



ENGINEERS  
AUSTRALIA

# Sustainability Policy

November 2014

## Purpose

Engineers Australia and its members are committed to creating and delivering outcomes that will ensure the long-term survival of life on earth in a fair and equitable manner.

For our members, sustainability means that future generations will enjoy environmental, social and economic conditions that are equal to or better than those enjoyed by the present generation.

Our Code of Ethics requires us to develop engineering solutions that repair and regenerate both natural and social capital, while maintaining economic health.

## Context

Engineers Australia acknowledges that to achieve sustainability outcomes requires transformative change in business practices, lifestyles, and in the way resource allocation decisions are made.

Fundamental to this change is the recognition that a healthy economy is underpinned by a healthy environment and respect for all life on earth.

Engineers Australia and its members commit to ensuring all relevant stakeholders are consulted, and that open and regular reporting of progress towards delivering sustainability outcomes forms a fundamental component of engineering practice.





## Principles

In implementing sustainability across any engineering activity, members of Engineers Australia should:

1. Objectively apply engineering knowledge, skill, and experience to achieve measurable outcomes that enhance both natural and social capital.
2. Maintain an up-to-date knowledge and understanding of sustainability principles, and practices relevant to their area of practice.
3. Seek outcomes that deliver fairness and equity within the present generation as well as between present and future generations.
4. Think holistically, and innovatively, and account for externalities and whole of life impacts, such that there is a net sustainability benefit.
5. Be proactive in addressing risks to the environment, society and the economy.
6. Build shared community value, robustness, and resilience.
7. Always practice within the Engineers Australia Code of Ethics.

## Guidance

Engineers Australia, as an organisation, considers that sustainability is a key consideration, informed by societal expectations, technical knowledge and expertise, and is to be applied in all areas of its endeavour and strongly promoted to all of its members.

This Sustainability Policy is supported by an Implementation Plan, which articulates specific changes to engineering practice that arise from adoption of this Policy.

Specific sustainability considerations to be applied to engineering practice (policy and projects) include (not in priority order):

1. The use of resources should not exceed the limits of regeneration.
2. The use of non-renewable resources should create enduring asset value (everlasting and/or fully recyclable), and be limited to applications where substitution with renewable resources is not practical.
3. Engineering design, including product design, should be whole system based, with consideration of all impacts from product inception to reuse/repurposing.

4. Product and project design should consider longevity, component re-use, repair and recyclability.
5. Eliminating waste should be a primary design consideration. Unavoidable waste from any one process should be examined for recycling potential as input to another productive process.
6. The rate of release of any substances to the environment should do no net harm, and be limited to the capacity of the environment to absorb or assimilate the substances, and maintain continuity of ecosystem services. In all instances, such releases should be lifecycle-costed and attributed.
7. Proactive and integrated solutions are preferable to reactive, linear, “end of pipe” solutions, such that there is a net sustainability benefit.
8. In circumstances where scientific information is inconclusive, or incomplete, the precautionary principle and risk management practices should be applied to ensure irreversible negative consequences are avoided and not passed as a liability to future generations.