

SUBMISSION

Submission to the Department of Climate Change, Energy, the Environment and Water

Submission to the Safeguard Mechanism Reform consultation on proposed design

24 February 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.

ATSE welcomes the opportunity to provide a submission to the Department of Climate Change, Energy, the Environment and Water on the reforms to the Safeguard Mechanism. The process of reforming the Safeguard Mechanism occurs on the back of a recent [independent review](#) of the Australian Carbon Credit Unit (ACCU) system led by Professor Ian Chubb and ATSE encourages the Australian Government to implement the findings of that review. ATSE previously [contributed a submission](#) to the review of the ACCU system, as well as to the [previous consultation](#) on the Safeguard Mechanism.

This submission argues that it is essential that the Safeguard Mechanism is transparent and subject to regular monitoring and reporting, to allow for adjustments to the scheme to meet market and environmental requirements. ATSE welcomes the 4.9% per annum reduction in emissions proposed as part of the reform process and the proposed \$75 per tonne cap on ACCUs. The use of carbon credits to abate unavoidable emissions is necessary for many industries but should be limited to those circumstances where it is not currently practical to reduce direct carbon emissions from facilities. Where they are necessary, high-quality international carbon credits should be redeemable in Australia to provide industry with additional carbon abatement options.

ATSE makes the following recommendations for the Australian Government:

Recommendation 1: Engage in clear, continual and transparent monitoring and reporting of the efficacy of the Safeguard Mechanism at reducing carbon emissions, and the impacts on local industry.

Recommendation 2: Restrict the use of carbon credits to lower emissions to only those facilities that can demonstrate they have exhausted all current available options to reduce carbon output, and that demonstrate a plan towards medium- and long-term emissions reduction.

Recommendation 3: Co-invest in emissions-reduction upgrades for Australian industry.

Recommendation 4: Implement the recommendations of the Independent Review of Australian Carbon Credit Units prior to allowing the use of ACCUs under the Safeguard Mechanism.

Recommendation 5: Restrict access to carbon credits to existing facilities; require all new facilities entering the Safeguard Mechanism to meet emissions targets through low emissions technologies or processes.

Verifying and accounting for carbon reductions

ATSE welcomes the plan to reform the Safeguard Mechanism, which has been ineffective at reducing carbon emissions since its introduction in 2016. Australia’s net zero future will not be possible to achieve without an emissions reduction of a minimum 4.9% per annum (equating to ~30% by 2030) across a significant proportion of Australian industry. ATSE supports this proposed reduction as a measured and realistic emissions reduction goal, which balances the need to reduce emissions rapidly while allowing industry sufficient time to adapt processes and invest in new technologies. To incentivise and scrutinise this reduction, the Australian Government needs to ensure a consistent and scientifically supported monitoring and reporting regime. High quality monitoring and reporting can help identify specific industries that need additional focus and support to cut emissions and allow for adjustments in policy to meet changing market and environmental conditions. As ATSE has [argued previously](#), this data should be released regularly and publicly, in a format understandable to the general public, to foster trust in the efficacy of the safeguard mechanism.

Recommendation 1:

Engage in clear, continual and transparent monitoring and reporting of the efficacy of the Safeguard Mechanism at reducing carbon emissions, and the impacts on local industry.

Optimising the use of carbon credits for emissions abatement

The aim of the Safeguard Mechanism is to encourage industry to innovate and adopt lower-emissions technologies and processes. The proposed reforms will allow facilities to purchase carbon offsets for 100% of emissions at a maximum price of \$75 per tonne. ATSE supports the proposed \$75 per tonne cap on carbon offsets as beneficial for industry certainty and forward planning. However, allowing the use of carbon credits (in the form of ACCUs and Safeguard Mechanism Credits; SMCs) to offset 100% of emissions allows companies to continue to produce emissions. Allowing for companies to avoid engaging in this vital process of innovation would effectively turn the Safeguard Mechanism into a taxation regime with limited material effect on emissions. Some organisations have called for hard limits on the amount of carbon emissions that are allowed to be offset using carbon credits (e.g. Lowrey, 2023; Verstegen, 2023). These calls fail to consider that, for some industries, emissions-reducing technology or processes may not yet exist, may not be commercially viable, or may take years to install or implement.

A more flexible alternative that could also reduce reliance on credits would be to require facilities to demonstrate that all reasonable attempts have been made to reduce emissions prior to accessing ACCUs and SMCs. Facilities would be required to demonstrate why further emissions reductions are not possible or are otherwise impractical, and how they intend to address this in the medium- and long-term, before purchasing offsets through either scheme. By doing this, the Australian Government would make innovative solutions to reducing carbon emissions more attractive, while not disadvantaging those industries that are currently unable to get to net-zero.

The practicality of emissions reductions will be heavily influenced by the capacity of industry to afford the changes required to reduce emissions. A collaborative approach between the Australian Government and industry is required to ensure that the most effective methods of emissions reductions can be implemented by industry. Government co-investment in emissions-reducing technology may help industry to accelerate the speed of emissions reduction, while mitigating any competitive disadvantages that may come from switching technologies and reducing reliance on carbon credits. Combined with a requirement to seek all practical emissions reductions before relying on carbon credits, and to continue to seek alternatives as technology evolves, government co-investment in emissions reducing technologies for Australian industries would help to encourage the greatest possible reduction in emissions, while ensuring the Australian industry remains internationally competitive.

Recommendation 2: Restrict the use of carbon credits to lower emissions to only those facilities that can demonstrate they have exhausted all current available options to reduce carbon output, and that demonstrate a plan towards medium- and long-term emissions reduction.

Recommendation 3: Co-invest in emissions-reduction upgrades for Australian industry.

Improving the quality of carbon credits

Where carbon credits must be used, it is crucial that these emissions reductions do not just exist on paper, but are real, meaningful reductions in carbon emissions. The use of ACCUs and SMCs, while necessary for some industries, must be closely managed to ensure that the credits provided represent a real investment in carbon reduction. Recent research has shown that 70% of the carbon abatement credits purchased through the Emissions Reduction Fund are provided for vegetation management (Australian Conservation Foundation & The Australia Institute, 2021). The former head of the Emissions Reduction Assurance Committee has described these credits as “largely a sham”, largely representing emissions reductions only on paper (Morton, 2022), a position supported by published research (Australian Conservation Foundation & The Australia Institute, 2021). The [Independent Review of ACCUs](#) has recommended that new registrations of avoided deforestation credits be prohibited (Chubb et al., 2022). ACCUs should be limited to projects that demonstrate a direct, quantifiable, and independently verifiable investment in emissions reductions, such as investments in solar or wind technologies. This will ensure that the emissions reductions claimed through this system reflect real-world reductions in carbon emissions. The recommendations of the Independent Review of ACCUs must be implemented prior to the application of

ACCUs to the Safeguard Mechanism, to ensure integrity of offsets purchased to meet facilities' emission reduction targets.

ATSE has [previously argued](#) that, as greenhouse gas emissions are fundamentally a global issue, carbon credits should be fungible regardless of where they are generated. ATSE believes that high quality international carbon credits should be acceptable under the Safeguard Mechanism, provided that the emissions savings claimed by the credits can be quantified, verified, and audited, as outlined in our [submission](#) to the 2022 consultation on the Safeguard Mechanism. ATSE notes that the Australian Government is intending to consult on amending legislation to allow for the use of high integrity international emissions credits and looks forward to engaging with that consultation process.

Recommendation 4: Implement the recommendations of the Independent Review of Australian Carbon Credit Units prior to allowing the use of ACCUs under the Safeguard Mechanism.

Accounting for new entrants

Any new high-emissions projects, additional to the 212 facilities already covered by the Safeguard Mechanism (Clean Energy Regulator, 2022), will make it more difficult for Australia to meet its emissions reductions targets. However, rather than having to retrofit existing premises and implement new processes, these projects will also have the advantage of being able to adopt the most up-to-date technologies and processes from the outset. ATSE has [previously argued](#) that older facilities may require tolerance for higher emissions and greater support to invest in efficiency upgrades (Australian Academy of Technological Sciences and Engineering, 2022). To ensure existing facilities are not disadvantaged, new facilities entering the Safeguard Mechanism scheme should be allocated a lower emissions baseline that reflects the technological and process benefits that these new facilities have over existing ones and the emissions reductions already achieved by existing facilities. Under the Government's proposed reforms, new facilities entering Safeguard Mechanism coverage will be able to meet their obligations via the use of carbon credits. This is likely to increase demand for ACCUs, particularly those of the highest integrity, driving up carbon credit prices for existing facilities that are likely to have less flexibility regarding how they meet their emissions targets. Given the advantages new projects have, compared to existing projects, and the upward pressure they will provide on ACCU prices, ATSE recommends that new projects should be restricted from accessing carbon credits to abate emissions. Instead, these projects should meet their emissions obligations through genuine, on-site, low emissions technology and processes.

Recommendation 5: Restrict access to carbon credits to existing facilities; require all new facilities entering the Safeguard Mechanism to meet emissions targets through low emissions technologies or processes.

References

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