

SUBMISSION TO THE

# National Energy Guarantee Draft Detailed Design for Consultation Commonwealth Elements

JULY 2018

# NATIONAL ENERGY GUARANTEE DRAFT DETAILED DESIGN FOR CONSULTATION COMMONWEALTH ELEMENTS

The Australian Academy of Technology and Engineering (ATSE)<sup>1</sup> welcomes the opportunity to provide comment on the *National Energy Guarantee, Draft Detailed Design for Consultation, Commonwealth Elements* paper.

## Key points

- ATSE supports the introduction of the National Energy Guarantee, however Australia needs an economy wide strategy for climate change mitigation, not just an emissions guarantee for a subsection of the electricity generation sector.
- Adopting the proposed emissions reduction trajectory implies that all economic sectors will need to achieve a 26 per cent reduction in emissions by 2030 to achieve the Government's current emissions reduction target. While there are clear pathways in the electricity generation and electricity end-use sectors to achieve and exceed this target, it will be much more challenging and likely more expensive to do so in the transport, direct combustion and agricultural sectors.
- The proposed emissions reduction trajectory in the electricity sector lacks ambition, is expected to be achieved by projects that are already planned, and will slow investment in the electricity sector post-2020 thus putting jobs and growth in the clean generation, energy storage and smart grid industries at risk.
- The electricity sector makes investments that have long pay back periods and life spans and the emissions guarantee requires a long term trajectory to allow the sector to plan for the future.
- The emissions reduction trajectory should be informed by the independent advice of the Climate Change Authority, and subject to regular reviews allow the ambition to be increased if the sector is performing well on emissions reductions, reliability and affordability.
- It is inequitable for non-Emissions Intensive Trade Exposed (EITE) consumers to subsidise EITE activities and, as such, EITE activities should be included under the Guarantee.
- ATSE strongly recommends that carbon offsets are not permitted in the proposed design of the NEG.

More detailed responses are included below. The Academy will happily provide further information and evidence to assist the Commonwealth Government in its deliberations on this important topic. Please contact Dominic Banfield, Policy Analyst, at [dominic.banfield@atse.org.au](mailto:dominic.banfield@atse.org.au) or on (03) 9864 0903 for further information.

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<sup>1</sup> ATSE is an independent think tank that comprises the leaders in the fields of technology and engineering, who gain Fellowship to the Academy in a highly competitive process. ATSE is one of Australia's four national Learned Academies but uniquely its 800-strong Fellowship come from industry, government and research organisations, as well as academia. Our Fellowship develops trusted, informed and visionary views to persuade decision-makers to implement the most progressive policies on the development of technology for the betterment of Australia and its people. [www.atse.org.au](http://www.atse.org.au)

### **The need for an economy wide climate change mitigation strategy.**

The Academy supports the introduction of a policy to encourage decarbonisation of the electricity sector but is concerned that the NEG is distracting from the need to develop a strategy for decarbonisation of the whole economy. Decarbonising Australia's electricity systems is a challenge for the entire nation, not just the regions that make up the National Electricity Market (NEM).

Emissions from the National Electricity Market accounted for approximately 160 Mt (29 per cent) of Australia's CO<sub>2</sub> equivalent emissions in 2017, however there are an additional 30 Mt CO<sub>2</sub>-e emissions from non-NEM electricity generation that will not be covered by the NEG policy. The Academy is pleased that the Energy Security Board has stated its intention to turn its intentions to the electricity systems in Western Australia and the Northern Territory.

Further to this, an additional 364 Mt CO<sub>2</sub>-e (66 per cent) of Australia's emissions originate from the direct combustion, transport, fugitive emissions, and non-energy sectors (including agriculture). These sectors are expected to be more expensive and more challenging to decarbonise than the electricity sector. Strategies for the long-term decarbonisation of these sectors are essential to support them through the transition to a net-zero carbon economy.

### **Setting and reviewing the electricity emissions target**

The emissions reduction target proposed in the consultation paper lacks ambition and will slow investment in and the transition of the electricity sector, placing jobs and growth at risk. Applying a uniform 26 per cent reduction target to all economic sectors ignores well established data that in Australia applying a greater reduction to the electricity sector is readily technically achievable and economically sound. In contrast, a 26 per cent target for the transport and direct combustion sectors, in which emissions continue to grow, will be more expensive for the nation and more technically challenging. As such, the Academy considers the proposed target to be inconsistent with the Government's goal of an economy wide emission reduction of 26 per cent on 2005 levels by 2030.

ATSE recommends the development of an emissions reduction trajectory extending until at least 2050. The electricity sector makes investments that have long pay back periods and life spans, and the emissions guarantee requires a long term trajectory to allow the sector to plan for the future. The emissions reduction trajectory should be informed by the independent advice of the Climate Change Authority, and must align with a carbon budget implied by Australia's commitment to the Paris Agreement.

This trajectory should be subject to regular reviews the timing of which must strike a balance between providing surety and confidence to the industry, while allowing for ambition to be increased if the sector is performing well on both emissions reductions and affordability.

### **Exemption for emissions intensive trade exposed (EITE) activities**

As discussed in in the Academy's response to the draft design<sup>2</sup>, we consider it to be inequitable for non-EITE users to subsidise EITE activities through an exemption. EITE activities should be encouraged and supported to reduce their emissions, and while exempting them from the NEG may avoid increased costs in the short term it does nothing to help their long-term viability in an emissions constrained world.

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<sup>2</sup> Available at <https://www.atse.org.au/content/publications/submissions/energy/national-energy-guarantee-draft-design.aspx>

### **Offsets**

ATSE strongly recommends that carbon offsets are not permitted in the proposed design of the NEG. Offsets (and especially international carbon credits) should not be eligible for use under a policy that only targets the electricity sector. Offsets and carbon trading only make sense under an economy wide emissions reduction policy.