

I respond to the notes presented by Matt Canavan, as an explanation for his introduction of a bill to enable the expansion of the nuclear industry in Australia. Ie, the 'Explanatory memo' accompanying the second reading.

*First, I would like to acknowledge former Senator for [South Australia, Cory Bernardi](#), for his work in this area (Canavan).*

Canavan acknowledges Bernardi for his 'work' in this area. Bernardi was a former Senator, active in obstructing effective action to minimise greenhouse emissions, and as these things roll around- he is now a commentator on Sky News. The acknowledgement of Bernardi's material as a body of work has no merit as an argument—it is merely an appeal to the cult of Cory Bernardi. Canavan has not referenced any single idea, from the "work" as an 'explanation', merely the mention of Cory Bernardi's name, as if this had some meaning or merit by itself. As an argument in favour of expanding the nuclear industry in Australia- it has nil content, except for the appeal to personality- and the argument should be rejected entirely on this basis (or precisely because- it appeals to implied admiration of such a character as Bernardi)

*We are the only developed country, only G20 country in the world that actually bans nuclear energy. This ban was introduced via a Greens amendment in the Senate on 10 December 1999. There was less than 10 minutes of debate on the matter.*

*The [Howard Government](#) at the time was seeking legislative support to build a new nuclear research reactor at [Lucas Heights](#). With no immediate prospect of a nuclear power station being built, the Government accepted the amendment so it could proceed with the new research reactor at Lucas Heights (Canavan).*

Without this kind of caution and foresight by the Greens- perhaps the nuclear industry would now have carte-blanc in Australia. It is unclear in his presentation of his idea whether Canavan is suggesting that the debate was insufficient (that the parliamentary process at the time was insufficient), or that the argument then, as now against involvement in the nuclear industry- its connections to weapons proliferation, the cost of accidents, the risk of terrorism, the expansion of nuclear weapons empires, was so compelling as to require little debate. The duration of the debate is irrelevant- what matters is the arguments presented in this time, and the context of their delivery. Canavan has presented no new evidence to support the overturning of this decision.

*Of the 20 richest nations in the world only three do not have nuclear power: Australia, [Saudi Arabia](#) and Italy (Canavan).*

What is the purpose of this kind of classification richest versus all the rest? It cannot be to imply cause and effect (ie Nuclear power makes you rich)- otherwise these countries would not be rich. Perhaps it is to invoke some fear of being an outsider (as if a need to be in some arbitrary (15% 'richest') is an argument with any merit at all.

*[Saudi Arabia](#) is building a nuclear power station (Canavan).*

Saudi Arabia also overtly suppresses the freedom of its press and is known to be directly implicated in the killing and chopping into pieces the bodies of journalists who would expose the decision-making processes of its government to public scrutiny. Yet Canavan apparently holds Saudi Arabia as a meritorious exemplar of how things should be done.

*Nuclear plants are generally characterised by large capacity and output, high capital cost, and long construction times, but relatively low operating costs and almost zero emissions to air from their operation (Canavan).*

The “relatively low operating costs” presumably do not include the extended costs of operation such as fisheries contamination, land contamination, air contamination, decommissioning, and waste management, or the costs of disaster management and mitigation. The Chernobyl nuclear event caused thousands of hectares of agricultural land across Scotland to be closed to Agriculture for decades precisely because of nuclear emissions to air- somehow this is ‘near zero’ in the decision-making of Canavan et al.

The Fukushima event caused the closure of much of the Japanese fishery, and the ultimately failed containment attempt will soon see the release of millions of tonnes more of contaminated material- again into the Japanese fishery- the food supply for a nation and world- yet Canavans construction of his argument to include only emissions to air- enables him to make blatantly absurd claims. Canavan et al conveniently exclude these events from their decision-making.

The magnitude of these costs might be unknown, but they are certainly very large, and overall do not allow anybody to honestly claim, ‘low operating costs’.

The implicit belief apparently held by Canavan et al, that these kinds of events will not be an ongoing part of the nuclear industry is to demonstrate a kind of faith in their own (technical, scientific, managerial) prowess that appears to exist only in the utterly deluded, the evangelical, or the utterly corrupt- and completely ignores the fundamental human factors that contribute these kinds of errors. Eg the pursuit of power, the pursuit of wealth, and the eternally renewed evidence of the failures of systems, and processes under human management.

*Many nations are building new nuclear power plants because they provide reliable, emission free power (Canavan).*

Nuclear Power is not emissions free. The only intellectual construction that allows this claim, is to somehow exclude the emissions associated with construction, mining, processing, decommissioning, waste-‘management’ and accident ‘management’ in nuclear facilities. When the entire chain is included, (and also including waste and accidents) then this argument fails. It is utterly disingenuous for any claim of ‘low emissions’ to be made that excludes the whole range of inevitable emissions before and after, the fission itself. It is also utterly foolish to believe such a claim made by others.

*Over the next 30 years, the [International Atomic Energy Agency](#) predicts that global nuclear power capacity could increase by 80 per cent, and possibly triple in the Asia-Pacific region (Canavan).*

The main role of the IAEA is to market Nuclear power for the nuclear mining weapons waste industries worldwide. One would expect the IAEA to make these sorts of predictions. The ‘claim’ is entirely predictable from their job description, and need not have any regard to more independent perspectives or realities. This appeal by Canavan to join some kind of gold-rush, to get in fast before they run out, to ride the wave, is the characteristic cry of spruikers, charlatans and hawkers of all manner of get rich schemes. Canavan et al’s spruiking has this characteristic, and his and his ‘co-sponsors’ other ongoing

undeclared interest should raise high suspicion in anybody who hears this kind of argument as to the motive for trying to whip up some kind of frenzy to remove bans on nuclear power development in Australia.

*Nuclear power is safe. Nuclear energy has resulted in far fewer deaths than that from dam failures, oil rig explosions and even, on some measures, the number of people that fall when installing solar panels (Canavan).*

Nuclear power is not safe. The use of “number of deaths” as the criterion is simplistic and these numbers are always in dispute. The IAEA (the promoter of the nuclear industry) reports 28 firemen and 2 reactor workers were killed as a direct result of the accident. The IAEA, as marketer in chief for the nuclear mining weapons waste industry, like Canavan, uses an incredibly narrow functional definition of safety, ie you must be killed directly by the event, and otherwise the practice is safe (!). Clearly, this is absurd. In its own marketing the IAEA minimises the thousands of resultant nuclear industry related cancers by claiming they are treatable, minimises the impact of the spread of the contamination across much of the northern hemisphere by saying that in some in some places it was insignificant, but does apparently acknowledge the psychological outcomes as widespread and profound with effects such as suicide, drinking problems and apathy. Canavans reliance on number of immediate deaths, fails to recognise the extent of the safety harms related to the nuclear industry, ie the long term illnesses, the health and safety dangers that do not cause immediate death.

*Nuclear does less damage to the natural environment than other energy options. Wind energy takes up 250 times more land than nuclear power and solar takes up 150 times more land (Canavan).*

Canavan implies that ‘taking up space’ is the main damage that various energy supply options may cause. By itself, the choice of this as a damage criterion seems odd. Surely Canavan can think of other aspects of ‘damage’ that might be relevant here- water consumption, land contamination, sea contamination, water contamination, food contamination—but no Canavan thinks as an explanation for the need to urgently consider the use of nuclear power, that taking up space in the issue.

Nevertheless, the physical footprint of uranium mine, its processing plant, a nuclear power station, its dumpsite does take up space far greater than Canavan implies, and this space, for nearly all human purposes will be forever unable to be used for other purposes ( ie space multiplied by time).

Buildings can be built under solar arrays, sheep can graze under solar arrays, and wind turbines, food crops can be grown in the wind farm. So while the egregious harm of a solar panel taking up space might be untenable for Mat- he can nevertheless use the same space for other things at the same time—this is not possible with. And if the solar or wind resource is no longer available at that site, then that space is again available to every other likely use. Not so nuclear- which will leave contamination forever (in human terms)- that denies the human use of this ‘space’, for effectively all human time

As an explanation of the need for nuclear power, the taking up space argument, as Canavans idea of Environmental harm, is weak on the face of it, and absurd in the detail.

*Because of these facts, the critics of nuclear power now tend to focus on the high cost of building nuclear power stations in western countries (Canavan).*

Simply that nuclear power might be cheaper in non-western countries is not an explanation as to the need for nuclear power in this country. Trousers too, might be cheaper in non-western countries, reflecting a whole range of considerations, such as workplace safety, transport costs, environmental and health standards, or standards of living. Is Canavan really suggesting that we should all go to work in slavery-like conditions, or where there is much lower than Australian standards for health, safety and Environmental protection, so that the cost of nuclear power could be cheaper than it realistically should be in Australia. The implicit complaint about the relative 'expense' of nuclear power plant construction in western countries is absurd, the costs are partly to do with standards of living, more appropriate legislation and regulation, health and safety and environmental protections, and financial integrity. Canavans argument fails at every level, and certainly does not warrant any further discussion.

*Nuclear power stations used to be constructed in around 5 years. In western countries, time frames for construction have blown out to 17 years. In the west, it now takes longer to build a nuclear power station from off-the-shelf technologies than it did to invent, design and build the first nuclear power station in the 1950s (Canavan)*

For many people it was always better in the olden days, and Matt Canavan may lament that it is not the 1950's, but this is not by itself an argument for an inquiry into nuclear power. Presumably Canavan is really arguing for a removal of legitimate processes that necessarily take time. Canavans concern about this "time to build" is a concern expressed mostly by industry trying to flog stock (or ideas) that is redundant, rather than any concern the public may have for the appropriate supply of electricity in a safe and expedient manner to a public concerned about the price, quality, reliability, safety of that energy source.

*The potential for high costs is not a reason to ban anyone building a power station (Canavan)*

The high costs (financial costs only considered here) of nuclear power should prevent its allowance to be built. Its presence in the energy market inflates the energy price that everyone ultimately must pay, especially when the development and maintenance decommissioning and the associated weapons and waste costs that necessarily accompany nuclear power are included. Far far better to keep this very expensive energy out of the market. Further, simply that someone has lots of money- should not give them some automatic right or entitlement to conduct extremely risky activity with huge potential to directly cause widespread harm. Simply that someone is wealthy- does not mean that they possess special wisdom, or have the best interests of the planet and its life at heart or that their wealth means that they do not have malignant associations with weapons industries, or are careless with regard to wider human health consequences (eg baby milk contamination in China by wealthy businesses).

*Our environmental laws should focus on protecting Australia's natural environment. Decisions about the relative profitability of different investments should be left to the businesses making those decisions. (Canavan)*

The decision regarding banning nuclear power is not about helping business people decide which shares to buy, it is about the need to supply the safest, cleanest, cheapest, most reliable, most intergenerationally equitable electricity. Similarly, the decisions attempting to ban certain drugs or behaviours, say supplying or promoting illicit drugs or supplying child prostitution- apparently very profitable businesses- is not about the some vacuous amoral libertarian notion of my right to spend my money where I want to- but the 'rightness' of that decision for the planet, and its life.

*The relative costs of nuclear compare well to renewable energy. Between 1965 and 2018 the world spent \$2 trillion on nuclear compared to \$2.3 trillion for solar and wind, yet nuclear today produces around double the electricity than that of solar and wind (Canavan)*

The financial price (even with insurances, cost of waste 'management', and costs of decommissioning all excluded) of nuclear power is twice as high at the cost of renewable energy. Canavan provides no reference for his absurd claim that nuclear is 'comparable'- though this is the kind of claim that the nuclear power marketing agencies make- and Canavan makes this similar claim. Canavan et al and families, whose interests are not disclosed in a parliamentary register of interests, appears to be behaving merely as the mouthpiece of the nuclear mining-weapons-waster-power-industry.

*While Small Modular Reactors are still in a development phase, they remain high cost. Yet if they become a commercial prospect, their modular nature may deliver substantial cost savings through mass production (Canavan).*

The nuclear industry has consistently presented itself as being on the verge of some breakthrough that would magically make the whole industry somehow viable- such as by the vitrification of waste- a dream promulgated for decades and never realised, the eternal dream of fusion, and the current marketing ploy of "small modular reactors"—none of which actually exist, except possibly one on a barge anchored off the Russian Arctic Coast operated by Russia. Any critical thinker should immediately see the sales bullshit that selling some future dream to a gullible purchaser is. The Australian public and parliament does not need to enquire into this kind of [REDACTED]. A fantasy eternally on the verge of flowering since 1965, simply is bullshit. No further enquiry is necessary.

*We should be looking at this, and the first thing we should do is remove the prohibition, so at least nuclear options can be discussed and considered (Canavan).*

Canavans argument that the existing prohibitions should be removed to enable the discussion of nuclear options is absurd. Canavan has already been discussing nuclear options without being constrained by any legislation to prevent him. He can go ahead by himself, knock himself out, discuss, but the protections afforded by the prohibitions do not need to be removed merely to enable the marketing arms of the nuclear industry to operate.

*Finally, I want to thank my colleagues Senators Antic, Cadell, Colbeck, Fawcett, Nampijinpa Price, O'Sullivan, Rennick and Van who are also sponsoring this Bill.*

Canavan wishes to thank and name some colleagues who are "sponsoring" the Bill. The question naturally arises- who and how are these people, including Canavan himself, being sponsored. The senate Register of interests does not require the spouses of children of senators to disclose their sponsors. It is therefore very easy for politicians to advocate for regulations, policies, and concessions that serve the family's concealed interests. Of these sponsors named, two have declared a direct personal interest in mining exploration companies (not explicitly including uranium), but overall, little is known about their family interests, including their shareholdings, family trusts, real estate, and liabilities, or their receipt of gifts, hospitality or travel from companies and lobby groups.

One of the sponsors (Cadell) has such regard for the disclosure of interests that they have spent their own or staffers time to include in the public record of gifts, a 'Box of biscuits, 10 Savoury biscuits is a blue cardboard box addressed to Senator Cadell and delivered to APH suite on 8/11/22 but with no card or indication who they were from, and separately, a 160g bag of Allens Jaffas.

This would appear to express a contempt for the public expectation that Senators should disclose interests, and a similar contempt for the Australian public for their expectations that Senators should pursue the genuine interests of the public, rather than pursue their own direct personal (or family) interests by receiving unknown kickbacks, including likely future employment from undisclosed organisations.

The sponsoring senators have indicated by their actions, that they are willing mouthpieces for the nuclear-mining-weapons-power-waste industry. Their voting record shows, and the parties they belong to have actively obstructed genuine action on climate change for decades- so any claims now as to their motivations around 'clean' energy is immediately observable as utterly disingenuous.

More likely is that this will enable them (and their families) to receive undisclosed kickbacks whilst in office, and when out of office, go and work for the industry that they are now seeking to give access to untold amounts public resources- taxpayer money, land, air and water. This revolving door is exactly the history of fossil fuel industry, where politicians become lobbyists, or become employed in the industries whose interests they sought to promote while ostensibly acting in the public interest (but in fact against the public interest) as a politician.

While-ever senators are not obliged to immediately disclose all financial interests of their family and themselves, they cannot be assumed to be acting in the interests of the public at all.

The absolute sincerity of Sam Dastyari, in believing he was entitled to have a Chinese business pay his expenses, the bald-faced claims of Angus Taylors exemptions for 'grassland' clearing. This characteristic behaviours of politicians, reflecting a lack of understanding of their obligations to the public, outright criminality, or contempt for the Australian taxpayer is much too common to allow them and their families, and the nuclear mining weapons waste and power industry, another pipeline to taxpayer funds.

The industries, the individuals, the lobbyists, the interests and voices that have guided the behaviours and actions in public office of Sam Dastyari, Angus Taylor, and their ilk are of very deep concern.

Positively alarming however are the 'voices' that Scott Morrison responded to, that in his mind, justified his secret claim to the power of many portfolios under the false cover some community crisis.

This behaviour too is unfortunately characteristic, Where people in power seek to gain more power, and by gradual erosion of regulation (such as is being proposed here), and enactment of new regulation to reduce effective public opposition, seek to entrench that power for longer and longer times, eg Putin, Ji Ji Ping, Marcos, Trump Kim Jong Il

In this case, the proposal put by Canavan and others- part of that power is being delivered to the nuclear mining weapons waste power industry. There is currently a war in Ukraine- by most accounts completely unjustified, disproportionate, and against many conventions of international behaviour. Thousands of people are being killed by this war, and the associated environmental destruction is enormous, and the negative impact across the globe is being enabled precisely by the threat that the madman will actually deploy the main product of the nuclear mining, weapons waste power industry, ie nuclear weapons.

What Canavan is proposing is to cause yet more proliferation of nuclear materials. In a world where terrorists drive truckloads of explosives into crowded city areas, how hard would it be for them to quietly drive a truck load of nuclear waste from a fleet

of widely dispersed so-called small modular reactors quietly into a reservoir somewhere. This would be enabled by Canavans actions, and Australians would become an extremely vulnerable hostage, like the world is now regarding Russian invasion of Ukraine, to the insane motivations of a self-interested few. Remember: it took just 33 months for an apparently normal popularly elected Scott Morrison to try to secretly amass unprecedented power to himself- on the guidance of whose/what (imagined) voices? To think somehow that Australia is not vulnerable to the dangers of the threat posed by enabling and empowering a nuclear industry in Australia, is to actively deny the blindingly obvious (in the same way that climate change has been denied).

The Nuclear weapons industry is entwined with the nuclear power industry- and to try to pretend that they are somehow separate, that promoting nuclear power does not also enable, facilitate and promote nuclear weapons, is delusional. Canavan et al cannot be allowed to open the doors to this industry, based on a range of delusional beliefs, other voices, and undisclosed financial interests. The arguments that Canavan has presented as an explanation for doing so are facile, and patently incorrect, 'takes up less space', cheaper, less harmful, wealthy people have the right etc.

Imagine Scott Morrison, or others similar affected- having attempted to amass power as he did, starting to respond to the voices that guide them, via the pathways that removing nuclear prohibitions would allow. This arrogance of faith that some politicians have in their own judgements, and the characteristic of seeking power that is present in most politicians, should be regarded with extreme caution. This is especially the case with regard to actions- such as involvement in the nuclear mining- weapons-power-waste industry, that have the potential to cause enormous global harms or many kinds.

The Senate register of financial interests for Senators and their family, as it stands increases the opportunity for a corrupt politician - someone like former NSW MP Eddie Obeid, to be directly 'funded' by the nuclear industry, and to act in their interests, and not in the interests of the Australian public, or the natural environment. The voting record of the sponsors of Canavan proposal, indicates that they do not have serious concern for clean energy, greenhouse emissions minimisation, so other motives must be assumed (motives that are not in the public interest).