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The point of the Royal Commission is to lay out the credible evidence on the subject, without ideology and dogma, without demagoguery and vapid rhetoric.

"However, we have already had several inquiries into nuclear expansion."

What is needed is a raised scientific and intellectual standard of inquiry - fact discovery with a greater respect for peer-review, not just feelpinions.
A Royal Commission isn't the perfect instrument for this, but it's better than nothing. The whole point is that it is not "re-treading" what we usually get from these sorts of Internet comments and opinion pieces.

"They concluded that it would take significant government subsidies to expand Australia's role in the nuclear industry."

The same is true for any non-fossil-fuel clean energy technology - a mechanism is needed to push the market into fossil fuel replacement, whether that's a price mechanism on carbon dioxide emissions or something similar.

This was not a surprising conclusion.

"For decades there has been glib talk about uranium enrichment in Australia, but these schemes have always foundered – partly for lack of a social licence, partly because of the dubious economics."

What exactly does social license actually mean? That we cannot proceed with a particular technology if there is any, no matter how small, level of activism against it?
Obviously that's not realistic, and we don't do that - otherwise we would have vaccination, fluoridation, smart meters and wind turbines banned for want of "social license".
At a certain point, based on the credible scientific evidence, we just say to the activists and science deniers, no, you're wrong, and we're not doing what you want.

Demand for uranium enrichment capacity is likely to increase in coming years as the supply of downblended weapons-grade HEU from US/Russian nuclear weapons decommissioning programs dries up.

"As Dr Alan Roberts of Monash University observed at a forum we both spoke at in the 1980s, wherever uranium is enriched, the tax-payers are impoverished."

So, was this based on some sort of evidence? Peer reviewed? And do we have anything newer than the 1980s?

"Australia's role in the nuclear industry was thoroughly canvassed nearly 40 years ago in the Fox Report"

Nothing more recent? And no recognition that previous reports, as well as being 40 years old, could be incomplete or wrong?

How many times is anthropogenic climate forcing mentioned in the Fox report?

"It concluded that exporting uranium contributed to two serious problems, the production of radioactive waste and the proliferation of nuclear weapons. Forty years later, those issues remain unresolved."

Has Australian uranium ever proliferated any nuclear weapons, or generated any radioactive waste that has ever harmed any person? What is the evidence base for this?

"Thousands of tonnes of spent fuel rods and radioactive waste are held near nuclear power stations and weapons facilities around the world, with no agreement on long-term storage."

And those decades of storage of used nuclear fuel at nuclear power plant sites, in the nations that haven't yet recycled this valuable fuel, have never caused any harm to any person. It can just be stored there until a decision is made on recycling or centralised storage - it's not hurting anyone, and can continue to be safely stored on site for decades if need be.

"exporting uranium is still making the world a dirtier and more dangerous place"
So, where's the real evidence of making the world a "dirtier and more dangerous place"?

The one thing we have very real, genuine evidence for is the billions of tonnes of carbon dioxide avoided, the degrees of warming avoided, and the huge number of lives saved thanks to nuclear energy.

http://pubs.acs.org/doi/abs/10.1021/es3051197

"Because nuclear power is an abundant, low-carbon source of base-load power, it could make a large contribution to mitigation of global climate change and air pollution. Using historical production data, we calculate that global nuclear power has prevented an average of 1.84 million air pollution-related deaths and 64 gigatonnes of CO2-equivalent greenhouse gas emissions that would have resulted from fossil fuel burning. On the basis of global projection data that take into account the effects of the Fukushima accident, we find that nuclear power could additionally prevent an average of 420 000–7.04 million deaths and 80–240 GtCO2-eq emissions due to fossil fuels by midcentury, depending on which fuel it replaces. By contrast, we assess that large-scale expansion of unconstrained natural gas use would not mitigate the climate problem and would cause far more deaths than expansion of nuclear power."

Remember, that's a peer-reviewed paper in a scientific journal - so anybody who wants to criticize that would be silly to come to the table with something from YouTube, Crikey, NaturalNews or Green Left Weekly. If you want to show that that's wrong, you need to operate at the same level of peer-review, with something similar published in the literature.

You're demonstrating exactly why we need a robust, factually responsible discovery of facts by a Royal Commission, or similar - because of the memes, the pseudoscience, the myths and nonsense that just keeps getting repeated over, and over, and over again. When we strip away the demagoguery and all the claims, from everybody, that aren't backed up by evidence, what are the factual conclusions that we're left with about nuclear energy?

http://www.sciencedirect.com/science/article/pii/S036054421000602X

"Here we define and apply a set of fit-for-service criteria to identify technologies capable of supplying baseload electricity and reducing GHGs by amounts and within the timescale set by the Intergovernmental Panel on Climate Change. Only five current technologies meet these criteria: coal (both pulverised fuel and integrated gasification combined cycle) with carbon capture and storage; combined cycle gas turbine with CCS; Generation III nuclear fission; and solar thermal backed by heat storage and gas turbines. To compare costs and performance, we undertook a meta-review of authoritative peer-reviewed studies of levelised cost of electricity and life-cycle GHG emissions for these technologies. Future baseload electricity technology selection will be influenced by the total cost of technology substitution, including carbon pricing, which is synergistically related to both LCOE and emissions. Nuclear energy is the cheapest option and best able to meet the IPCC timetable for GHG abatement. Solar thermal is the most expensive, while CCS will require rapid major advances in technology to meet that timetable."

"importing a whole new raft of environmental problems."

If used nuclear fuel was imported for storage in Australia, what environmental problems would it cause? What evidence exists for any other examples of environmental problems caused by used nuclear fuel anywhere else in the world?

"The critical issue is how the proposed further involvement in the nuclear industry fits with the agreed commitment to Ecologically Sustainable Development, adopted by Council of Australian Government as long ago as 1992. The reason most environmentalists oppose nuclear energy is that they see it as creating serious environmental problems"

It would seem that your claims are inconsistent with the peer-reviewed scientific literature, and are contrary to the views of many ecologists.

http://onlinelibrary.wiley.com/doi/10.1111/cobi.12433/abstract

http://bravenewclimate.com/2014/12/15/an-open-letter-to-environmentalists-on-nuclear-energy

Nuclear energy is recognized by most of the world's expert climatologists, scientists and engineers as an incredibly valuable, important tool for climate protection.

http://spectrum.ieee.org/energywise/energy/nuclear/experts-favor-retiring-coal-keeping-nuclear

About 71 percent of climate science experts surveyed in a recent poll (a poll that specifically looked at climatologists) agreed that nuclear power will play a crucial role in any plan to stabilize the effects of anthropogenic CO2 emissions. At the same time, 67 percent agreed that "renewable" energy sources such as wind, solar and biomass would not scale up fast enough to meet the world's expected power requirements with a safe CO2 budget.

"Any objective assessment of the state's needs in the context of a commitment to sustainable development will favour going forward by expanding the proven capacity of clean renewables, rather than gambling on unproven nuclear fantasies."

When prejudice and dogma are subtracted, where is the evidence that this is true?

Why is the anti-nuclear activist community so ruffled just by the mere announcement of a Royal Commission?
What part of rigorous fact discovery and critical appraisal of evidence are they concerned about?
What are they scared of?

3 months ago • report

https://theconversation.com/weve-already-had-the-nuclear-debate-why-do-it-again-37420#comment_585516