



Senate Standing Committee on Environment and Communications inquiry into the Climate Change Bill 2022 and the Climate Change (Consequential Amendments) Bill 2022

10 August 2022

Science & Technology Australia is the peak body for the nation's science and technology sectors, representing 95 organisations and more than 90,000 scientists and technologists.

We connect science and technology with governments, business and the community to advance science's role in solving some of humanity's greatest challenges.

We thank the committee for this opportunity to give feedback on the [Climate Change Bill 2022](#) and the [Climate Change \(Consequential Amendments\) Bill 2022](#).

Science & Technology Australia supports this legislation's passage through the Parliament.

Recommendations

Science & Technology Australia recommends:

- the Senate pass the Climate Change Bill 2022 and the Climate Change (Consequential Amendments) Bill 2022.
- amending Section 12(1) of the Climate Change 2022 Bill so the annual climate change statement includes:
 - specific updates for industry sectors
 - an acknowledgment of key climate science developments since the previous annual climate change statement

Emissions reduction targets – the time is now

Climate action is critical. CSIRO's [2020 State of the Climate](#) report outlines the real and serious impacts of climate change and the cost of failing to act. Australia is already experiencing the escalating damage of climate change – warming temperatures, changing rainfall patterns and more frequent extreme and catastrophic weather events. These changes will pose an ever greater risk to Australia if left unchecked.

The recently released [State of the Environment](#) report highlights the interconnections between the changing climate and all aspects of our country's environment. A strong emissions reduction target – enshrined in legislation – is needed now to mitigate the effects already threatening Australia's unique and vulnerable ecosystems and habitats.

The Climate Change 2022 Bill will enshrine in law a 43 per cent cut in national greenhouse gas emissions compared to 2005 levels by 2030, as well as committing to 'net zero' emissions by 2050. This is a crucial positive step that will pave the way for enduring climate action in Australia.

The science is clear that even stronger emissions reduction targets will be needed to halt climate change and limit global warming to 1.5°C, as per the [Paris Agreement](#). Science & Technology Australia welcomes the commitment that 43 per cent is a 'floor', not a 'ceiling', for emissions reductions – and strongly supports ambitions to bolster this emissions reduction target in coming years.

Alignment with the principle of 'no backsliding', as laid out in Article 4 of the Paris Agreement is another positive aspect of the bill. This ensures any future targets or goals must improve on the existing commitments, rather than becoming less ambitious over time. Safeguarding progress will be essential to achieve net zero, and subsequent negative emissions goals, as soon as possible.

Science & Technology Australia recommends the Senate pass the Climate Change Bill 2022.

Opportunities born of certainty and supportive policy

Several reports and economic analyses highlight the costs of inaction to Australia, but also the opportunities and benefits that transforming our economy can bring to the nation. This legislation will provide certainty for businesses and industry to plan and invest in the technologies and innovations we will need to adapt our economy – and our way of life – to the changing climate.

Australia can and must be a leader in the transition to renewable technologies. The certainty in emissions reductions the bills would enshrine must be accompanied by strong policy support for Australia's transition to electric vehicles, renewable energy, and cleaner technologies throughout industry. Strong climate action presents a compelling opportunity for Australia to scale up our manufacturing capacity. This can be achieved by producing the critical minerals needed for renewable technologies, and also converting the raw materials into products – adding value to our exports with vast benefits to the nation's economy.

Existing policy measures such as the Patent Box scheme for clean technologies and funding agencies supporting renewable energy development – [ARENA](#), the [Clean Energy Finance Corporation](#) – should be retained and augmented in coming years. The [Powering Australia](#) policy implementation will be critical to ensure the Australian Government, industry and community work together to support Australia's transition to net zero.

Robust, evidence-based policy development

Science & Technology Australia welcomes the strengthened role of the Climate Change Authority to provide advice to the Government and policymakers. It is crucial that planning and policy development is underpinned by the most recent evidence and scientific knowledge. Science & Technology Australia, with its vast reach of its membership base across the science and technology sector, stands ready to assist with advice or targeted analysis to help inform robust and effective policy.

Science & Technology Australia notes the [Climate Change \(Consequential Amendments\) Bill 2022](#) requires all government agencies, programs or schemes that deal with aspects of emissions reduction must consider Australia's emissions reductions targets and the Paris Agreement objectives in their work. This will ensure a whole-of-government approach to effective, evidence-based policy development and implementation.

Science & Technology Australia recommends the Senate pass the Climate Change (Consequential Amendments) Bill 2022.

Transparency and accountability

Science & Technology Australia welcomes the requirement for the Minister to provide an annual climate change statement on progress towards the emissions reduction target, as well as updates on the effectiveness of Government policies in achieving progress. This is a critical component to ensure accountability.

We also welcome the requirement for the Minister to respond to all advice received from the Climate Change Authority and table the response in Parliament, including any reasons advice was not taken. This embeds transparency and accountability in all Ministerial decisions, which is crucial to build trust and confidence in the Government's policies on this issue that is so important to Australians.

Acknowledging the complexity of the transition challenge across Australia's diverse industry sectors, the statement could include reports on progress made in each area. This would highlight industry leaders and spur momentum in Australia's transition. It would also deepen understanding of the scale of challenges in some sectors – and identify any need for targeted support.

Science & Technology Australia recommends amending Section 12(1) of the Climate Change 2022 Bill so the annual climate change statement includes sector-specific updates.

Boost – and fully draw on – Australia's climate science capability

Parallel to the urgent need for a strong greenhouse gas emissions reduction target is the need to inform our predictive capabilities and adaptation and mitigation strategies. The [2021 Intergovernmental Panel on Climate Change](#) report outlined the stark and urgent challenges amid the accelerating pace of climate change. Even with strong action, global warming is set to continue until at least mid-century.

Preparedness, enabled by an ever-deepening understanding of Australia's unique ecosystems and environment, will be key to our ability to deal with this challenge. Australia will need to deepen our climate research capabilities to ensure national preparedness for more frequent and dangerous extreme weather and environmental hazards. We need to enhance our ability to predict and be

resilient to escalating storms, heat waves, floods and bushfires. Our unique biodiversity, our agricultural industries – and the wellbeing of all Australians – depend on it.

To this end, we need to invest more deeply in our climate scientists – those researching our land, water, oceans and atmosphere. We need to constantly improve our understanding of how climate has changed in the past, as well as our ability to model the future changes.

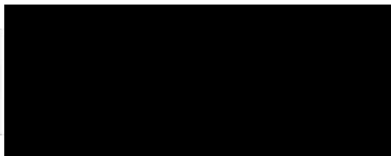
Science & Technology Australia advocates for a boost to Commonwealth support for climate science research and the research infrastructure essential to climate science capabilities. This will send a strong signal of the Australian Government’s commitment to climate action, particularly given our important role as a research leader in our region, and southern hemisphere climate science.

The Minister’s annual climate change statement could also include a section explicitly acknowledging key scientific developments in climate understanding – this will ensure all policy advice is underpinned by the latest scientific evidence. Section 12 (1) of the bill could be amended to include “(e) an outline of key scientific developments in climate science and understanding of climate change since the previous annual statement”.

Science & Technology Australia recommends amending Section 12(1) of the Climate Change 2022 Bill so the annual climate change statement includes an acknowledgment of key climate science developments since the previous annual statement.

As the national voice of more than 90,000 Australian scientists and technologists, Science & Technology Australia – along with our climate science expert member organisations – would be delighted to give evidence to this inquiry if hearings are held.

We also include links to detailed, science-based position statements from several Science & Technology Australia member organisations below for the committee’s ease of reference.



Professor Mark Hutchinson
President, Science & Technology Australia



Misha Schubert
CEO, Science & Technology Australia

Science & Technology Australia member statements

Ecological Society of Australia

[Position Statement 2022: Response to the Current Climate Crisis
Response to the State of the Environment Report](#)

Australian Marine Sciences Association

[Climate Change Position Statement](#)

Australian Meteorological and Oceanographic Society

[Position Statement on Climate Change](#)

The Royal Society of Victoria

[Official Position on Climate Change](#)

Australian Society for Fish Biology

[Statement of World Aquatic Scientific Societies on the Need to Take Urgent Action Against Human-Caused Climate Change, Based on Scientific Evidence](#)

Australian Coral Reef Society

[ACRS response to the GBRMPA and the AIMS Reef snapshot: Summer 2021-22](#)

Soil Science Australia

[Soil Science Australia Position Paper: Soil Security](#)