Enabling Design for Environmental Good
ECO-DESIGN

'Eco-Design' is an all-encompassing term to describe any design derived from sustainability-driven intent, which "minimises environmentally destructive impacts by integrating itself with living processes" (Ryn and Cowan, 2013).

'Enabling Design for Environmental Good' is a project that uses insights and approaches from design, innovation, and sustainability to propose a suite of actions to improve the uptake of sustainable design for products and associated materials used in Australia.

Two key themes of Eco-Design were identified:

1 Eco-Design delivers 'sustainable material outcomes'; or real-world material outcomes that lead to ecological, economic, and human health and wellbeing (which is typically approached in a results-focused way)

2 Eco-Design is derived from 'ethical-value approaches'; or a set of values, ethics and ideologies that result in sustainability-focused actions, (typically approached in a process-focused way)

There are multiple consistent elements underpinning Eco-Design practice that impacted the mechanics of both 'sustainable material outcomes' and 'ethical-value approaches'. Following an extensive review, four Eco-Design principles were identified.

These Eco-Design principles are:

PRINCIPLE 1
'Regenerative design: transitioning from designing 'like' to 'with' nature'

- This means collaborating with nature to preserve, promote and regenerate ecosystems, society, and culture, paying particular attention to accommodating diversity in each bioregion and place.
- It requires transitioning from current eco-efficiency practices that aim to reduce resource use and toxicity, to emerging eco-effectiveness practices that actively collaborate with natural systems for positive returns.

PRINCIPLE 2
'Think in systems and design for life cycles'

- This means having a long-term, integrative whole systems perspective and approach to design, recognising that each element at every scale is intrinsically intertwined with each 'other' across life cycles.
- It requires practices that embrace complexity, diversity, and scale in transparent and collaborative approaches.

PRINCIPLE 3
'Zero waste: Move from a take-make-waste model to circular economies'

- This means eliminating the concept of waste altogether and removing all toxicity at every life cycle stage.
- It requires circular design practices which encourage closed-loop systems and approaches for regenerative circular material use, where waste in one cycle becomes nutrient for the next.

PRINCIPLE 4
'Making better design choices: Ethical design for collective wellbeing'

- This means making ethical design choices that bring about the greatest possible total wellbeing, inviting everyone to be involved in designing an abundant and secure future together.
- It requires both a common understanding and ethical integrity for both designers and consumers, designing as custodians of the environment, society and culture and making transparent decisions that ensure the greatest long-term common good.

The Enable Design for Environmental Good publication is available at **www.dcceew.gov.au**

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