

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

# **ATSE SUBMISSION TO THE SAFEGUARD MECHANISM CONSULTATION**

26 September 2022



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# ATSE SUBMISSION TO THE SAFEGUARD MECHANISM CONSULTATION

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 respond to the Department of Climate Change, Energy, the Environment and Water's consultation on reforms to the Safeguard Mechanism to assist industry to reduce greenhouse gas emissions, to meet Australia's commitment net zero emissions by 2050.

While the Safeguard Mechanism has been in place since July 2016, it has not been impactful in reducing carbon emissions. ATSE agrees that reforms to the Safeguard Mechanism requires robust reforms to contribute to the effort to reach net zero. ATSE also makes the following recommendations to improve the Safeguard Mechanism:

**Recommendation 1:** Permit the purchase of international carbon credit units for compliance under the Safeguard Mechanism, provided they are audited to the same standards as Australian Carbon Credit Units (ACCUs), pending the ACCU reforms.

**Recommendation 2:** Allow some tolerance for higher emissions from existing facilities under the Safeguard Mechanism, while providing co-investment for efficiency upgrades.

**Recommendation 3:** Provide comprehensive and publicly available independent auditing, using consistent methods, for facility-specific emissions.

## The role of carbon credits in the Safeguard Mechanism

Facilities that would otherwise exceed their maximum carbon emissions have the option to purchase Australian Carbon Credit Units (ACCUs) as offsets. ACCUs are concurrently undergoing independent review, and ATSE is also making a submission to that review. Any changes to ACCUs arising from the independent review will have implications for the Safeguard Mechanism. It is critical that ACCUs can be trusted to represent genuine carbon emission reductions. ATSE's ACCU submission will recommend strengthening the governance of ACCUs for this purpose, in light of concerns about the integrity of ACCUs.

The consultation paper raises the possibility of facilities being able to purchase international carbon credit units in addition to ACCUs. As greenhouse gas emissions are fundamentally a global issue, carbon credits should be fungible regardless of where they are generated. ATSE agrees that international carbon credit units should be able to be used for compliance, provided they are of high quality and audited to the same standards as ACCUs (pending reform of ACCUs). ATSE furthermore notes that it is unclear if ACCUs presently meet international standards and that this must be addressed in the independent review of ACCUs.

**Recommendation 1:** Permit the purchase of international carbon credit units for compliance under the Safeguard Mechanism, provided they are audited to the same standards as Australian Carbon Credit Units (ACCUs), pending the ACCU reforms.

## **Accommodating older facilities within the Safeguard Mechanism**

The Safeguard Mechanism legislates an emissions limit (also known as a baseline) for industrial facilities with more than 100,000 tonnes of on-site carbon dioxide equivalent emissions per year. In 2020-21, these facilities contributed 28% of national emissions.

Existing facilities vary greatly in terms of age, efficiency, and technical availability and economic viability of emissions-reducing upgrades. Facilities are often many decades old and have been built with previous generation technology and efficiency. Upgrades may be capital-intensive and take multiple years to complete.

The Safeguard Mechanism must have some tolerance for existing facilities, while incentivising upgrades and replacements (where this would result in a net emissions reduction, accounting for the remaining lifetime of older facilities and embodied emissions of upgrades or new facilities). The Safeguard Mechanism must strike a balance between allowing the continued operation of facilities while not setting emissions limits so high that there is no reduction to carbon emissions.

The consultation presents options for setting emissions limits for existing facilities. Option 1 uses an industry average – this would penalise older facilities. Option 2 involves facility-specific limits – however, there is a risk that this will not result in emissions reductions. It is suggested that older facilities have some grandfathering in of emissions limits, while sending strong signals that emissions must be reduced by 2030.

It is also recommended that the existing production-adjusted emissions limits be retained. This framework allows for variability of production and emissions, while requiring improvements to emissions (per unit of production) over time.

At the same time as building in some tolerance in the Safeguard Mechanism for older facilities, the Australian Government should work with facilities to reduce emissions, as suggested by the consultation questions on emissions-intensive, trade-exposed businesses. For example, this could include co-investment in hydrogen-powered or electric industrial equipment and transport.

**Recommendation 2:** Allow some tolerance for higher emissions from existing facilities under the Safeguard Mechanism, while providing co-investment for efficiency upgrades.

## **Measuring carbon emissions**

Challenges in measuring and comparing carbon emissions have beleaguered the evaluation of Australia's progress towards the targets under international emissions reductions agreements (ATSE, 2020). To ensure the effectiveness of the Safeguard Mechanism and to measure its contributions to national emissions reductions, there must be robust, trusted, and consistently applied methods for measuring carbon emissions.

In Option 2 presented in the consultation paper, facility-specific emissions per unit of production are calculated by businesses and independently audited. To ensure the Safeguard Mechanism works as intended, there needs to be independent measurement including ruling out fugitive emissions. This information should also be publicly available to provide transparency and trust in the effectiveness of the Safeguard Mechanism.

**Recommendation 3:** Provide comprehensive and publicly available independent auditing, using consistent methods, for facility-specific emissions.

## References

Australian Academy of Technological Sciences and Engineering (ATSE), 2020. 'Emissions targets: Are we on track?', accessed from < <https://www.atse.org.au/news-and-events/article/emissions-targets-are-we-on-track/>>