push to decarbonise the grid gained heat this year after opposition energy spokesman Ted O'Brien came out as a strong advocate. Mr Bowen and Labor

are fierce opponents, citing the high cost of nuclear as the No.1 issue.

Analysis from Mr Bowen's department assumes the \$387 billion cost would be entirely borne by taxpayers and private firms would have no role. However, the Coalition has suggested existing coal-fired power stations could be used for nuclear, leaving the commerciality question to the market.

Opposition Leader Peter Dutton in July cited moves in the United States to replace a coal-fired power station with a small modular reactor in Wyoming, and moves across the globe to include nuclear as part of the mix.

"Proving that nuclear power is not a conservative political cause, Justin Trudeau has endorsed a plan which will see SMRs rolled out across numerous Canadian provinces," Mr Dutton said.

Australia's existing coal-fired power station fleet produces 21,300 megawatts of electricity, according to the analysis, which draws on the CSIRO's *GenCost* report and public data from the Australian Energy Market Oper-



Replacing coal-fired power stations would take 71 small modular nuclear reactors like this prototype.

ator. To replace that would require 71 small modular reactors, each producing 300 megawatts.

Each megawatt of nuclear-generated electricity would have a capital cost of \$18.1 million, according to the climate change department – or about \$5.4 billion per reactor – compared with \$1 million for large-scale solar and \$2 million for onshore wind.

The *GenCost* report found the benchmark "levelised cost of electricity" – a measure that seeks to compare apples

with apples – for solar and wind would be between \$60 and \$100 per megawatt hour by 2030.

That figure includes "integration costs" such as extra transmission, storage and gas "peaking" capacity to offset renewables "droughts".

By comparison, the CSIRO/AEMO analysis concluded that SMRs would cost between \$200 and \$350 per MWh.

Mr Bowen said: "Peter Dutton and the opposition need to explain why Australians will be slugged with a

\$387 billion cost burden for a nuclear energy plan that flies in the face of economics and reason.

"After nine years of energy policy chaos, rather than finally embracing a clean, cheap, safe and secure renewable future, all the Coalition can promise is a multibillion-dollar nuclear-flavoured energy policy."

But Mr O'Brien has rubbished this suggestion, saying Australia should only consider new and emerging technologies that will come down in price.