



QUICK GUIDE

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Nuclear energy reviews and inquiries: a quick guide

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Introduction

Nuclear-powered electricity production (often called nuclear power or nuclear energy) is currently prohibited in Australia under the [Environment Protection and Biodiversity Conservation Act 1999](#) and the [Australian Radiation Protection and Nuclear Safety Act 1998](#). It is also prohibited by legislation in several states as summarised in the Parliamentary Library's paper, [Current prohibitions on nuclear activities in Australia: a quick guide](#). Over the last 20 years, there have been several reviews and inquiries that have considered the removal of some of these prohibitions as well as the feasibility of nuclear energy in Australia.

This quick guide describes, in chronological order, the major government inquiries and reviews into nuclear energy that have occurred at the federal and state levels over this period. It includes inquiries with a substantial focus on nuclear energy in their terms of reference. It does not include those that focus on uranium mining and processing, nuclear waste management or nuclear-powered submarines. Some information on these topics is contained in the Parliamentary Library's paper, [Radioactive waste management in Australia 2012 – 2022: a chronology](#) and Bills digest, [Australian Naval Nuclear Power Safety Bill 2023 \[and\] Australian Naval Nuclear Power Safety \(Transitional Provisions\) Bill 2023](#).

2005–06 Parliamentary inquiry into developing Australia's non-fossil fuel energy industry

On 15 March 2005, the then Minister for Industry, Tourism and Resources, Ian Macfarlane, asked the House Standing Committee on Industry and Resources to [inquire into the development of the non-fossil fuel energy industry](#). The [terms of reference](#) for the inquiry specify the inquiry is to commence 'with a case study into the strategic importance of Australia's uranium resource'.

While nuclear energy forms part of the inquiry, the primary focus of the inquiry is other elements of the nuclear fuel cycle, including uranium mining, processing and export. The 802-page final report, [Australia's uranium: greenhouse friendly fuel for an energy hungry world](#), was published in November 2006. This includes Chapter 4 on greenhouse gas emissions and nuclear power.



The report made 14 recommendations, with part of one recommendation directly relating to the prohibitions on nuclear energy, Recommendation 12 (pp. xlii–xliii):

The Committee recommends that the Australian and state governments, through the Council of Australian Governments:

- examine how Australia might seek greater beneficiation of its uranium resources prior to export and encourage such a development, while meeting non-proliferation objectives proposed in initiatives such as the US Global Nuclear Energy Partnership (GNEP) and the International Atomic Energy Agency's (IAEA) proposed multilateral approaches to the nuclear fuel cycle;
- examine the possible establishment of fuel cycle facilities (for example, uranium conversion and enrichment plants) which, in accordance with the IAEA's recommendation for such facilities to be operated on a multilateral basis, could be operated on a joint ownership, co-management or drawing rights basis with countries in the region intending to use nuclear energy in the future;
- examine whether, in light of the advances in spent fuel management proposed in the GNEP initiative, there is in fact a potential role for Australia in the back-end of the fuel cycle;
- in the event these proposals are adopted, develop a licensing and regulatory framework, that meets world's best practice, to provide for the possible establishment of fuel cycle services industries and facilities in Australia; and
- having established an appropriate regulatory regime, remove legislative impediments to the establishment of nuclear fuel cycle facilities in Australia and, specifically, repeal or amend:
 - Section 140A of the Environment Protection and Biodiversity Conservation Act 1999, and
 - Section 10 of the Australian Radiation Protection and Nuclear Safety Act 1998.

The Coalition government [responded](#) to the report in March 2007, stating that Recommendation 12 was 'noted' and that the government would 'develop a workplan on options for an appropriate regulatory framework for an expanded nuclear industry' (pp. 5–6).

2006 Prime ministerial uranium mining, processing and nuclear energy review (Switkowski Review)

On 6 June 2006, then Prime Minister John Howard established the [Prime Ministerial Uranium Mining, Processing and Nuclear Energy Review Taskforce](#) to undertake a review. This became commonly known as the Switkowski Review, after the chair of the taskforce, Dr Ziggy Switkowski. The [terms of reference](#) for the review were to consider the economic issues of the nuclear fuel cycle and nuclear energy, environmental issues, and health safety and proliferation issues. The [final report of the taskforce](#) was published on [29 December 2006](#).

The review is notable as the first major review of nuclear energy in Australia since the introduction of the Commonwealth prohibitions, and the final report, [Uranium mining, processing and nuclear energy review: opportunities for Australia?](#), summarises the key issues of the nuclear debate during 2006. The final report did not make any recommendations but did include several key findings.

The key findings highlight the potential that nuclear energy could play in diversifying Australia's energy mix, including a potential source of baseload power, and emissions reduction (p. 2). However, the report also highlights some of the limitations and challenges that a nuclear industry

would face, including economics, introduction of regulation, waste management, and community acceptance (pp. 2, 5–6).

2015–16 South Australia Nuclear Fuel Cycle Royal Commission

The South Australian Government established the [Nuclear Fuel Cycle Royal Commission](#) on 19 March 2015, and the [final report](#) was publicly released on 9 May 2016. The [terms of reference](#) included consideration of nuclear energy generation, as well as nuclear ore mining and processing, nuclear waste management and other elements of the nuclear fuel cycle.

The royal commission's final report made 12 recommendations for the South Australian Government, including 3 related to nuclear energy (p. 169):

8. pursue removal at the federal level of existing prohibitions on nuclear power generation to allow it to contribute to a low-carbon electricity system, if required
9. promote and collaborate on the development of a comprehensive national energy policy that enables all technologies, including nuclear, to contribute to a reliable, low-carbon electricity network at the lowest possible system cost
10. collaborate with the Australian Government to commission expert monitoring and reporting on the commercialisation of new nuclear reactor designs that may offer economic value for nuclear power generation

The South Australian Labor Government [responded](#) to the commission in November 2016. It supported 9 of the 12 recommendations (including Recommendations 9 and 10), but did not support Recommendation 8, noting that 'nuclear power in the short to medium term is not a cost-effective source of low-carbon electricity for South Australia and, as such, pursuing the removal of Commonwealth legislative prohibitions cannot be justified' (p. 15).

2019 Parliamentary inquiry into the prerequisites for nuclear energy in Australia

Following a referral from the then Minister for Energy and Emissions Reduction, Angus Taylor, the House of Representatives Standing Committee on the Environment and Energy resolved to conduct an [inquiry into the prerequisites for nuclear energy in Australia](#) on 6 August 2019. The [terms of reference](#) for the inquiry were broad and included all matters related to nuclear energy. The final report, [Not without your approval: a way forward for nuclear technology in Australia](#), was tabled on 13 December 2019.

The committee made 3 multi-part recommendations in the report. Recommendation 1 includes 'that the Australian Government consider the prospect of nuclear energy technology as part of its future energy mix' (p. xi), and Recommendation 3 includes 'that the Australian Government allow partial and conditional consideration of nuclear energy technology', by lifting the moratorium on nuclear energy in relation to Generation III+ and IV reactors while keeping the moratorium on earlier generation reactors (p. xiii).

The inquiry also produced 2 dissenting reports, one from Labor MPs (pp. 55–73) and one from Independent MP Zali Steggall (pp. 75–93).

At the time of writing this Quick Guide, a government response has not been tabled.

2019–20 New South Wales inquiry into the Uranium Mining and Nuclear Facilities (Prohibitions) Repeal Bill 2019

The [Uranium Mining and Nuclear Facilities \(Prohibitions\) Repeal Bill 2019](#) (NSW) was a Private Member's Bill introduced by One Nation MLC Mark Latham in the Parliament of NSW on 6 June 2019. The intent of the Bill was to repeal the [Uranium Mining and Nuclear Facilities \(Prohibitions\) Act 1986](#) (NSW). The Bill was [referred to the Standing Committee on State Development](#) on 6 June 2019, and the [final report](#) was tabled on 4 March 2020.

The committee made 9 recommendations in the report, including (p. xii):

Recommendation 6 – That the NSW Government supports the repeal of the Uranium Mining and Nuclear Facilities (Prohibitions) Act 1986 in its entirety.

Recommendation 7 – That the NSW Government pursues the repeal of the Commonwealth prohibitions on nuclear facilities by making representations to the Commonwealth Minister with portfolio responsibility for the relevant legislation.

Recommendation 8 – That the Legislative Council proceed with debate on the bill, having regard to the findings and recommendations contained in this report.

The report includes a dissenting statement from Labor MLCs (pp. 149–150).

The Coalition NSW Government issued [a response to the report](#) on 4 September 2020. It supported or supported in principle all the recommendations in the report except Recommendation 6, which was noted, and Recommendation 8, which was not supported, stating '[i]f the NSW Government decides to amend the *Uranium Mining and Nuclear Facilities (Prohibitions) Act 1986*, it will introduce its own legislation to do so' (p. 4). The Bill failed to progress and lapsed on prorogation on 27 February 2023.

2019–20 Victoria inquiry into nuclear prohibition

On 14 August 2019, the Victorian Legislative Council agreed to a motion for the Environment and Planning Committee to [inquire into the potential benefits to Victoria](#) in removing prohibitions enacted by the [Nuclear Activities \(Prohibitions\) Act 1983](#) (Vic). The final report, [Inquiry into nuclear prohibition](#), was tabled on 26 November 2020.

The report did not make any recommendations but made 12 key findings, including (pp. 84, 106):

Finding 6 – Discussion about Victorian participation in the nuclear fuel cycle is entirely theoretical while the Commonwealth prohibitions remain in place

Finding 7 – Until there is a change in the Commonwealth position, detailed discussions about emerging technologies in Victoria related to the nuclear fuel cycle and power generation are unlikely to advance.

The inquiry produced 3 minority reports; one by Shooters, Farmers and Fishers MLC Jeff Bourman (p. 242 of pdf), one by Liberal and Liberal Democrat MLCs (pp. 243–246 of pdf), and one by Labor MLC Nina Taylor (pp. 247–256 of pdf).

As the committee made no recommendations, [no government response is required](#).

2022–23 Parliamentary inquiry into the Environment and Other Legislation Amendment (Removing Nuclear Energy Prohibitions) Bill 2022

The [Environment and Other Legislation Amendment \(Removing Nuclear Energy Prohibitions\) Bill 2022](#) (Cth) is a Private Senator's Bill [introduced](#) on 28 September 2022 by Senator Matthew

Canavan, and co-sponsored by 8 other Coalition senators. The intent of the Bill is to amend the [Environment Protection and Biodiversity Conservation Act 1999](#) and the [Australian Radiation Protection and Nuclear Safety Act 1998](#) to remove the prohibition on nuclear installations.

The Senate [referred the Bill](#) to the Environment and Communications Legislation Committee on 27 October 2022, and the committee's [final report](#) was tabled on 11 August 2023. The committee recommended that the Bill not be passed (p. 74 of pdf).

Coalition senators provided a dissenting report (pp. 75–95).

The Bill remains before the Senate and, unless it progresses further, will lapse at the prorogation of the current 47th Parliament.

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