

To: The Committee Secretary
Joint Standing Committee on Treaties

JSCT Inquiry: Exchange of Naval Nuclear Propulsion Information Agreement (ENNPIA)

Public Submission by David J Noonan B.Sc., M.Env.St., 25 Nov 2021

Re: Public interest tests for the AUKUS Pact, ENNPIA and proposed nuclear submarines

Dear Secretary

This ENNPIA Inquiry by the JSCT should accept a broad brief of relevant input in accordance with a public interest review and implications of the strategic and multi-decades breath of Australian interests involved. As canvassed by the Committee Chair in the [Inquiry Media Release](#) "Treaties Committee to review AUKUS nuclear submarine information exchange agreement" (23 Nov):

"It will help determine the optimal pathway for acquiring nuclear-powered submarines for the Royal Australian Navy, one of the most important strategic military capabilities for Australia in the decades ahead."

The Agreement Article II goes to safety, regulation, and 'disposal of military reactors', involved in and consequent to proposed acquisition, manufacture & operation of nuclear-powered submarines.

Further, a [National Interest Analysis](#) (22 Nov) "Overview and summary" states the Agreement is to:

"...examine the full suite of requirements that underpin the delivery of these submarines, including ensuring Australia is a responsible and reliable steward of this technology. ..."

The ENNPIA is critical to an intensive examination of the full suite of requirements that underpin the delivery of these submarines... The ENNPIA is therefore necessary for Australia to adequately and appropriately consider the implications and associated obligations of pursuing the acquisition of nuclear-powered submarines."

This JSCT Inquiry should be open to input on "the full suite of requirements" and on "implications and associated obligations" involved in the proposal for Australia to take up nuclear submarines.

The following matters are raised for the Committee's consideration, along with a range of public interest Questions to this Review of the ENNPIA. Further material is provided on selected issues.

Proposed nuclear submarines implicate Australia in - and oblige Australians to – multiple serious matters, some of which are arguably untenable and/or not in the national public interest to take on.

The AUKUS Pact and proposed nuclear subs face critical public interest tests

Military High-Level nuclear waste is an untenable burden - arbitrarily imposed on all Australians.

Q: Is AUKUS compatible with Australia's obligations to the spirit and the letter of the NPT? Expert IAEA opinion is concerned the AUKUS Pact could weaken the NPT.

Q: Is AUKUS compatible with Australia ending roles in nuclear war fighting AND signing & ratifying the UN "Treaty on Prohibition of Nuclear Weapons" - the Ban Treaty?

Q: Does the AUKUS Pact, proposed nuclear submarines and long-range strike capacities, add to insecurity and/or make Australia likely to be an increased target in war?

See: **“AUKUS nuclear subs & Tomahawk cruise missiles in a Defence Federal Election”**, a Briefer by David Noonan (27 Sept, 2 p) distributed in response to the AUKUS announcement, edited at p.6-7.

Further, see a paper **“To end Australia’s roles in nuclear war”** that I wrote prior to the AUKUS announcement for a civil society Inquiry, edited as relevant material to support points made in this overview letter. **Please see the set of Recommendations for consideration by JSCT at p.12** herein.

A short coming of the AUKUS Pact and of this ENNPIA: Is a failure to undertake a public comparative assessment of a nuclear versus a conventional submarine fleet for Australia.

I commend the Australian Federation of Shipbuilding Unions call for a **“Collins Mark II”** build, [Going into battle for boatbuilding jobs](#) (ASFU Opinion, The Advertiser, 2nd Nov) and <https://asfu.org.au/>.

High-Level nuclear waste is an untenable burden - arbitrarily imposed on all Australians:

The National Interest Analysis (NIA) states: *“Each party will bear their own costs”* (Para 30 Costs) and the NIA anticipates no associated regulatory costs. However, massive public costs are inherent in the proposal – not least on required High-Level nuclear waste management and disposal.

JSCT should seek and make public an estimate of this likely tens-of-billion-dollar additional lifecycle cost in a nuclear-powered submarine fleet compared to conventionally powered submarines.

- Military High-Level nuclear waste & associated reactor wastes require isolation for over 10,000 years and require deep geological disposal - which no country has achieved. This is an arbitrary imposition of a highly hazardous nuclear waste burden on all future Australian generations, without Parliamentary or societal debate or any Election mandate.
- **Q:** Which State or Territory is targeted to have to manage these High-Level nuclear wastes? The NIA (Para 39-40) says Defence decided not to consult with State or Territory Gov’s *“due to the expedited nature of the ENNPIA”* and says: *“No action is required from States or Territories”*. Clearly that is not the case in the long run.
- **Q:** What capabilities, facilities and costs are required to manage proposed military High-Level nuclear wastes in Australia - in perpetuity?
- The Federal Government claims a nuclear industry is not to be required in Australia and the ALP Opposition gave an in-principal agreement on Condition that it is not required. However, a High-Level nuclear waste management ‘industry’ is clearly a core requirement.
Q: How is this core inconsistency in the nuclear submarine proposal to be rationalised?

Q: Is AUKUS compatible with Australia’s obligations to the spirit and the letter of the NPT?

Australia’s obligations to the NPT are said to be Conditions on in-principal acceptance of AUKUS nuclear submarines: to not undermine the NPT, to not contribute toward proliferation of nuclear weapons, fissile materials and associated sensitive nuclear technologies.

Expert IAEA senior opinion is concerned the AUKUS Pact could weaken the NPT, [IAEA chief: AUKUS could set precedent for pursuit of nuclear submarines](#) | [The Guardian](#) (20 Oct 2021), Extract:

The head of the UN’s nuclear watchdog has said other states could follow Australia’s example and seek to build nuclear-powered submarines, raising serious proliferation and legal concerns.

Rafael Grossi, the director general of the International Atomic Energy Agency (IAEA) said during a visit to Washington that he had sent a special team to look into the safety and legal implications of the [Aukus partnership](#) announced last month, in which the US and UK will help Australia build a fleet of nuclear-powered submarines.

If the plan is carried through, it would be the first time a non-nuclear weapons state has acquired nuclear-powered submarines. It reflects a grey area in the 1968 Nuclear Non-Proliferation Treaty, which allows fissile material to be removed from IAEA safeguards for such purposes. ...

The procedures by which the agency would ensure that the fuel, removed from agency oversight, is not diverted to making nuclear weapons have yet to be worked out. ... "which has never been done before, and it's a very, very demanding process."...

Grossi said it "cannot be excluded" that other countries would use the [Aukus](#) precedent to pursue their own nuclear submarine plans.

See: [Nuclear inspection under AUKUS deal 'very tricky' says atomic agency head | Sky News Australia](#)

Nuclear inspections of Australia under the AUKUS deal could lead to a weakened non-proliferation system, says the head of the UN IAEA. "A country... is taking highly enriched uranium away from inspection for a period of time, which could result in a weakening of the nuclear non-proliferation regime," he said. "It is a technically very tricky question and it will be the first time that a country that does not have nuclear weapons has a nuclear sub," **IAEA Director General Rafael Grossi told BBC.**

See: "**Opening a Pandora's Box of Proliferation**" a safeguards critique of AUKUS by Tariq Rauf ex IAEA Head of Verification and Security Policy Coordination, [Australia's Nuclear-Powered Submarines Will Risk Opening a Pandora's Box of Proliferation | Toda Peace Institute](#) (19 Sept), Extract:

"Australia's acquisition of SSNs under AUKUS could well open a Pandora's Box of proliferation with non-nuclear-weapon States such as Argentina, Brazil, Canada, Iran, Japan, Saudi Arabia and South Korea among others also going in for nuclear-powered submarines and keeping nuclear fuel (both low- and highly-enriched uranium) outside the scope of IAEA safeguards. This would weaken the IAEA safeguards (verification) system already facing challenges from new technologies and open up possibilities of diversion of nuclear material for nuclear weapons. The AUKUS decision to equip Australia with SSNs not only is a fool's errand but also could pose a grave threat to regional and international security."

Q: Is AUKUS compatible with Australia ending roles in nuclear war fighting AND signing & ratifying the UN "Treaty on Prohibition of Nuclear Weapons" - the Ban Treaty?

The [ICAN](#) Report "[Choosing Humanity](#)" (July 2019) best sets out the case for Australia to Sign and Ratify the UN "[Treaty on the Prohibition of Nuclear Weapons](#)" (TPNW, the 'Ban Treaty'), which came into force as a permanent part of International Law from 22 January 2021.

The US nuclear umbrella is a threat to use nuclear weapons in Australia's defence policy – a threat which is illegal in International Law under the TPNW and long been contrary to Humanitarian Law.

The ALP has "*acknowledged the centrality of the US Alliance*" and importantly made formal commitments to: "*sign and ratify the Ban Treaty*" (In: [ALP National Platform](#) 2018 & 2021, p.117).

Anthony Albanese MP, "[Changing the World](#)" Speech, ALP National Conference 18 Dec 2018 said:

"We have on our side the overwhelming support of the Australian people. ... Our commitment to sign and ratify the nuclear weapons ban treaty in government is Labor at our best"

This JSCT Inquiry should investigate whether-or-not the AUKUS Pact and proposed nuclear-powered submarines is consistent with Australia's option to Sign & Ratify the Ban Treaty.

The Ban Treaty should be recognised as a fourth Condition on Federal Government & on ALP in-principal Conditional support for AUKUS. The preceding ALP public interest commitment to Sign & Ratify the Ban Treaty (see p.15 herein) should take precedence over the AUKUS Pact.

Q: Does the AUKUS Pact and proposed nuclear submarines add to *in-security* and likely make Australia an increased target in war?

In appraising AUKUS the JSCT Inquiry should consider the scenarios, risks, and consequences of a nuclear or conventional attack by China or Russia on US Bases in Australia in an escalating conflict.

Australians have a right to know the risk exposure we face with the US & with China - in peace & in war. The JSCT Inquiry should Question DFAT & our Minister for Foreign Affairs on the potential consequences of attacks on a range of existing and proposed Australian and US Base facilities here.

See: "US Bases in Australia are nuclear targets in event of a war between China & the US" at p.13 and related "Questions to DFAT and our Minister for Foreign Affairs" at p.14 herein.

Arguably, the AUKUS Pact and nuclear submarines, whether near term US or UK subs to be based in Australia or leased to our Navy, and future Australian nuclear subs, will make Stirling Naval Base near Perth a potential additional nuclear or conventional target in a war with China or Russia.

Q: What is the risk exposure and potential consequences to Perth of basing nuclear submarines at the Stirling Naval Base in the event of an escalating conflict with China or Russia targeting the Base?

The related case of Australia's untenable uranium sales to China:

Nuclear weapons, insecurity and Human Rights breaches are reasons to reform trade practices.

Australia should take action to phase out uranium export sales to nuclear weapon states, all are in breach of their "[Nuclear Non-Proliferation Treaty](#)" (NPT) Article VI nuclear disarmament obligations (see [ICAN Briefing](#)) and all are expanding their nuclear arsenals and delivery systems (see p.16-17).

["China accelerates nuclear weapons expansion, seeks 1,000 warheads or more, Pentagon says"](#) (The Washington Post, 3 Nov 2021). The Pentagon projects China will double its arsenal to have "*up to 700 deliverable nuclear warheads by 2027,*" with aspirations for at least 1,000 by 2030.

Further, Australia must not continue to be complicit in support of - and in uranium sales to - so called '[civil' nuclear programs with clear military links](#) in nuclear weapon states - [including China](#).

Australia [must not sell uranium into unstable regions](#) to suit BHP's Olympic Dam interests (p.25-27).

China should face disqualification as a recipient of Australian uranium sales given China's severe breaches of Human Rights and International Humanitarian Law and protections, in Tibet, in Xinjiang, in Hong Kong, and affecting religious & ethnic minorities and free speech across China (see p.18-20).

China's breaches of International Law are analogous to why Australia ended uranium sales to Russia. Prime Minister Howard signed Australia up to uranium sales to Russia. Under our next Liberal Prime Minister Tony Abbott [Australia banned uranium sales to Russia](#) - with the PM saying in 2014:

"Australia has no intention of selling uranium to a country which is so obviously in breach of international law as Russia currently is".

Australia should recognise China's adverse record on proliferation, expanding nuclear arsenal and assertive military rise and take action to reduce our risk exposure with China. China is a destabilising

influence in potential conflict flash points: on India's border, in Hong Kong and Taiwan, and is considered a rising military threat to countries interests in the Pacific (see p.21-22).

Claimed 'safeguards' on Australian uranium in China are an *Illusion of Protection*. The routine practice of "*substitution*" of Australian uranium in China belies the claim that Australian nuclear materials are accounted for. This 'flag swapping' of Australian uranium renders Australian Safeguards and Non-Proliferation Office (ASNO) safeguards ineffective (see p.23-24).

["China's Civil Nuclear Sector: Plowshares to Swords?"](#) (NPEC Report, March 2021) raises concerns:

"The possibility that China could use fissile material produced in civil nuclear facilities to build up its nuclear warhead stockpile has raised further concerns"

China's lack of transparency across the board and absence of senior level communications means the Federal Government can-not claim to exercise accountability on uranium sales to China.

China has said Australia will be a nuclear target because of AUKUS, see [Nuke sub deal could make Australia 'potential nuclear war target' - Global Times](#) (16 Sept 2021, see quote at p.8), as AUKUS:

"...will potentially make Australia a target of a nuclear strike if a nuclear war breaks out"

A range of public interest reasons warrant action to disqualify non-transparent China as a recipient of Australian uranium sales, including that:

"Australian uranium will effectively disappear off the safeguards radar on arrival in China, a country whose military is inextricably linked to the civilian nuclear sector and where nuclear whistle-blowers and critics are brutally suppressed and jailed. This alone is reason to disqualify China from acquiring Australian uranium."

In: "[Uranium policy a hypocrisy](#)" Opinion by David Noonan, The Age & SMH, 5 Oct 2009.

My background is relevant: In over 25 years' experience scrutinising environment, nuclear and uranium public interest issues, with 16 years as an Australian Conservation Foundation (ACF) campaigner 1996-2011. Including as author of ACF nuclear issues submissions to JSCT Inquiries and as lead ACF witness in JSCT Hearings on uranium sales issues with China and with Russia.

As an individual, I later gave evidence as a witness before the JSCT Inquiry on UAE uranium sales, provided input to the JSCT Inquiry on Ukraine uranium sales, and am quoted in both JSCT Reports.

Further, I bring long-term & ongoing civil society experience on nuclear waste management issues.

Note: I request an opportunity to give evidence as a witness at a Hearing of this ENNPIA Inquiry. I am travelling on the date of the Hearing on 29th Nov (the next working day after close of input). JSCT should hold subsequent Hearings to allow parties providing public input to participate.

Please feel free for JSCT staff and Inquiry Members & staff to make contact regarding any aspect of this public submission, by Mobile, Text or E-Mail (contacts in E-mail cover note).

Yours sincerely

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Public Submission by David Noonan to the JSCT Inquiry on ENNPIA

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AUKUS nuclear subs & Tomahawk cruise missiles in a 'Defence Federal Election':

A Briefer by David Noonan, Independent Campaigner, 27 Sept 2021

AUKUS nuclear subs are an opener in a broader 'Khaki Defence Federal Election' to purport a 'security crisis' rather than face a climate crisis. The Liberal gov will set tests for the ALP and Civil Society and are clearly not going to await 10+ year lead-times to any assembly of nuclear subs here.

Ministers have said they will invite visits by Nuclear Subs – a UK nuclear sub has visited Stirling and visits by US nuclear subs visits are expected before the federal election. At present only Brisbane and Perth / Stirling Naval Base are open ports to nuclear powered vessels. Sydney, London and New York have [prohibitions on safety grounds to refuse the hazards of nuclear-powered vessel visits](#).

Ministers have stated they want to Base or lease existing US nuclear subs. Expect a Liberal federal election commitment to do so ASAP and to test the ALP to agree in the federal election window.

A re-elected PM Morrison gov will likely expedite the nuclear subs Taskforce to 12 not 18 months.

Q: How soon can an option to Base or lease existing US or UK nuclear subs be acted on and preparations to Base and operate nuclear subs at Perth's Stirling Naval Base be put in place?

Expect the Liberals government to test the ALP on the US Alliance over Labor's commitment to support the Nuclear Weapons Ban Treaty in a lead up to the federal election.

The ALP's minimum ready response is their National Platform commitment to hold a Canberra Commission of Inquiry on nuclear disarmament. And to announce they will do so before Signing or at least before Ratifying the Ban Treaty - if elected. PM Morrison and the Murdoch press et al may be unlikely to be headed off by an 'Inquiry' level of response.

Public Interest Question: How much further ground could be given up toward the US Alliance, US Bases & US nuclear umbrella linked war fighting capabilities, in militarising Australia and introducing Tomahawk cruise missiles as a latent nuclear weapon capable delivery system (that is not limited to deployment on nuclear subs) in a lead up to a 'khaki defence election' in the first half of 2022?

Tomahawk cruise missiles are a core part of the AUKUS Pact, as a new long-range (up to 2,000 km) conventional strike capability for Australia, that can be fitted to a range of platforms.

The Tomahawks are due here in a next term of federal office with ALP apparent agreement and are ahead of and do not depend on any outcome to nuclear sub issues.

Tomahawks are first to be fitted to the RAN's four Hobart Class Destroyers, "giving them the ability to strike land targets at greater distances, with better precision" [Australia buying Tomahawk missiles for air warfare destroyers - Defense Brief \(defbrief.com\)](#) (announced 16 Sept, in-parallel to AUKUS).

Tomahawks raise a latent nuclear weapon delivery capability for Australia as an adaptable air, ship, sub or ground launched delivery system for specific US design miniaturised nuclear warheads. Tomahawk cruise missiles could require monitoring under the Ban Treaty and complicate Signing.

The US Navy has long canvassed to [Bring Back the Nuclear Tomahawks | Proceedings - May 2017 Vol. 143/5/1,371 \(usni.org\)](#) "as a sea-based nuclear-armed cruise missile. This would require restoration of the Navy's nuclear capability on Tomahawk cruise missiles."

The US Navy claims: "Bringing back the TLAM-N into the U.S. arsenal would not violate any treaty."

The Navy states: "The U.S. TLAM-N capability carries a number of inherent advantages: The capability is essentially invulnerable, as the missiles likely would be placed only on-board submarines. Any attack submarine can carry these missiles."

***This nuclear armed capability could also be applied to Australia's nuclear attack submarines.**

Q: Will conventional armed Tomahawk cruise missiles now be fitted to Collins-class submarines?

This could act as a force multiplier interim to availability of the first leased US nuclear subs. The RAN did consider [buying Tomahawks for the Collins](#) but no orders were placed – perhaps due to costs.

The US Marines are also re-introducing four-tube ground launched Tomahawks following the collapse of the Intermediate-Range Nuclear Forces Treaty, [or INF](#), with Russia, as anti-ship missiles:

A "potentially game-changing capability for not a lot of cost. It's a 1,000-mile anti-ship cruise missile. It can be used from practically our entire surface and submarine fleet." [Marines Set To Be The First To Bring Back Land-Based Tomahawk Missiles Post-INF Treaty \(thedrive.com\)](#) (March 2020).

Buying Tomahawks are in addition to extensive existing A\$100 billion bi-partisan missile plans:

*"Broadly speaking, the 2020 FSP outlines around \$100 billion in investment in guided weapons over the coming two decades" ([Cracking the missile matrix | ASP](#) April 2021), with an array of missile types to be produced in Australia. Tomahawks are now only made by **Raytheon** (the types used in attacks on Syria cost approx. US\$3 million each).*

China has said Australia will be a target because of AUKUS, see [Nuke sub deal could make Australia 'potential nuclear war target' - Global Times](#) (16 Sept 2021) as it:

"will potentially make Australia a target of a nuclear strike if a nuclear war breaks out ... because it's easy for the US to equip Australia with nuclear weapons and submarine-launched ballistic missiles when Australia has the submarines. ... intensifies the arms race, and undermines the Treaty on the Non-Proliferation of Nuclear Weapons."

China will treat Australia as "a US ally which could be armed with nuclear weapons anytime".

And "China will also be forced to make changes in its military deployment and counter-measures following Australia's latest move."

China sanctioned media says "...the AUKUS partnership confirms that Australia is going all the way with the US in what many have labelled a new 'cold war' with China."

See **"US bases in Australia are nuclear targets in event of a war between China & the US"** (at p.13 herein) in David Noonan 's input (13 August) to the [IPAN People's Inquiry](#) into the US Alliance:

["Re: To end Australia's roles in nuclear war, along with an end to the sale of uranium to nuclear weapons states in breach of NPT nuclear disarmament obligations & Human Rights laws"](#)

- see a set of **Recommendations** at p.12 herein, and the Introduction at p.9-11 herein.

In civil society engaging on the AUKUS Pact one should also engage on uranium responsibilities: **Including to disqualify China as a recipient of Australian uranium** over routine substitution of uranium supplies and breaches of NPT disarmament obligations and Human Rights laws.

Uranium mining & sales responsibilities should be public interest issues in Federal & SA Elections:

- see a 2 p Briefer [Aust-U-sales-fuel-insecurity-Noonan-2021.pdf \(foe.org.au\)](#) (Feb 2021).

Introduction to an Edited Paper by David Noonan (13 Aug 2021):

“To end Australia’s roles in nuclear war, along with an end to sale of uranium to nuclear weapons states in breach of NPT nuclear disarmament obligations & Human Rights laws”

The JSCT Inquiry should appraise these propositions and take up Recommendations toward an end to Australia’s roles in nuclear war. Australia must evolve the US Alliance to end our roles in US nuclear war fighting capabilities AND end defence reliance on a US nuclear weapons ‘umbrella’.

The [ICAN](#) Report “[Choosing Humanity](#)” (July 2019) best sets out the case for Australia to Sign and Ratify the UN “[Treaty on the Prohibition of Nuclear Weapons](#)” (TPNW, the ‘Ban Treaty’), which came into force as a permanent part of International Law from 22 January 2021.

The US nuclear umbrella is a threat to use nuclear weapons in Australia’s defence policy – a threat which is illegal in International Law under the TPNW and long been contrary to Humanitarian Law.

Australia must evolve the roles and operations of the [Pine Gap](#) and North-West Cape US Bases in light of the **TPNW Article 1 Prohibitions** on nations to “*never under any circumstance*”:

(d) Use or threaten to use nuclear weapons or other nuclear explosive devices;

(e) Assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party under this Treaty;

In appraising AUKUS this JSCT Inquiry must consider the scenarios, risks, and consequences of a nuclear or conventional attack by China or Russia on US Bases amid an escalating conflict (p.6-7).

Australians have a right to know the risk exposure we face with the US & with China - in peace & in war. The JSCT Inquiry should Question DFAT & our Minister for Foreign Affairs on the potential consequences of attacks on a range of Australian facilities – including [Darwin Harbour](#) (p.7).

To come into future compliance with the TPNW, Australia’s military inter-operability with US forces must evolve to exclude nuclear military related operations or reliance. Further, all [our Institutions](#) along with the “[Future Fund](#)” must divest from nuclear weapons - the world’s worst weapons.

The **TPNW Article 1 Prohibitions** apply equal normative pressure across Australia’s nuclear weapons state allies: the US, the UK and France, and prescribe nations to never under any circumstance:

(a) Develop, test, produce, manufacture, otherwise acquire, possess or stockpile nuclear weapons or other nuclear explosive devices;

Our next Federal Government must Sign & Ratify the TPNW. The ALP has “*acknowledged the centrality of the US Alliance*” and importantly made formal commitments to: “*sign and ratify the Ban Treaty, after taking account of the need to:*” (In: [ALP National Platform](#) 2018 & 2021, p.117).

The ALP also has a prior commitment to re-establish a **Canberra Commission of Inquiry** “*to make a significant contribution to promoting disarmament*” (see ALP, 2021, p.98). In an ALP path toward the TPNW, a Canberra Commission of Inquiry is likely to occur to ‘*take account*’ of a list of matters before legal obligations arise on Australia through a ratification of the Ban Treaty (see p.15 herein).

Nuclear weapons, insecurity and Human Rights breaches are reasons to reform trade practices.

Australia must take action to phase out uranium export sales to nuclear weapon states (p.16-17).

All nuclear weapon states [are in breach of](#) their “[Nuclear Non-Proliferation Treaty](#)” (NPT) Article VI nuclear disarmament obligations and are expanding their nuclear arsenals and delivery systems.

Further, Australia must not continue to be complicit in support of - and in uranium sales to - so called ‘[civil’ nuclear programs with clear military links](#) in nuclear weapon states - [including China](#).

The linkages and reliance of western military nuclear sectors on civil nuclear programs have been acknowledged in the [US](#), [UK](#) and [France](#).

So called ‘civil’ nuclear sectors in China, Russia, India and Pakistan, and Israel are all *inextricably* linked with their military nuclear sectors. Nuclear programs are a *dual use* civil & weapons chain.

China should face disqualification as a recipient of Australian uranium sales given China’s severe breaches of Human Rights and International Humanitarian Law and protections (p.11).

In 2014 [Australia banned uranium sales to Russia](#): “*Australia has no intention of selling uranium to a country which is so obviously in breach of international law as Russia currently is*” PM Tony Abbott.

BHP had to accept an end to uranium sales to Russia and now has an onus to end uranium sales to China in response to: China’s nuclear weapons, Human Rights breaches, multiple cases of regional insecurity (p.14), China’s involvement in cyber-attacks on Australia (p.17), and fundamentally (p.16):

- In any case, the routine “*substitution*” of Australian uranium in China, and the [Illusion of Protection](#) in ASNO safeguards, warrant disqualification of China as a recipient of uranium

Australia has no leverage on China through our uranium sales and must exit that risky exposure.

I have campaigned on a range of public interest issues regarding China, see an Opinion in The Age & SMH newspapers “[Uranium policy a hypocrisy](#)” (5 Oct 2009) - which raised Human Rights cases.

“Australian uranium will effectively disappear off the safeguards radar on arrival in China, a country whose military is inextricably linked to the civilian nuclear sector and where nuclear whistle-blowers and critics are brutally suppressed and jailed. This alone is reason to disqualify China from acquiring Australian uranium.”

Transparency is a core pre-requisite to any ‘trust’ in nuclear issues and is sorely lacking in China.

South Australia is now the only State or Territory conducting uranium mining & milling, with BHP’s Olympic Dam copper-uranium mine by far the primary corporate driver of uranium in Australia.

BHP uranium sales are under scrutiny: see “[Risky Business: BHP, Rio Tinto given carte blanche to export uranium to global hotspots - Michael West](#)” (17 March 2021) and [Australian uranium fuelled Fukushima \(theecologist.org\)](#) (9 March 2021), joint author Dr Jim Green, FOE Australia.

Influence, \$ value & level of mine production of Australian uranium are in multi-year decline (p.20).

BHP’s vested mining interests in marginal uranium sales to China run counter to public interests.

Uranium sales to China were contrived through Australian Safeguards and Non-proliferation Office’s (ASNO) five-fold inflated projection of the dollar value and tonnage of uranium to China (p.19).

In the 2020’s the Department of Foreign Affairs and Trade (DFAT) warns Australians are “*at risk of arbitrary detention*” in China - yet uranium sales continue to non-transparent China (p.15).

Successive Federal Governments have [il-advisedly expanded uranium sales deals since 2005](#), to China, Russia, India, the UAE and the Ukraine, with BHP solely carrying these deals into the 2020's.

Australia must not sell uranium into *unstable regions* to suit BHP's vested mining interests: in proposed sales to the UAE in the volatile Middle East; to the Ukraine in an insurgency border conflict with Russia; and to India in ongoing nuclear tensions with Pakistan and outside of the NPT regime.

["THE NEED TO ASSESS A FEASIBLE ALTERNATIVE: NO-URANIUM SALES FROM OLYMPIC DAM"](#)
(Briefing by David Noonan for the Australian Conservation Foundation, Friends of the Earth and Conservation SA, June 2019) sets out rationale and means to end uranium sales from Olympic Dam.

Joint National and State Environment Groups recommended BHP be required to properly assess:

- *A No Uranium Sales approach as a feasible alternative project configuration. This would see no uranium removed from the mine site with all uranium retained on-site and discharged to the tailings waste system. This assessment would explore potential savings in water, electricity and chemicals, economic costs and benefits, radiation exposures, nuclear safety and related issues;*
- *BHP has a primary duty of care to properly assess the benefits in potentially significant lower ionizing radiation exposures to workers by not processing uranium at Olympic Dam.*

The Joint ENGO's recommended: a full "**Nuclear Events Risk Analysis**" is needed to appraise uranium sector 'social license' issues, and for Australia to belatedly act on the [UN Secretary General's Nuclear Safety and Security Report](#) (Sept 2011, p.14), which followed the Fukushima nuclear disaster and called for an Inquiry to include "*an in depth assessment of the net cost impact*" of uranium mining.

Uranium sales fuel nuclear insecurity and should be a public interest issue in the next Federal Election & SA State Election, see Briefer: [Aust-U-sales-fuel-insecurity-Noonan-2021.pdf \(foe.org.au\)](#)

Recommendations for consideration by this JSCT inquiry

- Australia must evolve the US Alliance to [end roles in US nuclear war fighting capabilities](#) AND end claimed defence reliance on the US nuclear weapons 'umbrella' – which is a *threat to use* nuclear weapons in Australia's defence policy
- Australia's next Federal Government [must Sign and Ratify](#) the "*Treaty on the Prohibition of Nuclear Weapons*". [ALP commitments](#) to do so are welcome and must be realised within a next term of office.
- In appraising US Bases in Australia this JSCT Inquiry must consider the risks and scenarios of a potential nuclear or conventional attack by China on [Pine Gap](#) or on an Australia facility
- Australians have a right to know the extent of our risk exposure with the US & with China in peace & in war. JSCT should call on DFAT to be transparent on the extent of the risk profile
- In particular: Australian's have a right to know the *consequences* of a potential nuclear or conventional attack by China on a US Base or an Australian facility, including [Darwin Harbour](#)
- [Nuclear weapons](#), insecurity and severe Human Rights breaches are reasons to reform trade practices and to disqualify a country from receiving Australian uranium sales
- Australia must take action to phase out uranium export sales to nuclear weapon states, [all are in breach of their "Nuclear Non-Proliferation Treaty" \(NPT\) Article VI nuclear disarmament obligations](#) and are expanding their nuclear arsenals and delivery systems
- Australia [must not sell uranium into global hotspots](#) to suit BHP's vested mining interests

Re [Australia banned uranium sales to Russia](#) PM Tony Abbott "*Australia has no intention of selling uranium to a country which is so obviously in breach of international law as Russia currently is*":

- [China must face disqualification](#) as a recipient of Australian uranium sales given China's severe breaches of Human Rights and International Humanitarian Law and protections
- BHP had to accept an end to uranium sales to Russia and now has [an onus to end uranium sales to China](#) in response to China's nuclear weapons, severe Human Rights breaches and *insecurity* issues
- Australia should take action in response to China's involvement in unacceptable and illegal [large scale cyber-attacks on Australia](#) and cease uranium sales to China
- In any case, the routine "*substitution*" of Australian uranium in China, and the [Illusion of Protection](#) in ASNO safeguards, warrant disqualification of China as a recipient of uranium
- Australia should now belatedly act on the Recommendation of the [UN Secretary General's Nuclear Safety and Security Report](#) (Sept 2011, p.14) following the Fukushima nuclear disaster, for "*an in depth assessment of the net cost impact*" of uranium mining
- A full "[Nuclear Events Risk Analysis](#)" is needed to appraise the uranium sector and BHP's 'social license' issues
- BHP must be required to properly assess and instigate a '[No Uranium Sales](#)' feasible alternative project configuration for the Olympic Dam copper-uranium mine

US Bases in Australia are nuclear targets in event of a war between China & the US

Both China and Russia's priority & capacity to attack US bases in Australia has long been recognised.

The [Nautilus Institute for Stability and Security](#) has referenced key understandings that Australia is a nuclear target in war, "[Possibilities and effects of a nuclear missile attack on Pine Gap](#)" (2013) states:

"Pine Gap ... remains a likely priority target for a Chinese missile strike in the event of a major China – United States conflict, both because of its role as a remote ground station for early warning satellites ... and its larger role as a command, control, downlink, and processing facility for US signals intelligence satellites in geo-stationary orbit."

(See Richard Tanter, [The "Joint Facilities" revisited – Desmond Ball, democratic debate on security, and the human interest](#), Special Report, Nautilus Institute for Security and Sustainability, 12 Dec 2012.)

Ex-PM Kim Beazley, a year after leaving office in 1996, told a parliamentary committee seminar that:

"We accepted that the joint facilities were probably targets, but we accepted the risk of that for what we saw as the benefits of global stability." (Seminar on the ANZUS Alliance, Joint Standing Committee on Foreign Affairs, Defence and Trade, 11 August 1997.)

Paul Dibb, a former Deputy Secretary of Defence, ("*America has always kept us in the loop*", *The Australian*, 10 Sept 2005) has stated in regard to Russian ICBM's targeting Australia:

"We judged, for example, that the SS-11 ICBM site at Svobodny in Siberia was capable of inflicting one million instant deaths and 750,000 radiation deaths on Sydney. And you would not have wanted to live in Alice Springs, Woomera or Exmouth — or even Adelaide."

A classified **Force Posture Review** prepared prior to the 2009 Australian Defence White Paper, in [The Kingdom and the Quarry](#) David Uren's 2012 book on our relationship to China (p.128), cites:

"defence thinking is that in the event of a conflict with the United States, China would attempt to destroy Pine Gap."

[Pine Gap](#) (2020) is still a target in war. **Richard Tanter's** "[The Joint facilities](#)" (2012, p.42) concluded:

Consequently, attacking Pine Gap almost certainly remains a plausible and lucrative way of degrading or destroying the US geosynchronous signals intelligence capability – the "ears" of nuclear war-fighting capacity.

China modernising its nuclear arsenal "[Chinese nuclear forces](#)" (Dec 2020) increases options for use.

The **head of U.S. Strategic Command** considers China could strike first in a war with the US "[Would China Use Nuclear Weapons First in a War with the United States?](#)" (The Diplomat, April 2020).

["China threatens Australia with missile attack"](#) (**Paul Dibb**, ASPI, 26 July 2021) reports the editor-in-chief of Beijing's *Global Times* newspaper, which generally reflects the views of the Chinese Communist Party, [threatened Australia](#) (07 May 2021) with 'retaliatory punishment' with missile strikes 'on the military facilities and relevant key facilities on Australian soil' if the Australian military coordinates with the US in a war over Taiwan, including that:

*“China has a strong production capability, including producing additional long-range missiles with **conventional warheads that target military objectives in Australia** when the situation becomes highly tense.”*

“Thinking the Unthinkable. What would a Chinese invasion of Taiwan mean for Australia?” (Greg Sheridan, Foreign Editor, The Weekend Australian, 8-9 May 2021) set out Australian military facilities and forces that afford a raft of targets for the Chinese military in a conflict with the US over Taiwan.

Including: the “Joint Defence Facility” at Pine Gap; the “North West Cape” communications facility (for submarines); the Geraldton signals intelligence facility; the over-the-horizon “Jindalee Operational Radar Network” (JORN comprises three radar sites, near Alice Springs, near Laverton WA & near Longreach Qld); Australian submarines at sea; the Stirling submarine base south of Perth; and RAAF aircraft operating with US forces (potentially based out of Guam or other US allied bases).

Darwin and NT RAAF bases are arguably also potential targets in an escalating conflict: *“The arena of hostilities for any such conflict would be mostly confined to East Asia, with the possible exception of strikes against US forces using Darwin as a rear-area staging base”* (Lowy [paper](#), 09 August 2021).

[War with China](#) is out in open debate. [The Lowy Institute’s 2020 poll](#) showed that only a third of Australians support the idea of joining the US in a war over Taiwan or in the South China Sea.

Australians has a right to know the risk exposure they face with the US & with China - in peace & in war. This JSCT Inquiry should Question DFAT & our Minister for Foreign Affairs on these matters. This includes the risks to, and consequences of, potential attacks on a range of Australian facilities.

Questions on Australia’s risk exposure to a strike by China in a conflict with the US:

Noting - DFAT is aware of commentary by senior academics and by former senior Australian officials, including ex-Prime Minister Kim Beazley, that key US bases in Australia are a nuclear target in war:

Q: What are the risks and scenarios in which China could launch a nuclear or a conventional strike on the “Pine Gap” or “North-West Cape” US bases in Australia during an escalating conflict with the US?

Q: What are the *consequences* for Australia and for the Australian population in a nuclear or a conventional strike by China on the Pine Gap or “North-West Cape” US Bases, or on an Australian facility - including potentially on Darwin Harbour in an escalating conflict with the US?

Q: What civil defence plans & health care responses – if any, has Australia made for populations near Pine Gap and near other potential target Australian bases and facilities – including Darwin Harbour?

Q: Has the Federal Government ever made a serious attempt to explain to populations living in proximity to target US Bases the dangers that they face in a nuclear strike by Russia or by China?

Q: In addition to the “Joint Defence Facility” at Pine Gap, what other Australian military facilities, communications & intelligence facilities, and key infrastructures (for instance Darwin Harbour) are considered potential targets for China to attack in an escalating conflict with the US?

Noting - that Australia stopped the sale of uranium supplies to Russia in 2014:

Q: Why does Australia still sell uranium to China – the only country (in addition to Russia) that is considered likely to attack Australia with nuclear weapons in an escalating conflict with the US?

The ALP “*acknowledges the centrality of the US Alliance*” and will Sign & Ratify the TPNW

Anthony Albanese MP, “[Changing the World](#)” Speech, ALP National Conference 18 Dec 2018:

“We have on our side the overwhelming support of the Australian people. ... Our commitment to sign and ratify the nuclear weapons ban treaty in government is Labor at our best”

The [ALP National Platform](#), 2021, ***Nuclear disarmament*** p.116-117, lists the matters to ‘take account of’ in the ALP signing and ratifying the TPNW, with ‘after’ a key operative word in this commitment:

1. *Congratulates the International Campaign to Abolish Nuclear Weapons on its work in returning to global prominence the cause of nuclear disarmament;*

2. *Acknowledges the value of the Treaty on the Prohibition of Nuclear Weapons (the Ban Treaty) and its aspiration to rid the world of nuclear weapons for all time; and*

3. ***Acknowledges the centrality of the US Alliance to Australia’s national security and strategic policy. Labor in government will sign and ratify the Ban Treaty, after taking account of the need to:***
(Emphasis added)

- *Ensure an effective verification and enforcement architecture;*
- *Ensure the interaction of the Ban Treaty with the longstanding Nuclear Non-Proliferation Treaty;*
- *Work to achieve universal support for the Ban Treaty. Labor will take urgent action to reduce the risk of nuclear war by continuing its proud record of seeking nuclear disarmament and non-proliferation by:*
- *Working to create the conditions necessary to achieve a pathway to universal support for the Ban Treaty;*
- *Advocating to the United States that it actively negotiates with Russia, China and other nuclear armed states to develop a follow on treaty to the New START treaty with a view to realising the objective of Article VI of the Treaty on the Non - Proliferation of Nuclear Weapons (NPT), namely, a world free of nuclear weapons;*
- *Seeking to work with partners and allies to build upon the International Commission on Nuclear Non-Proliferation and Disarmament to develop an initiative which proposes a way of working with states possessing nuclear weapons to achieve Article VI of the NPT and encouraging transparency among all states with nuclear weapons in relation to their use doctrine and the composition of their arsenals, while continuing to strengthen non-proliferation goals in the Indo Pacific region.*

The ALP also gave commitments in Dec 2018 to re-establish the **Canberra Commission**: “to make a significant contribution to promoting disarmament” (In: [ALP National Platform](#), 2021, p.98).

“Labor will progress these commitments through diplomatic means including the re-establishment of the Canberra Commission to re-invigorate Australia’s tradition of middle power, multilateral diplomacy. In doing so, Labor believes that as a non-nuclear armed nation and a good international citizen, Australia can make a significant contribution to promoting disarmament, the reduction of nuclear stockpiles, and the responsible use of nuclear technology.”

In an ALP path toward the TPNW, a Canberra Commission of Inquiry is likely to occur to ‘**take account**’ of a list of matters **before** legal obligations arise on Australia through a ratification of the Ban Treaty. This should all be realisable within a next ALP three-year term of federal office.

End uranium sales to nuclear weapons states and into *unstable regions*

All nuclear weapon states [are in breach of](#) their “[Nuclear Non-Proliferation Treaty](#)” (NPT) Preamble and Article VI nuclear disarmament obligations - which entered into force in 1970:

“Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to undertake effective measures in the direction of nuclear disarmament,

Article VI Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.”

After 50 years breaching their NPT nuclear disarmament obligations to end the nuclear arms race “*at the earliest possible date*” all nuclear weapon states are expanding their nuclear arsenals and delivery systems. The ICAN Report “[Complicit: 2020 Global Nuclear Weapons Spending](#)” (June 2021) estimates nine nuclear weapon states spent \$72.6 billion on nuclear weapons in 2020 alone.

Australia is undermining the NPT. Key Findings of the ICAN Briefing “[Sabotaging the NPT](#)” (April 2018) identifies Australia as: “*enabling nuclear arms races and threats by explicitly basing their national defence partly on the potential use of nuclear weapons by allies.*”

Australia must take action to phase out uranium export sales to all nuclear weapon states.

Further, Australia must not continue to be complicit in support of - and in uranium sales to - so called ‘civil’ nuclear programs with clear military links in nuclear weapon states - [including China](#).

The linkages and reliance of western military nuclear sectors on civil nuclear programs have been acknowledged in the [US](#), [UK](#) and [France](#).

So called ‘civil’ nuclear sectors in China, Russia, India and Pakistan, and Israel are all *inextricably* linked with their military nuclear sectors. Nuclear programs are a *dual use* civil & weapons chain.

Successive Federal Governments have [il-advisedly expanded uranium sales deals since 2005](#), to China, Russia, India, the UAE and the Ukraine, with BHP solely carrying these deals into the 2020’s.

Australia [must not sell uranium into unstable regions](#) to suit BHP’s vested mining interests: In proposed sales to the UAE in the volatile Middle East; to the Ukraine in an insurgency border conflict with Russia; and to India in ongoing nuclear tensions with Pakistan and outside of the NPT regime.

BHP uranium sales are under scrutiny: see “[Risky Business: BHP, Rio Tinto given carte blanche to export uranium to global hotspots - Michael West](#)” (17 March 2021) and [Australian uranium fuelled Fukushima \(theecologist.org\)](#) (9 March 2021), joint author Dr Jim Green, FOE Australia.

In 2011 – the same year as BHP uranium from the Olympic Dam mine in SA fuelled the Fukushima nuclear disaster – the Federal Government agreed to allow uranium exports to India. This despite India being outside of the NPT regime, [inadequate nuclear regulation](#) in India, and despite India’s ongoing expansion of its nuclear weaponry and delivery capabilities.

A uranium supply agreement with the [United Arab Emirates](#) was concluded in 2013 despite the obvious risks of selling uranium into a politically and militarily [volatile](#) region where nuclear facilities have repeatedly been [targeted](#) by adversaries intent on stopping covert nuclear weapons programs.

A uranium supply agreement with [Ukraine](#) was concluded in 2016 despite a host of safety and security concerns, and the inability of the IAEA to carry out safeguards inspections in regions annexed by Russia.

However, it is obvious that Australia will take action when it wants to. In 2014, [Australia banned uranium sales to Russia](#), with then Prime Minister Tony Abbott stating: “Australia has no intention of selling uranium to a country which is so obviously in breach of international law as Russia currently is.”

Australia’s uranium supply agreement with China, concluded in 2006, has not been reviewed despite abundant [evidence](#) of inadequate nuclear safety standards, inadequate regulation, lack of transparency, repression of whistleblowers, world’s worst insurance and liability arrangements, security risks, and widespread corruption.

Civil society and NGO’s are campaigning to wind back Australia’s atomic exposures in the uranium trade with emphasis on [uranium sales to China](#). China’s [human rights abuses](#) and a range of strategic insecurity issues warrant a cessation of uranium sales. China’s ongoing [human rights abuses in Tibet](#) and mass detention and [forced labour](#) against Uyghurs [in Xinjiang](#) are severe breaches of international humanitarian law and UN Treaties.

China is obviously in breach of international law on numerous counts. Uranium sales to Russia were suspended because of breaches of international law and the same standard should be applied to China.

Scant regard for nuclear risks: China has exported nuclear weapons know-how to [Pakistan](#), targets Australia in [cyber-attacks](#), and is causing regional [insecurity on the India border](#), in [Hong Kong](#) and [Taiwan](#), and [in the Pacific](#).

BHP’s Olympic Dam mine is the only operation still selling Australian uranium into China. There is a case for the ‘Big Australian’ [to forego uranium sales](#) overall and an [onus to end sales to China](#).

Likewise, proliferation risks are also given short shrift in Australia’s uranium sales. Australia claims to be working to discourage countries from producing fissile (explosive) material for nuclear bombs, but nonetheless exports uranium to countries blocking progress on the proposed Fissile Material Cut-Off Treaty and refusing to sign or ratify the Comprehensive Test Ban Treaty.

And Australia gives Japan open-ended permission to separate and stockpile plutonium although [reprocessing](#) and stockpiling fans regional proliferation risks and tensions in North-East Asia.

Despite liberal and ill-advised uranium export policies, Australian uranium sales are in long-term decline and now represent only [8.9 per cent](#) of world uranium usage.

China's lack of transparency and severe Human Rights breaches warrant response:

I commend the 11 core Recommendations of "*An Illusion of Protection. Full Report. The unavoidable limitations of safeguards on nuclear materials and the export of uranium to China*", a [Report](#) (Oct 2006) prepared for the Medical Association for Prevention of War and ACF.

China's lack of transparency was a key factor in the reports Recommendation No.2 by MAPW and ACF to disqualify China as a recipient of Australian uranium:

"Australia should not export uranium to China. On such a serious matter as proliferation of nuclear weapons, China's poor non-proliferation record and lack of transparency – and indeed active contribution to horizontal nuclear proliferation – warrants the disqualification of China as an appropriate recipient of Australian uranium on these grounds alone."

China's lack of transparency and severe Human Rights abuses, of the gravity of mass detention and forced labour of the Uyghur people in Xinjiang AND of the Tibetan people in Tibet, oblige Australia to act on our values and to instigate a range of decisive actions and measures in response.

Recommendations for the JSCT Inquiry to consider and for Australia to instigate actions on:

- Australia must take action on China's severe Human Rights abuses and mass detention and forced labour of Uyghurs in the Xinjiang region AND of Tibetans in the region of Tibet
- Require access to Xinjiang & to Tibet, or else decline entry to Australia to officials of China
- Ban the Australian import of goods produced by Uyghur or by Tibetan forced labour
- Investigate and engage a range of measures to support the Human Rights of both the Uyghur people and of the Tibetan people
- Disqualify *non-transparent* China as a recipient of Australian uranium sales
- Support Hong Kong people impacted by state repression of Human Rights and freedoms
- Accept refugees and others at risk of - or subject to - state repression in Xinjiang, in Tibet and in Hong Kong
- Support Taiwan as a fellow democracy

China's Human Rights record has failed civil society expectations on transparency & accountability.

Prime Minister Bob Hawke responded to China's 1989 Tiananmen Square massacre by accepting over 40,000 Chinese nationals to stay in Australia. Apart from rhetoric, what if anything has Australia *actually done* on China's continued record of severe Human Rights abuses since then?

'Trust' in China is proving to be misplaced. China is increasingly not accountable to Australia on a widening range of trade, transparency, Human Rights and strategic issues.

What exposure has Australia accrued through untempered trade with authoritarian China?

Australia's values are at stake. Australia must act to uphold our values rather than try to retain trade sales to China, however advantageous they may be perceived. It is untenable to ignore severe Human Rights abuses in China. Australian must not continue to be effectively silent on these issues.

Trade dependence on China involves Australia in repression of whistle-blowers, media, civil society and ethnic communities - near anyone who dares to disagree with the one-party state in China.

Australia has a record of subverting reality to accommodate even dangerous trade with China:

I have campaigned on Australian public interest issues regarding China, including an Opinion in The Age & SMH newspapers "[Uranium policy a hypocrisy](#)" (5 Oct 2009) raising Human Rights cases.

“Australian uranium will effectively disappear off the safeguards radar on arrival in China, a country whose military is inextricably linked to the civilian nuclear sector and where nuclear whistle-blowers and critics are brutally suppressed and jailed. This alone is reason to disqualify China from acquiring Australian uranium.”

Transparency is a core pre-requisite to any ‘trust’ in nuclear issues and is sorely lacking in China.

Claims by successive Federal Governments & DFAT to trust in and rely on China in uranium sales issues were never credible and are nonsense now in an era of an assertive and unresponsive China.

In 2014 Prime Minister Tony Abbott [banned uranium exports](#) to Russia over complicity in mass loss of civilian life in the downing of MH17. Australia must now also act to end uranium sales to China.

What level of Human Rights abuses will China be allowed before Australia acts on our values?

China has effectively ended the ‘two-state’ system in Hong Kong and Human Rights and freedoms are being repressed under [new national security legislation](#) (ABC News, 1st July 2020):

The crimes of secession, subversion of state power and colluding with foreign countries and external elements — such as foreign institutions, organisations and personnel — could result in penalties of up to life in prison.

This has stunned some legal scholars, who say even peaceful actions such as the [pro-democracy Occupy protests of 2014](#) could now bring 10 years' jail if foreign links could be proven.

It also provides for more active state management and oversight of foreign groups, organisations and media based in Hong Kong, ...

There is also a provision allowing for trials to take place secretly, barring public and media access to proceedings, ...

"The punitive elements of the law are stupefying," Simon Young, a law professor at the University of Hong Kong's law school, and a barrister, told Reuters.

"... the consequences to the individual and the legal system will be irreparable."

China has recently threatened to use military force against a neighbouring democracy in Taiwan [“Chinese general threatens attack on Taiwan to stop independence”](#) (SMH, 29 May 2020):

Taiwan's government denounced the comments, saying that threats of war were a violation of international law and that Taiwan has never been a part of the People's Republic of China.

"Taiwan's people will never choose dictatorship nor bow to violence", Taiwan's Mainland Affairs Council said. "Force and unilateral decisions are not the way to resolve problems."

What actions must Australia take in the face of mass internment and forced labour in China?

First, this JSCT Inquiry should address reports of severe Human Rights abuses and mass detention and forced labour of both the Uyghurs in the Xinjiang region AND of Tibetans in the Tibet region.

The Australia Tibet Council (ATC) recently lobbied Federal Parliament, addressing news reports citing:

“Half a million Tibetan nomads and farmers have been coerced into labour camps where they are subject to indoctrination before being sent to work in factories.”

[“China sharply expands mass labor program in Tibet”](#) (Reuters, 22 Sept 2020) cites a [report](#) *“Xinjiang’s System of Militarized Vocational Training Comes to Tibet”* by the Jamestown Foundation, a Global Research and Analysis Institute based in Washington DC, the article stating that:

BEIJING (Reuters) - China is pushing growing numbers of Tibetan rural laborers off the land and into recently built military-style training centres where they are turned into factory workers, mirroring a program in the western Xinjiang region that rights groups have branded coercive labour.

Beijing has set quotas for the mass transfer of rural laborers within Tibet and to other parts of China. ...

“This is now, in my opinion, the strongest, most clear and targeted attack on traditional Tibetan livelihoods that we have seen almost since the Cultural Revolution of 1966 to 1976”, said Adrian Zenz, an independent Tibet and Xinjiang researcher, who compiled the core findings about the program.

...in areas like Xinjiang and Tibet, with large ethnic populations and a history of unrest, rights groups say the programs include an outsized emphasis on ideological training. And the government quotas and military-style management, they say, suggest the transfers have coercive elements. ...

The Tibetan program is expanding as international pressure is growing over similar projects in Xinjiang, some of which have been linked to mass detention centres.

A United Nations report has estimated that around one million people in Xinjiang, mostly ethnic Uighurs, were detained in camps and subjected to ideological education.”

Second, I commend the ATC recommendation for Australia to seek and require access to Tibet for journalists and foreign officials, or else decline entry to Australia to officials of China, including those responsible for ongoing abuses. This requirement must also be applied to the Xinjiang region.

Third, this Inquiry should test China and request a civil society delegation visit Xinjiang and Tibet.

China’s Foreign Minister Wang Yi recently made an offer to visit China, reported in The Age [“China’s foreign minister want better ties with Biden administration”](#) (04 Jan 2021):

“Some politicians have fabricated too much false information about Xinjiang and Tibet. ... We welcome you, ... to visit China, including the two autonomous regions at your convenience”.

The offer was made in a US forum hosted by ex-Prime Minister Kevin Rudd, who is cited as saying:

“I’ll put in a pitch for my own country Australia (and for) face-to-face contact between the Chinese government and the Australian government as well.”

Fourth, Questions should be put to the Chinese government and their Ambassador to Australia.

JSCT could investigate and make Recommendations that are commensurate with the seriousness and extent of the severe Human Rights abuses in China, irrespective of whether-or-not China accommodates any requests made to it by the Australian government or by this JSCT Inquiry.

China's proliferation record, nuclear arsenals and assertive military rise:

Australia must recognise China's record and take action to reduce our risk exposure with China.

China's Ambassador to Australia, Madame Fu Ying stated at a Melbourne Mining Club luncheon in Dec 2005 that China has *insufficient* uranium for both its civil and military nuclear program (In: JSCT Dec 2006, [Report No.81](#), Chapter 5.36).

At best, the sale of Australian uranium frees up China to divert its own limited supply of uranium reserves to use in its military related nuclear regime. The sale of uranium to China involves Australia in acceptance of China's nuclear regime: its routine substitution of Australian uranium, its record of proliferation of nuclear & missile technology and weapons know-how, [modernisation of its nuclear arsenal](#), and an assertive military posture.

China's nuclear proliferation was central to Pakistan's nuclear weapons program ("[Deadly Arsenals](#)" Report 2nd Ed., J Cirincione et al, Carnegie Endowment for International Peace, July 2005).

China's state-run corporations trafficked illicit nuclear & missile technology to Pakistan, Iran, North Korea and Libya, despite China commitments to uphold non-proliferation regimes (Deadly Arsenals).

Chinese nuclear weapon designs were available from the [A Q Kahn nuclear smuggling network](#) out of Pakistan and are reported to have turned up in a number of countries.

China has also threatened to use nuclear weapons to destroy US cities over Taiwan ("[Chinese general warns of nuclear risk to US](#)", The Guardian, July 2005):

A senior Chinese general has warned that his country could destroy hundreds of American cities with nuclear weapons if the two nations clashed over Taiwan. ... "If the Americans draw their missiles and position-guided ammunition on to the target zone on China's territory, I think we will have to respond with nuclear weapons." Major general Zhu Chenghu, a dean at the National Defence University, said. ... "Of course, the Americans will have to be prepared that hundreds of cities will be destroyed by the Chinese."

The "[An illusion of Protection](#)" report by MAPW & ACF (Oct 2006) discussed China's flawed non-proliferation record to Pakistan and to Iran and the potential for nuclear conflict with the West.

Despite China's flawed record & risky profile, Australia signed up to sell uranium into China in 2006.

By 2007 China pushed nuclear supply deals to Pakistan in breach of NSG embargoes and continues to do so. Even the World Nuclear Association ([China's Nuclear Fuel Cycle](#), 2020) cites concern:

Non-proliferation: *China undertook nuclear weapons tests in 1964-96. Since then it has signed the Comprehensive Nuclear Test Ban Treaty, although it has not yet ratified it. In May 2004, it joined the Nuclear Suppliers Group (NSG).*

The NSG membership gives rise to questions about China's supply of two small power reactors to Pakistan, Chashma 3&4. Contracts for Chashma units 1&2 were signed in 1990 and 2000, before 2004 when China joined the NSG, which maintains an embargo on sales of nuclear equipment to Pakistan. The agreement for units 3&4 was announced in 2007 and signed in October 2008. China argues that units 3&4 are 'grandfathered', under arrangements which are consistent with those for units 1&2.

In 2013 contracts were signed for two Hualong One reactors to be built near Karachi.

China is a destabilising influence in a number of potential conflict flash points, in India, in Hong Kong and Taiwan, and is considered a rising military threat to countries interests in the Pacific.

China recently instigated destabilising military action against India "[India says trust with China 'profoundly disturbed'](#)" (Reuters, 12 Jan 2021):

India's Foreign Minister Subrahmanyam Jaishankar said on Tuesday that trust with China had been deeply impaired after last summer's border clash which resulted in the first combat deaths in 45 years.

China has recently threatened to use military force against a neighbouring democracy in Taiwan "[Chinese general threatens attack on Taiwan to stop independence](#)" (SMH, 29 May 2020):

Taiwan's government denounced the comments, saying that threats of war were a violation of international law and that Taiwan has never been a part of the People's Republic of China. Taiwan's people will never choose dictatorship nor bow to violence", Taiwan's Mainland Affairs Council said. "Force and unilateral decisions are not the way to resolve problems."

The military assertive rise of China across the South & East China Sea has lead [Japan to urge a boost in our naval presence](#) (Jan 2021). Tension with Japan over the Senkaku Islands continues to simmer, with a [record number of incursions](#) into Japanese territorial waters during 2020.

Defence analyst Hugh White urged Australia rethink our defence, to near double our military budget, and to (ill-advisedly) consider nuclear options ("[Australia may need to consider nuclear weapons to counter China's dominance, defence analyst says](#)", July 2019).

"[China threatens to nuke Japan if country intervenes in Taiwan conflict](#)" (19 July 2021): a Chinese Communist Party approved video channel called on Beijing to abandon its "no first-use" nuclear weapons policy and 'vowed to Nuke Japan if Japan defends Taiwan' - it was shared millions of times.

"[Xi Jinping Warns Taiwan That Unification Is the Goal and Force Is an Option](#)" (The New York Times, 01 Jan 2019) Xi Jinping has repeatedly affirmed a right to use force to 're-unify' with Taiwan.

Concerns over China's interference, subversion and espionage also feature in "[Australia to toughen export controls over fears technology could fall into hands of foreign armies](#)" (The Guardian, 2021).

DFAT: Do not travel to China, at risk of arbitrary detention - yet uranium sales continue...

DFAT advises that it is not safe for Australians to travel to China. The Department of Foreign Affairs and Trade acknowledges that DFAT can-not effectively help Australians who travel and who are at risk of arrest, jail and arbitrary detention in China. DFAT is not allowed to intervene in the Chinese 'legal system' in response to arbitrary detentions.

"Australians may also be at risk of arbitrary detention.

We advise: Do not travel to China. If you're arrested or jailed ... we can't get you out of trouble or out of jail. The Australian Government can't intervene in the Chinese justice process." (DFAT [China Travel Advice and Safety](#) accessed 16 Jan 2021)

However, in defiance of reality DFAT and the [Australian Safeguards and Non-proliferation Office](#) continue to claim Australian uranium is accounted for in *non-transparent* China, and that Australia can trust in and rely on the conduct of the one party state nuclear regime in China.

Claimed ‘safeguards’ on Australian uranium in China are an *Illusion of Protection*:

“Uranium ore concentrates transferred to China under this Agreement shall be substituted by an equivalent quantity of converted natural uranium”

([Transfer of Nuclear Material Agreement](#) between Australia and the People’s Republic of China, Annex B, DELINEATED CHINESE NUCLEAR FUEL CYCLE PROGRAM, in force Feb 2007)

“All Australian Obligated Nuclear Material was satisfactorily accounted for.”

(Dr Robert Floyd, Director General, [ASNO Annual Report 2019-20](#), p.iii)

The routine practice of “*substitution*” of Australian uranium in China belies the claim that Australian nuclear materials are accounted for. This ‘[flag swapping](#)’ of Australian uranium renders Australian Safeguards and Non-Proliferation Office (ASNO) safeguards ineffective.

On arrival in China shipments of Australian uranium are “*substituted*” for other uranium material from other origins that are held at other locations at nuclear enrichment facilities. Actual Australian uranium then goes on to a nuclear conversion facility in China, which is outside of IAEA safeguards.

Australian uranium sales to *non-transparent* China contributes, directly or indirectly, to support and sanction China’s interlinked civil and military nuclear regime.

A range of public interest reasons warrant action to disqualify non-transparent China as a recipient of Australian uranium sales, including that:

“Australian uranium will effectively disappear off the safeguards radar on arrival in China, a country whose military is inextricably linked to the civilian nuclear sector and where nuclear whistle-blowers and critics are brutally suppressed and jailed. This alone is reason to disqualify China from acquiring Australian uranium.”

In: “[Uranium policy a hypocrisy](#)” Opinion by David Noonan, The Age & SMH newspapers, 5 Oct 2009.

“Who’s Watching the Nuclear Watchdog? [A Critique of ASNO](#)” (Energy/Science Coalition, Briefing Paper #19, Executive Summary p.2, University of Melbourne, August 2007) states:

“This EnergyScience Briefing Paper raises serious concerns regarding the competence and professionalism of ASNO. ...

This paper details a large number of statements made by ASNO which are false or misleading. The evidence compiled raises critical questions of good governance, and leads inescapably to the conclusion that the safeguards on Australian uranium which ASNO is responsible for implementing are deeply flawed both in their design and in their execution. This situation requires redress. The authors of this paper believe there is a compelling case for major reform of ASNO as a matter of urgency. ...

The matters raised here go to the heart of Australia’s obligations as a major uranium exporting nation.”

ASNO claims to account for Australian nuclear materials in China are an ‘*Illusion of Protection*’. ASNO conducts a book-keeping exercise in attempt to account for other ‘equivalent’ designated nuclear material which have been “*substituted*” for the original Australian uranium.

Export of Australian uranium to China was investigated by a major [report](#) (Oct 2006) prepared for the Medical Association for Prevention of War (MAPW) & Australian Conservation Foundation (ACF).

“An Illusion of Protection. Full Report. The unavoidable limitations of safeguards on nuclear materials and the export of uranium to China” concluded in Recommendation No.2 (p.11):

“Australia should not export uranium to China. On such a serious matter as proliferation of nuclear weapons, China’s poor non-proliferation record and lack of transparency – and indeed active contribution to horizontal nuclear proliferation – warrants the disqualification of China as an appropriate recipient of Australian uranium on these grounds alone.”

Lack of transparency was a key factor in the report’s findings to disqualify China. Australia has no leverage on China through our uranium sales and must exit that risky exposure.

PM Tony Abbott showed leadership to ban uranium sales to Russia. Who will lead now on China?

Recommendation: The routine “*substitution*” of Australian uranium in China, and the *Illusion of Protection* in ASNO safeguards, warrant disqualification of China as a recipient of uranium.

Why do we sell uranium to China - while China targets Australia in cyber-attacks?

“Another certainty is that Australia will continue to be under full-on cyber assault, principally from China” (Peter Jennings, ED of ASPI, in *The Australian, Insight*, 23 Dec 2020, p.11).

Peter Jennings article “[2021 the year of the wolf warrior at the door](#)” has set out “*take-to-the-bank strategic certainties for 2021*” including the certainty of continued cyber assault by China:

“The wider point is that Australia is constantly under sustained cyber attack from sophisticated and persistent state actors that have shown a determination to get into our networks, ranging from parliament to security and intelligence agencies, universities and businesses.” (Peter Jennings, Australian Strategic Policy Institute)

[“Australia joins international partners in attribution of malicious cyber activity to China”](#):

“...China's Ministry of State Security exploits vulnerabilities affecting thousands of computers and networks worldwide, including in Australia. These actions have undermined international stability and security by opening the door to a range of other actors, including cybercriminals, who continue to exploit this vulnerability for illicit gain. The Australian Government is also seriously concerned about reports from our international partners that China's Ministry of State Security is engaging contract hackers who have carried out cyber-enabled intellectual property theft for personal gain and to provide commercial advantage to the Chinese Government.”
(DFAT, 19 June 20210)

“What should Australia do about... its relationship with the PRC?” by Dave Sharma, Federal Liberal MP (In: [China Matters Explores views from across the aisle, Nov-Dec 2020](#)), says:

“Among Western nations, Australia has the highest level of integration and exposure to the PRC. ... Be frank with the Australian public. ... This includes being more willing to disclose attempts by the PRC to interfere in Australia, from large-scale cyberattacks to attempts to intimidate Chinese Australian communities. ... Australia must clearly define our redlines. We must make it clear that certain elements underpinning our sovereignty and national character are not-negotiable and off limits to foreign actors.”

I submit the People’s Republic of China (PRC) [has already crossed a number of Australia’s redlines](#).

Recommendation: Australia must take action in response to China’s involvement in large scale cyber-attacks on Australia and cease uranium sales to China.

BHP Olympic Dam is the only outfit still selling Australian uranium to China:

The BHP Olympic Dam copper-uranium mine in SA is the only outfit still selling Australian uranium into China since closure of Rio Tinto's Ranger uranium mine in Kakadu in January 2021.

These is a case for 'The big Australian' BHP [to forego uranium sales](#) and an onus to end China sales.

China asked Australia to agree to export uranium in August 2004. BHP took over Olympic Dam mine in mid-2005 amidst a sales pitch for a major expansion in uranium output. By August that year Australia had sent agreement papers to China, with a required JSCT Inquiry yet to occur.

In Nov 2005 "[BHP plans to expand Olympic Dam](#)" (ABC AM, 04/11/05) BHP proposed converting the Olympic Dam mine at Roxby Downs into world's largest open pit mine operation:

"The project is a \$5 bil expansion, doubling copper production, quadrupling uranium output, and converting the mine from a network of underground tunnels to a massive open pit." ...

But opponents like the Australian Conservation Foundation's David Noonan say there's much more at stake if the expansion does go ahead:

"This is to turn Roxby into the world's largest uranium mine. It's to turn SA into the uranium quarry for the world nuclear industry. It will make SA responsible for much of the nuclear risk, much of the potential nuclear accidents ... right across the globe."

The "[An illusion of Protection](#)" report investigated the China uranium sales deal and its BHP links:

"On 3 April 2006 the Government of Australia and the Peoples Republic of China signed a bilateral safeguards agreement that opened the door for the export of Australian uranium to China. ... Four days after the agreement was signed, the Governor of China's Development Bank toured BHP Billiton's Olympic Dam uranium mine in South Australia which is expected to become the primary source of uranium exports to China." (p.33)

However, BHP abandoned the proposed open pit mine project as uneconomic in 2012 - after receiving full Federal and SA Government approvals. Costs had risen from \$5 to over \$20 billion.

Olympic Dam uranium production has declined rather than increase and the mine has struggled to produce copper at the rate of its late 1990's 'nameplate capacity' of 220 000 tonnes per annum.

Overall, uranium sales are a declining economic by-product of Olympic Dam copper mining. Since 2012 BHP has prioritised \$ returns on copper through access to areas of higher-grade copper ores.

BHP recently abandoned another Olympic Dam mine expansion plan: "[BHP shelves \\$3.7bn expansion plan for Olympic Dam mine in SA for a second time](#)" (The Advertiser, Business Editor, 20 Oct 2020). Having SA government "Major Project" status from Feb 2019, BHP abandoned this mine expansion:

"just months after the colossal project was put on a Federal Government fast-track."

BHP's claimed uranium expansion, touted with inflated figures, never occurred. The evidence from 2005 to 2020 is clear: BHP's Olympic Dam mine and vested interest in uranium, can't take a trick.

However, BHP Olympic Dam uranium sales did go on [to fuel the Fukushima nuclear disaster](#) in 2011.

BHP lobbied the Joint Standing Committee on Treaties (JSCT) to sell Australian uranium into China.

Recommendation: BHP had to accept an end to uranium sales to Russia and now has an onus to end uranium sales to non-transparent China in response to China's severe Human Rights abuses.

ASNO's five-fold inflated projection of Australian uranium sales to China:

Despite inflated projections of Australia's uranium mine production and export uranium sales potential, uranium sales tonnage has declined since 2008-09 and sales to China are small scale.

Australian uranium sales to China are only one fifth of ASNO's projected tonnage and dollar value.

BHP purported commercial interests joined with Chinese officials to lobby the Australian government to allow uranium sales to China ([JSCT Report No.81](#), Dec 2006, Background 4.5, p.22).

BHP sought new treaty agreements to sell uranium into China and into Russia to suit vested interests in a 2005-2012 Olympic Dam copper-uranium mine expansion proposal, which never eventuated.

The ASNO Director General gave evidence to the JSCT Inquiry in a Hearing in Sept 2006 on the claimed "*Value of Australian uranium exports*" to China (JSCT Report No.81, p.32)

4.37 ASNO informed the Committee that the economic benefit of the Agreements would provide an estimated value of an additional A\$250 million per annum for Australia once they enter into force.

4.38 In 2005, Australia's uranium exports were worth A\$573 million. With the Agreements in place, uranium exports would be worth around A\$820 million per annum.

Importantly, in the [Hearing](#) (TR p.22, 04 Sept 2006) the ASNO DG gave evidence projecting a 2020 Australian uranium export sale of "*in excess of 2,500 tonnes of uranium a year*" to China:

Mr Carlson—The agreements will be in place for a considerable period, an initial period of 30 years. We have not attempted to calculate a value for the life of the agreements, but I can illustrate by reference to the 2020 projection when China hopes to have 40 gigawatts of installed nuclear capacity. The annual uranium requirements to fuel that number of reactors would be around 8,000 tonnes a year, which is almost as large as Australia's current uranium production. We assume that China will seek to diversify its supply so it will not be 100 per cent dependent on one country, but it would be a reasonable objective for Australia to secure around one-third of the Chinese market. That is a third of 8,000 tonnes so it is something in excess of 2½ thousand tonnes of uranium a year. That would be a reasonable expectation for us to be exporting to China.

In contrast, the World Nuclear Association ("[Australian uranium](#)", updated Jan 2020) reports:

"Customer countries' contracted imports of Australian uranium oxide concentrate – U₃O₈ – may be summarised as follows:

- China: about 500 tonnes per year."*

Australian uranium sales in the order of about 500 tonnes per year are valued at approx. A\$50 million (derived from Department of Industry, "[Uranium Outlook](#)", Dec 2020, figures p.95).

In evidence to the JSCT, ASNO projected Australian uranium sales to China in 2020 to be "*in excess of 2,500 tonnes of uranium a year*" and gave a uranium sales valuation at approx. \$250 million.

However, actual uranium sales to China are reported by the nuclear industry to be in the order of about 500 tonnes per year, giving an export value in 2020 of approx. A\$50 million.

In a breach of transparency, ASNO and BHP fail to disclose the record of uranium sales to China.

In decline: The influence, \$ value and level of production of Australian uranium

Australian uranium production and exports are in long term decline. Rio Tinto's Ranger uranium mine in Kakadu closed in January 2021, leaving only two active uranium mines in SA: BHP's Olympic Dam copper-uranium mine and the General Atomics 'Beverley Four Mile' operation.

Uranium export values are projected to decline from \$688 million in 2019-2020 to \$547 million in 2021-22 as mine output declines ([Resources & Energy Quarterly, Depart of Industry, Dec 2020](#), p.91).

Production declined from 7,600 tonnes in 2018-19 to 7,349 in 2019-20 and is projected to fall to 6,486 in 2020-21 and to only 5,800 in 2021-22 (Depart of Industry, Table 9.1 Uranium Outlook, p.95).

Department of Industry estimates an over 10% fall in uranium production in both 2021 and in 2022.

This forecast of only 5,800 tonnes in 2021-22 will be the second lowest level of uranium exports cited in [ASNO Annual Reports](#) from 1998-99 on. The lowest level was in 2014-15 at 5,515 tonnes.

The forecast 2021-22 uranium export \$ value of only \$547 million will be equal lowest Australian uranium sales since before 1998-99, tying with the previous low in 2005-06 at \$545 million.

The [Resources & Energy Quarterly](#) (Dec 2020) reports the "*export earnings forecast for 2020-21 was revised down by \$74 million, ... with the 2021-22 forecast revised down in similar proportion. This reflects a weaker price outlook over the next two years*" (p.94).

Further, uranium exploration "*remains low due to ongoing weak prices*" (p.94). Only \$1.8 million was spent on uranium exploration in Australia in the September quarter of 2020.

Australia has been ranked in third place among uranium producer countries since falling from second place after 2008-09. Australia used to export approx. 10,000 tonnes of uranium per annum. The average over the last decade has been approx. 7,200 tonnes per annum. The 2008-09 year was also the only year in which the \$ value of our uranium exports has ever reached \$1 billion.

Australian uranium production continues to decline in global terms: From approx. 12% of world production in 2018-19, to a forecast of approx. 10.7% in 2020-21 and to only 9.6% in 2021-22 (p.91).

In comparison: First placed Kazakhstan produced 26,800 tonnes in 2019 and is expected to produce 26,300 tonnes in 2022. Second placed Canada produced 8,200 tonnes in 2019, is estimated to only produce 4,800 in 2020 (with temporary cutbacks), and 8,200 tonnes in both 2021 and in 2022 (p.95).

Australia is relegated to fourth place in terms of considering "combined African uranium production" (p.95), at 10,000 tonnes in 2019 and forecast to produce 9,400 tonnes in 2021 and 9,200 tonnes in 2022 – at levels higher than in Canada or in Australia.

Note: "*World uranium production has long been checked by large stocks of surplus supply and inventories*" (p.93), with world uranium usage far in excess of mine production over the long term. The Department of Industry says any potential rapid price rise "*will likely be stymied given the scale of world uranium inventories and the significant spare capacity of major producers*" (p.91).

Australian uranium exports now represent only 8.9% of world uranium usage ([ASNO Annual Report 2019-20](#), p23) and can be expected to continue to fall further over the next few years.

New uranium mines are uneconomic in Australia. In Nov 2019 Cameco, the world's largest uranium company, [cited](#) the long-term price needed to trigger investment in mines in WA at US\$55 - 60lb. However, the long-term uranium price is reported at US \$35lb and the spot price is below US\$30lb.