

SUBMISSION

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

Submission to the consultation on incorporating an emissions reduction objective into the national energy objectives

7 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 review on incorporating an emissions reduction objective into the national energy objectives. ATSE endorses the emissions reductions objective and recommends that the proposed legislative changes:

Recommendation 1: Require energy market bodies to include a statement in their annual reports on how each of the energy objectives have been applied.

Recommendation 2: Require energy market bodies to publish a list in their annual reports outlining the emissions reduction targets that were considered when applying the energy objectives.

Recommendation 3: Broaden the reference to emissions reduction targets to include specific mention of compliance to interim targets.

Embedding net zero across the economy

As the economy decarbonises, it is critical to embed net zero commitments across statutory bodies and agencies. ATSE’s recent position statement [Australia’s technology-led transition to net zero emissions](#) outlines that the transition to net zero will be achieved by employing a critical mix of low-emissions technologies, supported by changes in policy. The Australian Government’s planned inclusion of an emissions reduction objective into the national energy laws will create a policy lever to reduce carbon emissions from the energy sector and support the deployment of renewable energy technologies. Placing an emissions reduction objective within the current economic-efficiency framework has the potential to facilitate long-term planning and investment in renewable energy generation, storage, and transmission. This will ensure that energy is accessible and affordable for consumers in the future. ATSE welcomes these proposed legislative changes. Government leadership on net zero emissions also provides a signal to industry on the need to measure and reduce carbon emissions.

ATSE recognises that the Australian Government, in addition to state and territory governments, is currently undertaking policy initiatives to reduce emissions and build a green-powered economy in a range of areas, including transport, households, and infrastructure projects. Increasing the share of renewable energy, which these reforms will encourage, is critical for the decarbonisation of high-emitting sectors.

Improving public oversight of the energy objectives

The main aim of the proposed change is to ensure that energy market bodies consider emissions reduction when undertaking their respective functions, supporting a managed transition to an energy system with a higher proportion of firmed renewables. The energy objectives currently contain a range of components that the energy market bodies are obliged to consider: price, quality, safety, reliability, and security of supply. The emissions reduction component will be considered and balanced alongside these existing components. While market bodies release general guidance material about the objectives and a list of rule changes, they do not provide public reporting on how each of the objectives have been assessed. In order to provide transparency, ATSE recommends that the energy market bodies include a statement on how each of these objectives have been applied in their annual reports. This will establish public accountability for the reduction of emissions in the energy sector.

The legislation introduces consideration of targets to which any Commonwealth, state, or territory government has committed. Energy markets and market bodies are entwined across states, with market bodies operating accordingly. However, state and territory emissions reduction commitments are presently unaligned, and the commitments of future state and territory governments may change. In addition, governments may communicate aspirations for emissions reductions that do not constitute targets. The proposed legislative changes provide market bodies the flexibility to consider which targets are relevant to

their decision-making, including other targets (such as renewable energy targets) that are likely to contribute to emissions reduction. To ensure transparency, ATSE recommends that the legislation requires energy market bodies to publish a list in their annual reports outlining the emissions reduction targets that were considered when applying the energy objectives.

Recommendation 1: Require energy market bodies to include a statement in their annual reports on how each of the energy objectives have been applied.

Recommendation 2: Require energy market bodies to publish a list in their annual reports outlining the emissions reduction targets that were considered when applying the energy objectives.

Referencing new standards for net zero commitments

The proposed emissions reduction objective is framed in terms of “achieving targets for reducing Australia’s greenhouse gas emissions” or targets that are “likely to contribute” to reducing emissions. It is essential that more clarity is provided in this definition to ensure that the energy objectives meet the new standards for net zero goals outlined by the [United Nations Expert Group on Net Zero Commitments for Non-State Entities](#) (UN Expert Group) and the [International Standards Organisation](#) (ISO). These new standards are designed to differentiate genuine efforts towards tackling climate change and decarbonisation from those aimed at delaying the changes that are needed to achieve internationally agreed safe climate temperature goals. Both the UN Expert group and the ISO advise that net zero commitments and policies establish interim targets that are aligned with evidence-based safe climate temperature scenarios (1.5 degrees of warming). To support compliance with international standards, it is essential that energy market regulators consider progress towards interim targets (in addition to the overall net zero target) in their assessment of proposed energy projects. The acknowledgement of interim targets can help to alleviate any potential stalling by governments or industry in progressing towards a decarbonised economy. ATSE therefore advises that the proposed legislation specifically mentions compliance to interim targets.

Recommendation 3: Broaden the reference to emissions reduction targets to include specific mention of compliance to interim targets.

References

Australian Academy of Technological Sciences and Engineering (ATSE), 2021. Australia's technology-led transition to net zero emissions. Accessed from <<https://www.atse.org.au/wp-content/uploads/2021/09/POS-NetZero-PS10-210823.pdf>>

United Nations, 2022. Integrity matters: Net zero commitments by businesses, financial institutions, cities and regions. Accessed from <https://www.un.org/sites/un2.un.org/files/high-level_expert_group_n7b.pdf>

International Standards Organisation, 2022. Net zero guidelines. Accessed from <<https://www.iso.org/obp/ui/en/#iso:std:iso:iwa:42:ed-1:v1:en>>