

Infrastructure's role in a net zero emissions future

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Engineers Australia - Sustainable Engineering Society
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ClimateWorks Australia is a non-profit, evidence-based independent adviser, committed to accelerating the transition to net zero emissions for Australia and SE Asia Pacific. We were co-founded by The Myer Foundation and Monash University and work within Monash Sustainable Development Institute.

ClimateWork acts as a bridge between research and action, analysing net zero pathways for governments, businesses and investors, and helping facilitate conditions that encourage and support the transition to a prosperous, net zero emissions future.



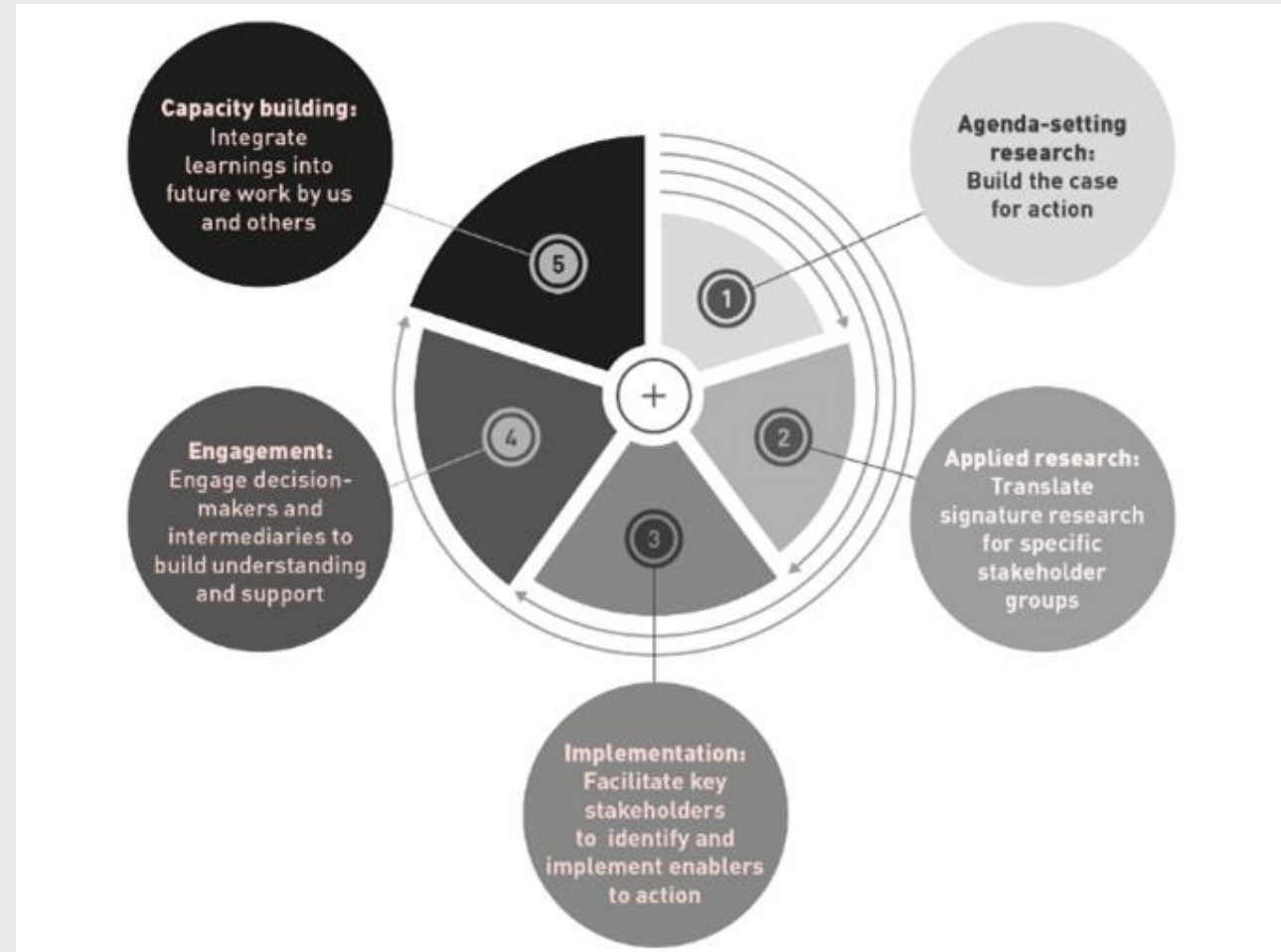
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Our cycle of change underpins our work

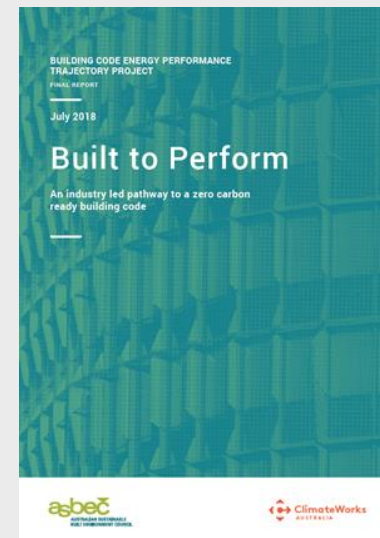


We advise governments and industry on net zero emissions pathways

State government net zero emissions targets



Sector roadmaps



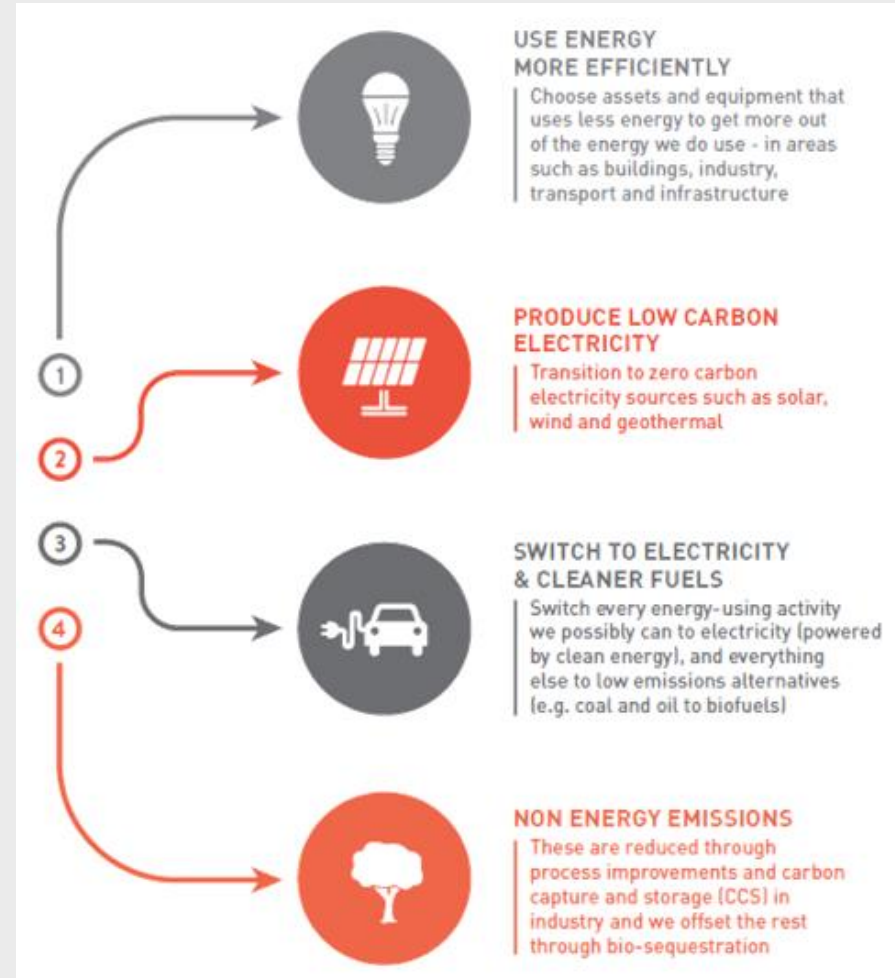
Investors



Bringing stakeholders together



Our approach centres around four key pillars for reducing emissions



Infrastructure and net zero emissions

The Infrastructure Sustainability Council of Australia (ISCA) is partnering with ClimateWorks Australia and the Australian Sustainable Built Environment Council (ASBEC) to explore infrastructure's role in a net zero emissions future.

Infrastructure shapes Australia's future

Infrastructure **lasts for decades** and serves as the foundation for:

- Supporting economic growth
- Meeting the needs of a growing population
- “Congestion busting” for roads and public transport
- Opening up opportunities for new technologies or consumer demand
- Preparing for a low emissions future

Decisions made today will define Australia's future

One example: Tapping into economic growth

“Already 75% of Australia's goods exports are going to Asia ... OECD projections suggest that Asia's share of the global middle class will grow from around 35% in 2015 to 80% by 2050 ... Our proximity to Asia, combined with our reputation for high quality exports, therefore has the potential to be a strong driver of economic growth for Australia.

*However, **our ability to capitalise on this is only as good as our freight and supply chain networks.**”*

Anna Chau, acting CEO, Infrastructure Australia, October 2018

<https://www.infrastructureaustralia.gov.au/listing/speech/australias-growing-freight-task-challenges-and-opportunities>

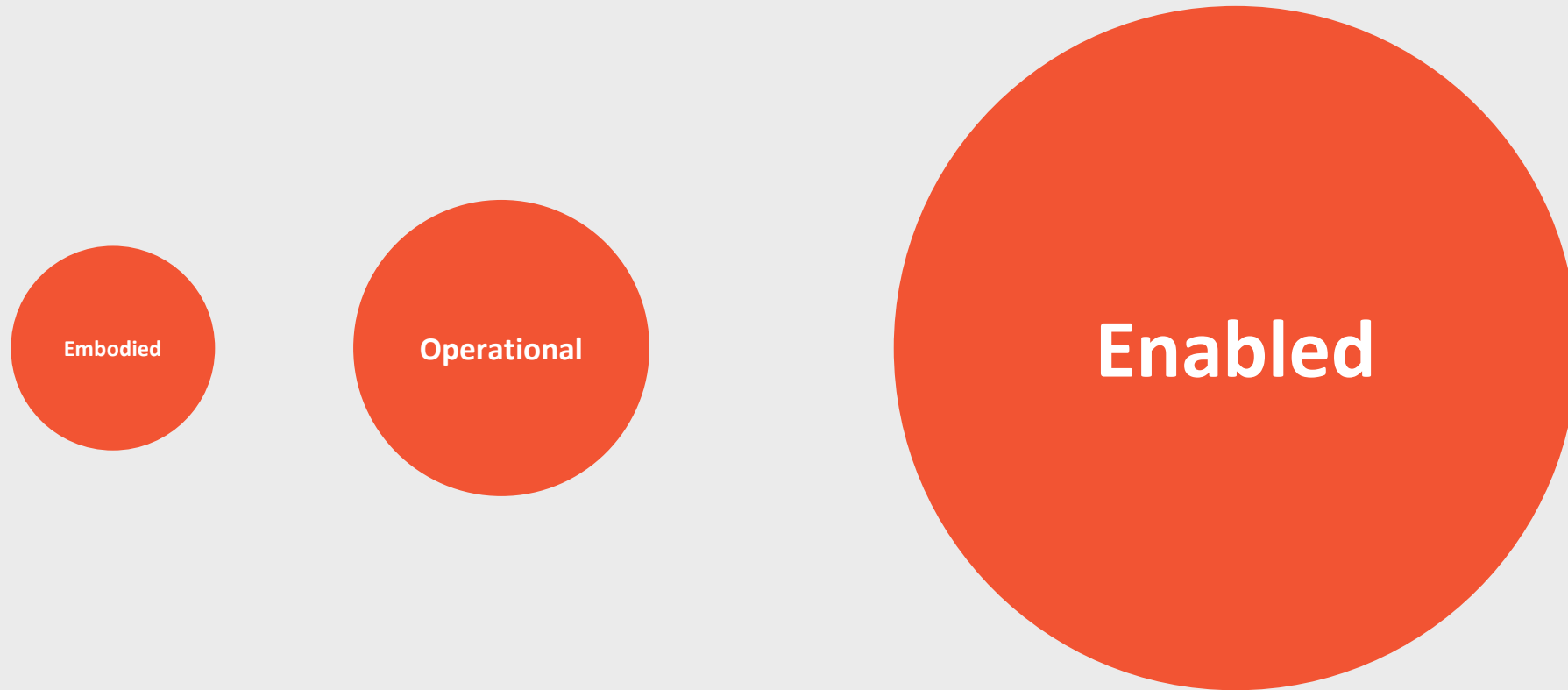
Infrastructure responses to climate risks

Infrastructure built today needs to be both resilient to climate change impacts and designed to support a transition to net zero emissions

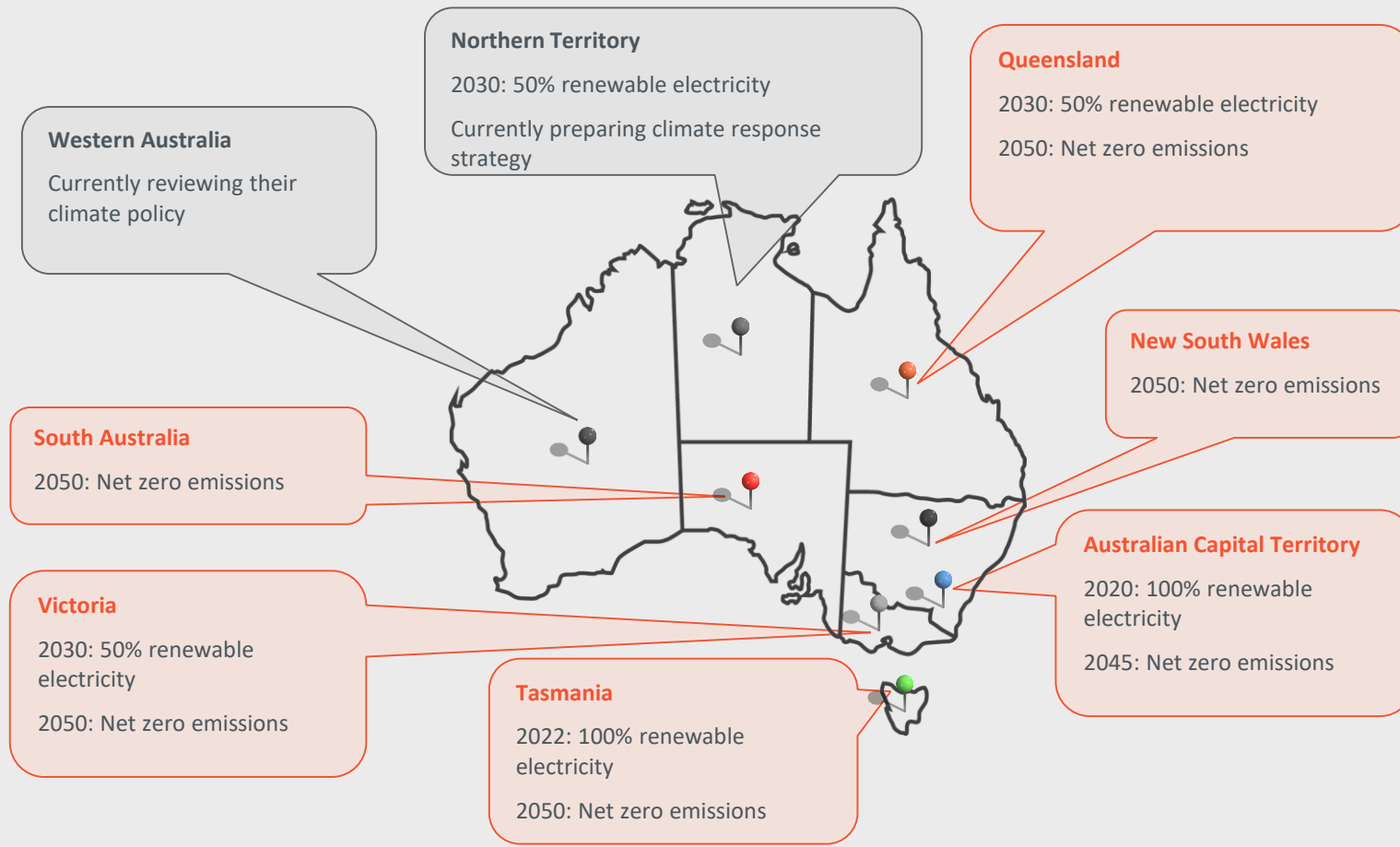
Physical risks relate to infrastructure's resilience in a changing climate

Transition risks consider how infrastructure projects are fit for purpose in a net zero emissions future

Infrastructure influences the majority of Australia's emissions



State and territory governments covering 80% of Australia's emissions are committed to net zero emissions



Investors are considering emissions

“QIC’s Responsible Investment team collaborates with the QIC investment teams on a number of initiatives to better understand our clients’ and products’ exposures. Examples include portfolio carbon footprinting, reviewing portfolios to quantify exposure to carbon intensive industries and engaging directly with companies to understand the strategies they have in place to manage the transition to a low carbon economy.”

QIC Sustainability Report 2018

“climate change poses a significant investment risk with the potential to impact value over the short, medium and long term ... it is important to establish the appropriate governance and strategic processes to effectively identify and manage climate change risks and opportunities”

IFM Investors Carbon Footprint Report 2018

“Infrastructure assets are central to our economic and social well-being ... It is absolutely critical that the assets of today contribute to the overall emissions reduction task that we are facing”

Ian Learmonth, CEFC CEO (quoted in IFM Investors Carbon Footprint Report 2018)

Infrastructure can
**lay the foundations for a
net zero emissions
economy**

Net zero emissions principles are already being embedded



Sydney Metro North-West - new large scale solar farm meeting 100% of operational energy; enabling and 20 million fewer car trips a year by 2036
image source: ISCA

Whyalla Steelworks in South Australia to be powered by solar, pumped hydro and co-generation

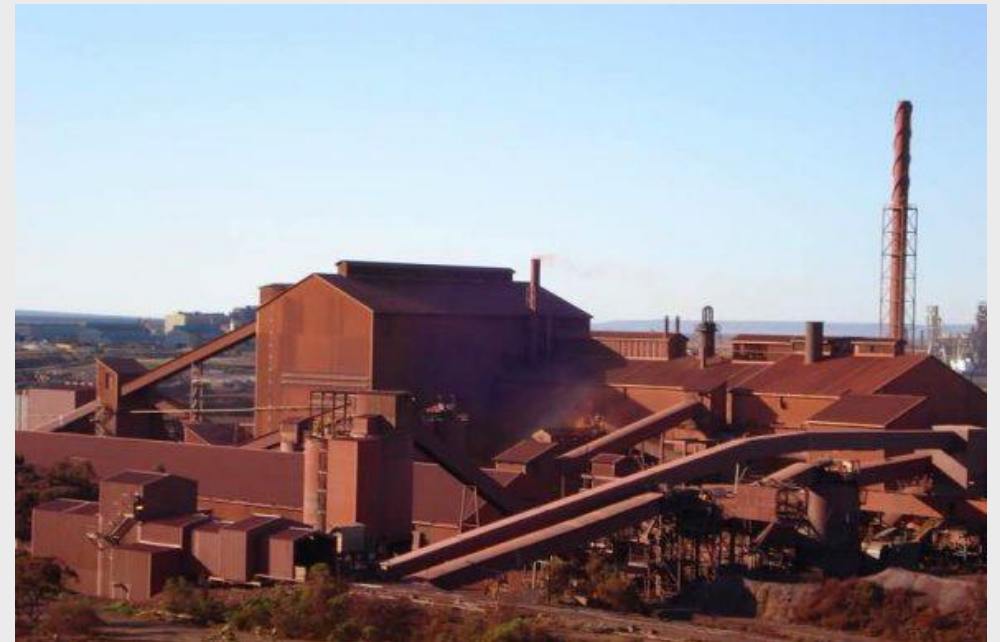


image source: Renew Economy

Net zero emissions principles are already being embedded

Gold Coast airport redevelopment: Commonwealth Bank and Westpac offer discounted interest rates if emissions targets are met



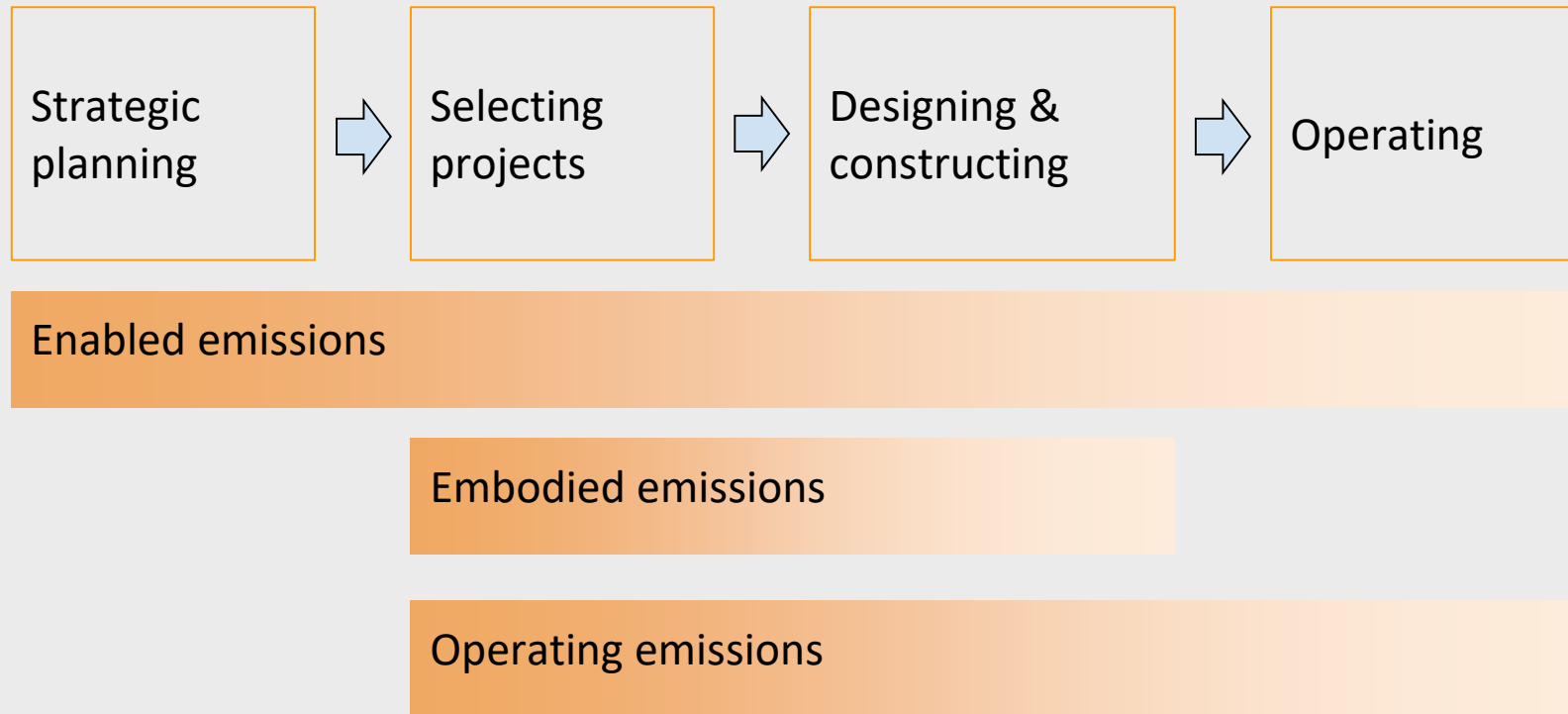
Image source: Australian Aviation



315km electric vehicle highway between Perth and Augusta, WA

Image source: My Electric Car

There are opportunities to influence emissions throughout a project's lifecycle



Our project can support planning for net zero emissions

ISCA, ClimateWorks and ASBEC seek to work with industry and governments to

provide guidance on how to consider net zero emissions

in decisions about planning, designing, building and operating infrastructure.

Project objectives

- Demonstrate **the role of infrastructure as an enabler** for net zero emissions
- **Engage stakeholders** on key challenges and opportunities
- Establish a **clear pathway** to net zero emissions for infrastructure projects
- Integrate minimum emissions requirements into **procurement and investment practices**

Contact us

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Since ClimateWorks' launch in 2009 through a partnership between The Myer Foundation and Monash University, philanthropic support has been key to achieving our mission of catalysing Australia's transition to a prosperous, net zero emissions future. This support continues to allow us to remain truly independent, evidence-based and non-partisan.