

— Opinion

Remove ban on nuclear power and let the market do its magic

Chris Bowen says the economic simply don't stack up for Australia. But with the right policy settings, bold venture investors will pour risk capital into this safe and zero-emissions energy source.

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My father-in-law, Marc Besen AC, turns 100 in December, and his engagement with business and politics remains irrepressible.

Over coffee last week, he asked me this question: climate activists like you have spent the last 20 years trying to convince conservatives about the urgent need to do something about climate change. Yet, when leaders of the Liberals and Nationals [propose a nuclear industry \[https://www.afr.com/politics/federal/nuclear-is-a-debate-australia-needs-to-have-advocate-20230707-p5dmgf\]](https://www.afr.com/politics/federal/nuclear-is-a-debate-australia-needs-to-have-advocate-20230707-p5dmgf) in this country to help reduce carbon emissions, you are opposed. Have you examined this possibility with an open mind, and isn't this your great opportunity to make climate action a bipartisan issue?



There is growing evidence that small modular reactors will be far safer. Sceptics cannot ignore an emerging scientific consensus. **AP**

Confronted by this remark, I spent several days researching Australia's ban on nuclear power, which was introduced in 1998 during John Howard's leadership. This unusual ban – which was debated for less than 30 minutes in the Senate – appears to have been enacted in return for the construction of a new nuclear reactor for scientific and medical purposes at Lucas Heights in Sydney.

With abundant coal and gas and the climate crisis still over the horizon, this pragmatic horse-trade may have made sense at the time.

But I have come to the view that much has changed since 1998, and my father-in-law is right – we should support, or at least debate, the removal of the ban on nuclear power.

There are three main arguments against the development of nuclear power in Australia: it is too expensive relative to solar, wind and battery power; it is unsafe; and is not renewable. The last is irrelevant – uranium may not be renewable, but it's effectively inexhaustible. That leaves safety and economics.

Like many Australians, my visceral reaction to nuclear is that it is unsafe. Why risk a repeat of Three Mile Island, Chernobyl or Fukushima, and what will we do with nuclear waste?

While safety is not negotiable, it is far from obvious to me that we will be safer by failing to examine the nuclear option. First, a successful transition to solar, wind

and batteries depends on our ability to quickly rebuild our transmission system.

Despite the best efforts, the rebuild is likely to be delayed

[<https://www.afr.com/policy/energy-and-climate/what-is-labor-s-2030-back-up-energy-plan-20230710-p5dn4m>] due to the spread of planning and regulatory decision-making across three tiers of government and the power of nimbyism. How safe would we feel if the transmission upgrade, already much slower than it needs to be, were delayed, and we were forced to retain coal plants?

Second, while three large-scale nuclear plants have failed catastrophically, there is growing evidence that small modular reactors will be far safer. Nuclear power sceptics cannot ignore an emerging scientific consensus.

Finally, we do not have a plan for safely disposing of many million tons of spent batteries and millions of hectares of expired solar panels. Burying a small volume of nuclear waste deep underground in stable geological formations could be a safer option.

In terms of the economics of nuclear power, Energy Minister Chris Bowen says they simply don't stack up for Australia, especially in the midst of an energy cost crisis. But why not remove the ban and let the market decide?

Astute business leaders now understand that decarbonisation is both a huge commercial risk and an opportunity. With the right policy settings, and as long as safety is mandated and enforced, we can rely on the market to do its magic. Bold venture investors will pour risk capital into nuclear options.

They will examine the feasibility of placing SMRs in de-commissioned coal-fired power plants, using the existing skilled workforce (supplemented by imported scientists and engineers), and using the transmission system to deliver carbon-free energy to metropolitan markets.

They will consider the competitive advantage conferred by Australia having the largest known uranium reserves in the world – about 28 per cent of the global total. They will study the cost curves for SMRs to see whether they can achieve economies of scale and be to large nuclear plants what PCs were to mainframes – initially more expensive but capable of rapid cost reductions and efficiency improvements.

We cannot be sure what these explorations will unveil, and whether they find a profitable market opportunity, but we cannot afford to exclude this option in our

mix of future solutions.

My one caveat to supporting the removal of the ban on nuclear energy is that it cannot be an excuse to stop or reduce the investment in solar, wind, batteries and the necessary upgrades to our transmission system. The climate response demands renewables and nuclear, not either/or.

The Finnish Green Party has understood this, becoming last year the world's first green party to reverse its historic position and support nuclear power.

We must examine with open minds the relative safety and economic feasibility of all options to get quickly to net zero emissions. A blanket ban on nuclear precludes this debate. There are risks in nuclear power, but they seem far outweighed by the risks caused by the galloping global climate crisis, evident in our newspapers and on our screens every day.



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