



ENGINEERS
AUSTRALIA

2 April 2024

Climate Change Act Amendment Engagement
Department for Environment and Water
GPO Box 1047
Adelaide SA 5001

Dear Sir/Madam,

Re: Engineers Australia Response to proposed amendments to South Australia's *Climate Change and Greenhouse Emissions Reduction Act 2007*

I am writing on behalf of Engineers Australia to offer our perspective and support regarding the proposed amendments to South Australia's *Climate Change and Greenhouse Emissions Reduction Act 2007* (the Act). Engineers Australia is committed to advancing sustainable practices within the engineering, construction, and built environment sectors, and we welcome the opportunity to provide feedback and offer support to the South Australian Government to develop a plan to achieve the outlined targets.

About Engineers Australia

Engineering is the essential link between thinking and doing. Between idea, and implementation. It's our means for positive, sustainable change, with an influence on every aspect of modern society. Engineers are the enablers of productivity because they convert smart ideas into new products, processes and services.

As Australia's national body for engineering, we are the voice and champion of our 120,000-plus members. We provide them with the resources, connections, and growth they need to do ethical, competent and high-value work in our communities.

A mission-based, not-for-profit professional association, Engineers Australia is constituted by Royal Charter to advance the science and practice of engineering for the benefit of the community. We back today's problem-solvers, so they can shape a better tomorrow.

Engineers are passionate participants in public discourse, contributing to important community and policy discussions that impact the economy and society. Engineers Australia's policy agenda is focused on engineering:

- a sustainable future
- a skilled future
- an innovative and productive future.

Response

Engineers Australia recognises the critical importance of the targets set forth in the amendments, and supports a nationally-consistent approach to emissions targets. We believe that an urgent transition in the construction and built environment sectors is required to meet these ambitious goals within the designated time frame, and are also mindful of additional challenges that lie ahead, some of which are outlined below:

- 1. Skills Challenge and Workforce Preparation:** Engineers will play a pivotal role in achieving the proposed targets. Demand for engineering skills is increasing due to a healthy forward infrastructure pipeline in South Australia and a reliance of many national priorities on the engineering profession, including defence capabilities within the region. Should the outcomes of the State Government State Prosperity Project¹ be realised, this demand will increase further. It is essential to address the current skills challenges and ensure that the engineering workforce is adequately prepared. Engineers Australia has been actively involved in initiatives to address these challenges, including breaking down barriers for overseas qualified engineers, promoting engineering and STEM education in our schools, and fostering innovation through forums such as the Climate Smart Engineering Conference².
- 2. Awareness of Climate Change Impacts:** Engineers Australia recognises the scale and urgency of the challenges presented by climate change, the disruptions it causes, and the pivotal role of engineering in enabling a socially just transition to a sustainable society³. Additionally, we recognise the significant impact that climate change will have on our communities and industries. It is crucial to raise awareness and ensure that stakeholders are informed and prepared for these changes.
- 3. Sector-Specific Guidance:** As part of our commitment to advancing sustainable practices, we recommend that the government provides sector-specific guidance to address the challenges posed by climate change. This guidance should include strategies to update outdated standards, policies, and government specifications within the engineering, construction, and built environment sectors.

Having driven the Climate Smart Engineering Initiative and produced recommendations and outcomes via the CSEI's Climate Risk working group, Engineers Australia stands ready to support this work. We are well-positioned to provide expertise and collaborate with the government in developing sector-specific guidance that aligns with best practices and addresses the pressing challenges of emissions reduction.

- 4. Barriers to Adoption:** Discussions with our members in South Australia have highlighted several additional barriers to adoption, including outdated standards, concerns about the long-term performance of sustainable products, and the need for better climate modelling for South Australia.

In response to the specific amendments proposed in the SA Climate Change Bill, we offer the following feedback:

Amendment of Section 4 – Interpretation

Engineers Australia is supportive of all changes to the bill that align with the Australian Government, including the standardised definitions of key terms such as climate change adaptation, mitigation, and net greenhouse gas emissions.

Amendment of Section 5 – Targets

Engineers Australia supports the proposed 2030 Emissions Target of a 50% reduction by 2030 (based on 2005 levels) and net zero emissions by 2050. We recommend alignment of all states and territories with national emissions targets to provide clear milestones and encourage coordinated action across all levels of government.

We also support the inclusion of five yearly interim targets between 2030 and 2050. Meeting the 2050 target will be challenging but necessary to limit global warming to 1.5 degrees. Engineers Australia acknowledges the importance of collaboration with experts and consistency with national and international best practices. As the peak body of the engineering profession in Australia, Engineers

¹ Government of South Australia 'State Prosperity Project document' *Government of South Australia* (accessed April 2024) <https://www.stateprosperity.sa.gov.au/images/State-Prosperity-Project-Documents.pdf>

² Bell, M., Briggs, P. et al 'Strengthening the engineering workforce in Australia' *Engineers Australia* (August 2022) <https://www.engineersaustralia.org.au/sites/default/files/2022-08/strengthening-engineering-workforce-australia.pdf>

³ Koger, S 'Setting, tracking and achieving Australia's emissions reduction targets' *Engineers Australia* (June 2023) <https://www.engineersaustralia.org.au/sites/default/files/2023-10/setting-tracking-achieving-emissions-reduction-targets-submission-jun-23.pdf>

Australia is actively engaged with relevant experts. We are willing to participate in industry consultations related to achieving these targets.

Engineers Australia recognises that the urgency of the climate crisis demands a more ambitious approach to limit global warming to 1.5°C Australia-wide, as described by the Intergovernmental Panel on Climate Change (IPCC)⁴. Given South Australia's progress in the energy transition, we are cognisant that much of the emissions reduction will fall to 'hard to abate' sectors, which will pose a challenge to the State. South Australia's aim to achieve 100% net renewable energy generation by 2030 means future reductions beyond 2030 will need to focus on the Transport, Agriculture, and Construction Sectors. The built environment is a significant contributor to global emissions, and transitioning these industries will require close collaboration with industry and the engineering profession.

Amendment of Section 14 – Policies

Engineers Australia is supportive of the proposal to prepare a State-wide emissions reduction plan. We are willing to engage and collaborate with the South Australia Government to advise on objectives, policies, programs, and initiatives relevant to the engineering profession.

Insertion of Section 14A and 14B

Regarding Climate Change risk assessment and sector plans for the Engineering/Built Environment sector, Engineers Australia is well placed to assist the South Australian Government. We offer our expertise to support the preparation of Climate Risk assessments for the State and the development of sector-specific plans.

Engineers Australia is committed to supporting the South Australia Government to achieve its climate change targets. We have been actively involved in addressing the challenges outlined in the amendments and are eager to continue our collaboration. Our organisation stands ready to provide expertise, guidance, and support to ensure a sustainable and resilient future for South Australia.

We would welcome the opportunity to meet with the Department or Deputy Premier and Minister for Climate, Environment and Water, Susan Close, to discuss these recommendations in more detail. Please do not hesitate to contact me at JIrvine@engineersaustralia.org.au to arrange a meeting, or seek further information.

Thank you for considering our input.

Yours sincerely,



Jan Irvine

General Manager, SA
Engineers Australia

⁴ Koger, S 'Setting, tracking and achieving Australia's emissions reduction targets' *Engineers Australia* (June 2023) <https://www.engineersaustralia.org.au/sites/default/files/2023-10/setting-tracking-achieving-emissions-reduction-targets-submission-jun-23.pdf>