

SUBMISSION

Submission to the Senate Standing Committees on Environment and Communications

Submission to the Climate Change Amendment (Duty of Care and Intergenerational Climate Equity) Bill 2023

20 October 2023

The Australian Academy of Technological Sciences and Engineering (ATSE) is a Learned Academy of independent, non-political experts helping Australians understand and use technology to solve complex problems. Bringing together Australia's leading thinkers in applied science, technology and engineering, ATSE provides impartial, practical and evidence-based advice on how to achieve sustainable solutions and advance prosperity.

The impacts of climate change are not evenly distributed. Among geographical, socioeconomic and developmental inequalities, intergenerational inequity is one of the most significant. The Climate Change Amendment (Duty of Care and Intergenerational Climate Equity) Bill 2023 seeks to amend the Climate Change Act 2022. It obligates the Minister for Environment to consider the well-being of current and future children when considering approvals for fossil fuel projects. ATSE supports the central philosophy of the Bill in that it asks parliamentarians to consider today's children and future generations as stakeholders in the environment. ATSE advocates for the Government and industry to work together to reach a more ambitious carbon emissions reduction target in line with limiting global warming to 1.5 degrees. In a recent [position statement](#), ATSE called for the target of net zero emissions by 2035 (ATSE 2023a).

ATSE offers the following recommendations for the Committee's consideration:

Recommendation 1: Implement United Nations guidance on upholding children's rights through climate change reduction actions, including universal, quality and relevant education.

Recommendation 2: Strengthen the amendment to include projects in other sectors (as well as coal, oil and gas projects) in the carbon dioxide threshold for 'significant decisions'.

Recommendation 3: Amend the Climate Change Act 2022 to require decision-makers to consider the long-term impacts of new fossil fuel projects relative to the expected project lifetime.

Recommendation 4: Encourage sustainable decision-making on emission-producing projects by making justifications, progress and outcomes for high-emission projects publicly available within a reasonable timeframe.

Recommendation 5: Use probabilistic decision-making for planning to mitigate the impacts of climate change and help protect current and future generations from climate change consequences.

Recommendation 6: Invest in skills and infrastructure to support a low-emission economy, build resilience, and support net zero emissions by 2035.

Upholding children's rights according to international best practice

Globally, 1.7 million children lose their lives annually due to human impacts on the environment, with millions more being uprooted from their homes, suffering from disease and missing out on school (Child Rights Environment 2023). The proposed amendment provides a mechanism for mitigating the future impacts of climate change in Australia.

Children's right to live in a clean, healthy and sustainable environment must be recognised. The [United Nations Committee on the Rights of the Child](#) (OHCHR 2023) is taking steps to make governments accountable for climate impacts on children. [General Comment No. 26](#) guided what actions governments must take to uphold children's rights relating to climate change (United Nations 2023). Consultation for General Comment No. 26 highlighted the following children's key demands to adults: a) a clean and healthy environment, b) to be listened to, taken seriously and play a role in environmental action, c) clear and transparent actions from governments, corporations and all adults, d) cooperation across countries and regions of the world, e) awareness raising and environmental education, and f) spaces to share their ideas for potential solutions (Child Rights Environment 2023).

It is ATSE's view that if an amendment to the Climate Change Act (which impacts children) is to be made, it should align with the United Nations guidance. The Committee on the Rights of the Child also stated that children have the right to access information. Greater standardisation of climate science curricula throughout Australia's schooling system would equip learners with the critical thinking and scientific skills required to evaluate sources, ask questions and challenge information on climate change. A hands-on approach to applying the STEM curriculum (such as that taken by ATSE's sustainable energy-focused [STELR program](#)) would empower children to acquire the skills and inspire them to pursue problem-solving careers to contribute to climate change mitigation and adaptation initiatives (ATSE 2023b). All such resources must also extend to remote populations and diverse communities.

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Strengthening the Amendment to encourage sustainable decisions

Environmental degradation diminishes the ability of children to access their developmental rights, such as the ability to experience outdoor activities and interact with natural environments. The proposed amendment goes some way to upholding the rights of future generations.

The amendment states: “A person also has a statutory duty not to make a significant decision about the exploration or extraction of coal, oil or natural gas if the likely emission of greenhouse gases as a result of the decision poses a material risk of harm to the health and wellbeing of current and future children in Australia.” ATSE recognises that this amendment would make it more challenging for coal, oil or gas projects to attain approval and would compel firms considering developing such projects to make every effort to implement reduction methods and technologies. Failing to actively assert reduction actions of greenhouse gas emissions across all sectors of the economy could be detrimental to Australia's future.

The proposed threshold of having “a carbon dioxide equivalence of at least 100,000 tonnes (gross)” for ‘significant decisions’ affecting coal, oil and gas projects should be extended to projects in other sectors that cross this threshold. As the current amendment stands, other projects (such as cement-based and major construction projects) are excluded. ATSE believes that the amendment must not be limited to just gas, coal or oil projects if it is to truly take an economy-wide emission-reducing stance, for the benefit of current and future generations to come.

The relevant minister must consider carbon emissions within the context of the lifetime of a proposed new project. For example, if a project has a 30-year life, the low threshold would only permit around 3,300 tonnes of emissions yearly - the equivalent amount emitted by about 700 internal combustion engine cars (EPA 2023). ATSE suggests that the lifetime of a project needs to be considered- in doing so, a higher lifetime emission threshold needs to be set.

The Government must work with industry to reduce emissions and understand alternatives and lifetime consequences when making approval decisions. In a previous submission on the [Climate Change Bill \(2022\) and the Climate Change \(Consequential Amendments\) Bill 2022](#) (ATSE 2022a), ATSE argued that all information on decisions regarding major new high-emissions projects, and their targets and progress, should be made available publicly and that an annual statement should be provided to Parliament within a reasonable timeframe. This would improve accountability and supply industry, policy professionals, and public interest groups with current information.

Local and global environmental impacts of new projects (including via exports) must also be considered. The International Energy Agency has urged that viable clean energy technologies be scaled up: “The world needs to double the current rate of global energy efficiency progress and triple its total renewable power capacity” (Birol and Al Jaber 2023). A linear economic approach comprising a ‘take, make, use and dispose’ process is unsustainable. As per ATSE’s [‘Towards a Waste Free Future’](#) report (ATSE 2020), a circular economic approach would shift the economy to a more sustainable course where production continues to meet demand while reducing our environmental impact. Australia has an obligation to future generations to limit fossil fuel exports; at the same time, Australia has an enormous opportunity to position itself as a global front-runner in clean energy exports, including critical minerals and green energy.

Recommendation 2: Strengthen the amendment to include projects in other sectors (as well as coal, oil and gas projects) in the carbon dioxide threshold for ‘significant decisions’.

Recommendation 3: Amend the Climate Change Act 2022 to require decision-makers to consider the long-term impacts of new fossil fuel projects relative to the expected project lifetime.

Recommendation 4: Encourage sustainable decision-making on emission-producing projects by making justifications, progress and outcomes for high-emission projects publicly available within a reasonable timeframe.

Building climate resilience

In addition to reducing emissions in Australia, the Government must strengthen management strategies, technologies and infrastructure for mitigating and handling the consequences of climate change. Planning for resilience is built on four pillars - economic, environmental, social and cultural. ATSE's explainer on [Probabilistic Risk Assessment](#) highlights the benefits of probabilistic risk assessments to inform government, community and individuals of the trade-offs between risks, benefits and costs. This can be used for decision-making on how best to protect against climate change consequences (such as disease and malnutrition).

ATSE's [Building a Resilient Australia Position Statement](#) (ATSE 2022b) highlighted that while limiting climate change is essential, Australia must also ensure appropriate planning to mitigate the worst effects on Australian infrastructure, services and communities. It identified that decision-making can be difficult when the potential consequences are severe, yet the probability of these consequences occurring is assessed to be extremely low. These extreme events (low probability but high consequence) need evidence-based decision-making tools to build resilience into planning systems. Integrating resilience, while implementing low-emission strategies, would help protect current and future generations from climate change consequences.

ATSE has called for immediate and large-scale action to invest in skills and infrastructure, as well as political, policy and regulatory support at all levels, to achieve net zero emissions by 2035 (ATSE 2023a). Achieving net zero emissions by 2035 requires the cooperation of governments at all levels, all industry sectors, and the research sector. It also brings opportunities for Australia to develop new leading-edge technologies, exports and economic sectors. To succeed in decarbonisation, Australia must take a multifaceted approach, encompassing the development and urgent application of solutions across all industry sectors, and making at-scale investments in skills, research and development, and infrastructure to support a low-emissions economy.

Australia's work towards net zero targets advances more than half of the UN Sustainable Development Goals that call for action to address climate change, either directly or indirectly.

Recommendation 5: Use probabilistic decision-making for planning to mitigate the impacts of climate change and help protect current and future generations from climate change consequences.

Recommendation 6: Invest in skills and infrastructure to support a low-emission economy, build resilience, and support net zero emissions by 2035.

ATSE thanks the Senate Standing Committees on Environment and Communications for the opportunity to respond to the Climate Change Amendment (Duty of Care and Intergenerational Climate Equity) Bill 2023. For further information, please contact academypolicyteam@atse.org.au.

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