

SCIENCE & TECHNOLOGY AUSTRALIA

POLICY SUBMISSION

14 OCTOBER 2022

SENATE STANDING COMMITTEE ON ENVIRONMENT AND COMMUNICATIONS INQUIRY INTO THE ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION AMENDMENT (CLIMATE TRIGGER) BILL 2022

Science & Technology Australia is the peak body for the nation's science and technology sectors, representing 105 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 input to the inquiry into [Environment Protection and Biodiversity Conservation Amendment \(Climate Trigger\) Bill 2022](#).

According to the [Explanatory Memoranda](#), this Bill seeks to amend the [Environment Protection and Biodiversity Conservation Act 1999](#) (the EPBC Act) to introduce a new class of 'controlled action' that would require consideration of the activity's greenhouse gas emissions in the approval process. For an action with a 'significant impact on emissions', (emissions between 25,000 and 100,000 tonnes of carbon dioxide equivalent greenhouse gases in any one year), the Minister would be required to consider the project in line with current procedures for 'matters of national environmental significance'. For actions with 'prohibited impact on emissions' (greater than 100,000 tonnes), the Minister would be required to reject the project.

The Bill also seeks to require the Climate Change Authority to develop a 'carbon budget', which would outline the permissible amount of greenhouse gas emissions under Australia's newly implemented emissions reduction targets of 43 per cent compared to 2005 levels by 2030 and net zero emissions by 2050. All projects would be considered with the context of this budget.

CLIMATE CHANGE THREATENS ALL ASPECTS OF AUSTRALIA'S UNIQUE BIODIVERSITY

Australia is a vast continent, with a diverse range of terrestrial and marine ecosystems. Our continent's environment is already one of extremes, encompassing deserts, tropical regions, river and woodland systems and snowy alpine areas. Australia's flora and fauna have evolved over time and in isolation to adapt to these environments, and many species occur nowhere else on Earth. While adapting to Australia's extreme environments has given some species a degree of inherent resilience, many species are already living at the limits of their physiological extremes and the impacts of climate change is pushing this resilience to its limits.

The impacts of climate change will be felt across Australia's ecosystems. Australia's flat topography limits many species' ability to move to higher regions as temperatures rise. Australia's soils are old and nutrient poor – this constrains the available habitats for many plant species, particularly as



climate change results in unfavourable conditions in current habitats. Many plants have evolved under specific fire regimes and changes to rainfall and temperature have the potential to drive broad changes in fire and ecosystem structure.

In our oceans, currents along the east and west coasts of the country carry warm water southward. While species from more northerly areas can potentially move south as waters warm, there is limited range for shallow, cool water species to move further south.

Australia is now working towards emissions reduction targets of 43 per cent compared to 2005 levels by 2030 and net zero emissions by 2050, as per the recently passed [Climate Change Act 2022](#) and [Climate Change \(Consequential Amendments\) Act 2022](#). Science & Technology Australia welcomed and supported the legislation that enshrined these targets into law.

The requirement for the Minister to consider the greenhouse gas emissions of a project as part of the approval process under the EPBC Act would support these emissions targets and help protect our nation's biodiversity. This would work in concert with the emissions reductions targets legislation to provide a stronger and more comprehensive approach to reducing emissions and protecting the Australian environment.

CARBON BUDGET

Developing a carbon budget would enable decision makers to consider projects' and activities' contributions to Australia's greenhouse gas emissions within the broader context of working to meet emissions reductions targets. This would ensure a comprehensive approach to emissions reductions that accounts for greenhouse gas emissions across a broader context, rather than in the isolation of a single project or activity. This would improve accountability across both the EPBC Act and the climate change legislation and provide significant support to reduce Australia's emissions and meet reductions targets – with the ultimate goal of protecting Australia's unique biodiversity and environments.

INVEST IN OUR CLIMATE SCIENTISTS AND CAPABILITIES

Along with action on greenhouse gas emissions and strong measures to protect Australia's biodiversity, we need to continue to enhance 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. To properly protect our unique environments and biodiversity, Australia needs to strengthen 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 the necessary and constantly evolving technologies required to transition to a net zero future, as well as 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 and clean technology 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.

Please do not hesitate to contact us if we can assist with any additional information.

Yours faithfully,

Professor Mark Hutchinson
President
Science & Technology Australia

Misha Schubert
Chief Executive Officer
Science & Technology Australia

**SCIENCE & TECHNOLOGY AUSTRALIA / PO Box 259 CANBERRA ACT 2601 / 02 6257 2891 /
info@sta.org.au / www.scienceandtechnologyaustralia.org.au / ABN 71 626 822 845**

©2022 Science & Technology Australia

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission from Science & Technology Australia. Requests and enquiries concerning reproduction and rights should be made using any of the contact details above.

