

AUKUS and Australia's Nuclear Landscape: May 2023

Briefing Purpose: To provide an update on key strategic issues related to the recent AUKUS announcement, in particular:

- increased domestic pressure from proponents for domestic nuclear power;
- elevated threats around intermediate and high level radioactive waste;
- moves to repeal federal prohibitions on nuclear activities and facilities; and
- stalling Australia's signing of the Treaty on the Prohibition of Nuclear Weapons (the ICAN inspired Nuclear Ban Treaty).

What is AUKUS?

- The leaders of Australia, the United Kingdom and the United States announced a major defence and security partnership called "AUKUS" on 16 September 2021. This was confirmed and detailed by PM Albanese in March 2023.
- The most consequential aspect of AUKUS is a commitment to acquire nuclearpowered submarines. This will happen in three stages:
 - foreign nuclear subs porting in Australia from 2027;
 - purchase and re-badging of 3 to 5 Virginia class subs from the US Navy in the early 2030's; and
 - construction of 8-10 new AUKUS class subs in Adelaide from the 2040's.
- With a total current costing of between \$268-\$368 billion to 2055 this will be the single biggest spend in Australia's history. The opportunity cost of this allocation is massive and continuing.
- US and UK nuclear submarines will routinely begin accessing Australian ports from 2027 (esp. at HMAS Stirling near Fremantle). Australian ports, port communities, waters and seas will face the threat of radiation exposure from accidents, fire, sabotage or attack. The federal nuclear regulator ARPANSA has provided a deeply disturbing assessment of the deficiencies in Australia's radiation response and emergency capacity and stated that the protection framework "is not fit for purpose for a future with nuclear submarines".
- AUKUS would result in increased US ground force deployments in the NT, massively increased space surveillance and war-fighting plans (largely based in northern South Australia) and the permanent deployment of six US Air Force B52 bombers at RAAF Tindal in the NT. This is likely to escalate regional tensions.

Implications of AUKUS for climate and energy ambitions

(i) Stalling the necessary and happening renewable energy transition

- AUKUS has reignited the push for domestic nuclear power and threatens to distract and divert efforts away from genuine and effective clean and sustainable energy responses to climate change.
- Nuclear proponents are pushing for the removal of federal prohibitions on nuclear power. Currently nuclear power stations and other facilities cannot be built in Australia as they are banned by two pieces of legislation, the Australian Radiation Protection and Nuclear Safety (ARPANS) and EPBC Acts. However, there are real risks that AUKUS opens the door to a renewed push for nuclear power and reactivation and expansion of uranium mining.
- Coalition MPs and aligned think-tanks like the Coalition for Conservation are increasingly promoting nuclear power as a climate solution for Australia despite independent analysis that nuclear power is uneconomic and unnecessary. This positioning risks a new variant of the energy culture wars.
- Major proponents of nuclear energy are the Minerals Council, state mining advocacy and promotion bodies, the Australian Workers Union, the Murdoch media, the Australian Nuclear Association and industry academics.

(ii) Uranium mining

- AUKUS related momentum is being used by junior mining companies and mining industry advocacy groups as a financial enabler for an expanded uranium sector.
- The stalled Honeymoon mine in eastern South Australia has received finance and is anticipated to re-commence commercial operations in the final quarter of 2023. This precedent is already being promoted as the start of a new wave of uranium extraction.

(iii) Nuclear waste

- The prospect managing future arising high level waste (HLW) from nuclear submarines is seeing some revisiting the earlier South Australian Royal Commission plan for a global HLW dump. HLW needs to be isolated from people and the environment for 100,000 years a task no nation or technology has come close to realising. There is a real concern that this will be seen by the international nuclear industry as a gateway to a future international HLW dump in Australia.
- Environmental and First Nation efforts to advance responsible domestic radioactive waste management, including by supporting community opposition to a planned federal facility at Kimba in regional South Australia, have also been made more complicated by AUKUS.

(iv) Nuclear non-proliferation and abolition

• Nuclear submarines use highly enriched uranium as their fuel. HEU is uranium that has been concentrated to around 95% (for comparison, uranium fuel used in commercial nuclear reactors is generally concentrated to around 5%). HEU can be used in a nuclear weapon and is internationally classified as a proliferation sensitive material. International concern over the risks posed by HEU can be seen with the attention given to Iran's enrichment program.

- Australia will be the only non-nuclear weapon state to have access to nuclear submarines. There is considerable regional and wider concern over the copycat aspect with other nations already expressing a desire to access nuclear submarines
- Efforts to advance Australia signing the Treaty on the Prohibition of Nuclear Weapons (the ICAN inspired Nuclear Ban Treaty) have become more complicated. ICAN is ramping up efforts and making the case that AUKUS per se doesn't preclude signature and instead makes a stronger case for it as a credible assurance mechanism that Australia does not hold nuclear weapons ambitions.

Steps to help ensure effective climate action and reduce nuclear expansion:

- Highlight the human and environmental opportunity cost of the massive AUKUS spend. In essence every challenge facing Australia that can be solved by money could be solved by repurposing this massive allocation.
- Contest claims that nuclear power is a credible domestic climate response. Reinforce the economic and environmental benefits of renewable energy and support the transition from dirty to clean energy for domestic and export use.
- Maintain the existing federal prohibitions on domestic nuclear power in both the EPBC and Australian Radiation Protection and Nuclear Safety (ARPANS) Acts.
- Halt the federal radioactive waste plan for Kimba in regional South Australia and instead promote interim storage of Intermediate Level Waste (ILW) at the ANSTO (Australian Nuclear Science and Technology Organisation) Lucas Heights facility.
- Advocate for ILW and future HLW management to be the focus of one dedicated and transparent waste siting process.
- Maintain domestic opposition to any plans to store or dispose of international High Level Radioactive waste in Australia.
- AUKUS has been advanced with a high level of secrecy and scant scrutiny. Use all possible mechanisms to elevate calls for transparency, rigour and public and Parliamentary disclosure to track the future process.
- Grow expectations for industrial and political Labor to sign the Treaty on the Prohibition of Nuclear Weapons (TPNW).

Clarification/further detail: Dave Sweeney on <u>dave.sweeney@acf.org.au</u> or 0408 317 812