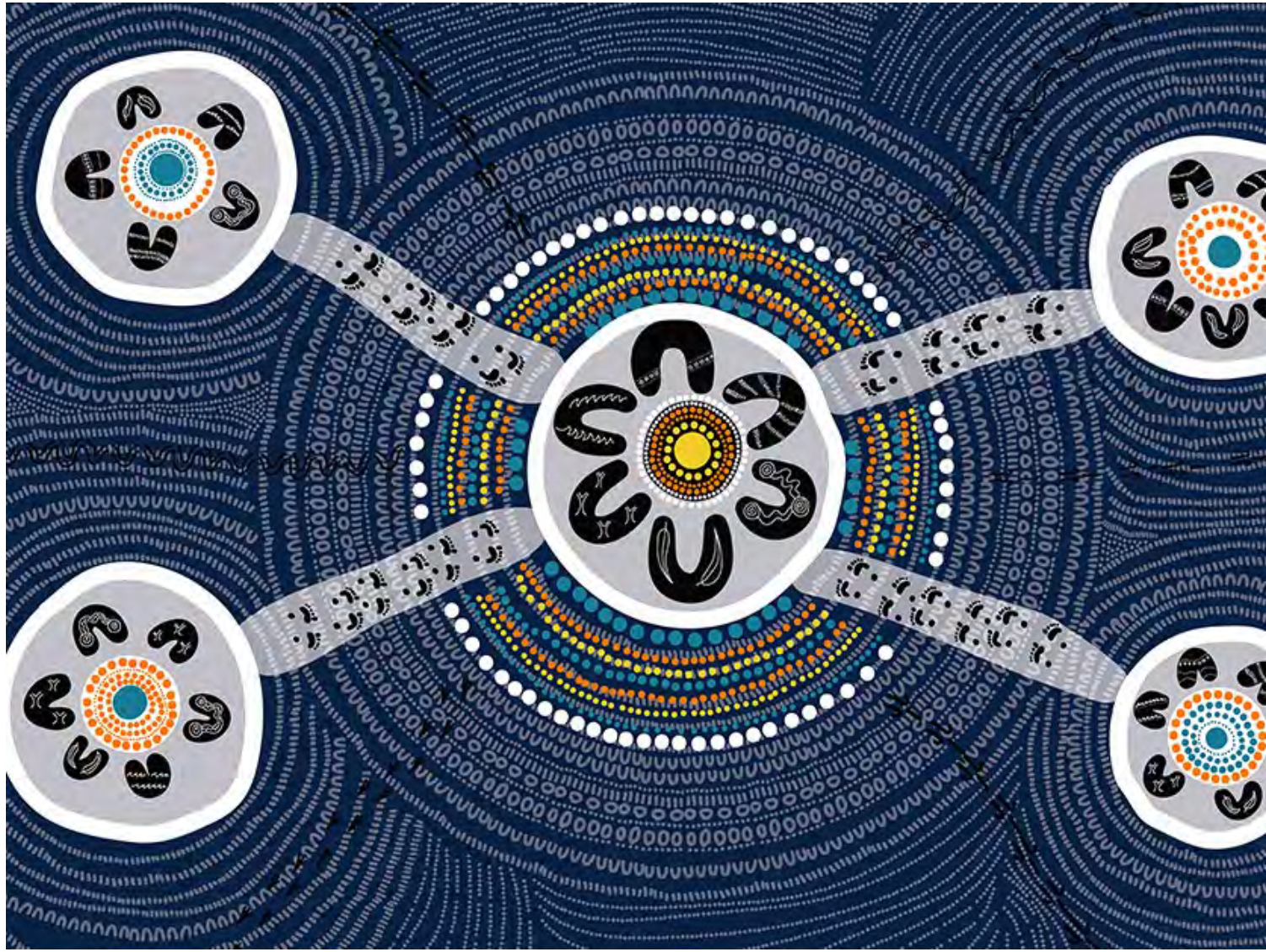
Advancing resilient, inclusive, low-emission infrastructure in Australia

August 2022

Acknowledgement of Country

We begin by acknowledging the Traditional Custodians of the land on which we meet today.

We acknowledge their deep connection to land, water and culture, and pay respects to their Elders past, present and emerging.



Overview

1 Overview of the ISC

2 IS Rating Scheme

3 Driving best practice

4 Critical success factors

Winds of change

Infrastructure Sustainability Council

A positive future for people, planet and the economy

Our Purpose

Ensuring all infrastructure delivers cultural, social, environmental and economic benefits

Net zero is both an immense challenge and a once-in-a-generation, globally significant and nation-building opportunity

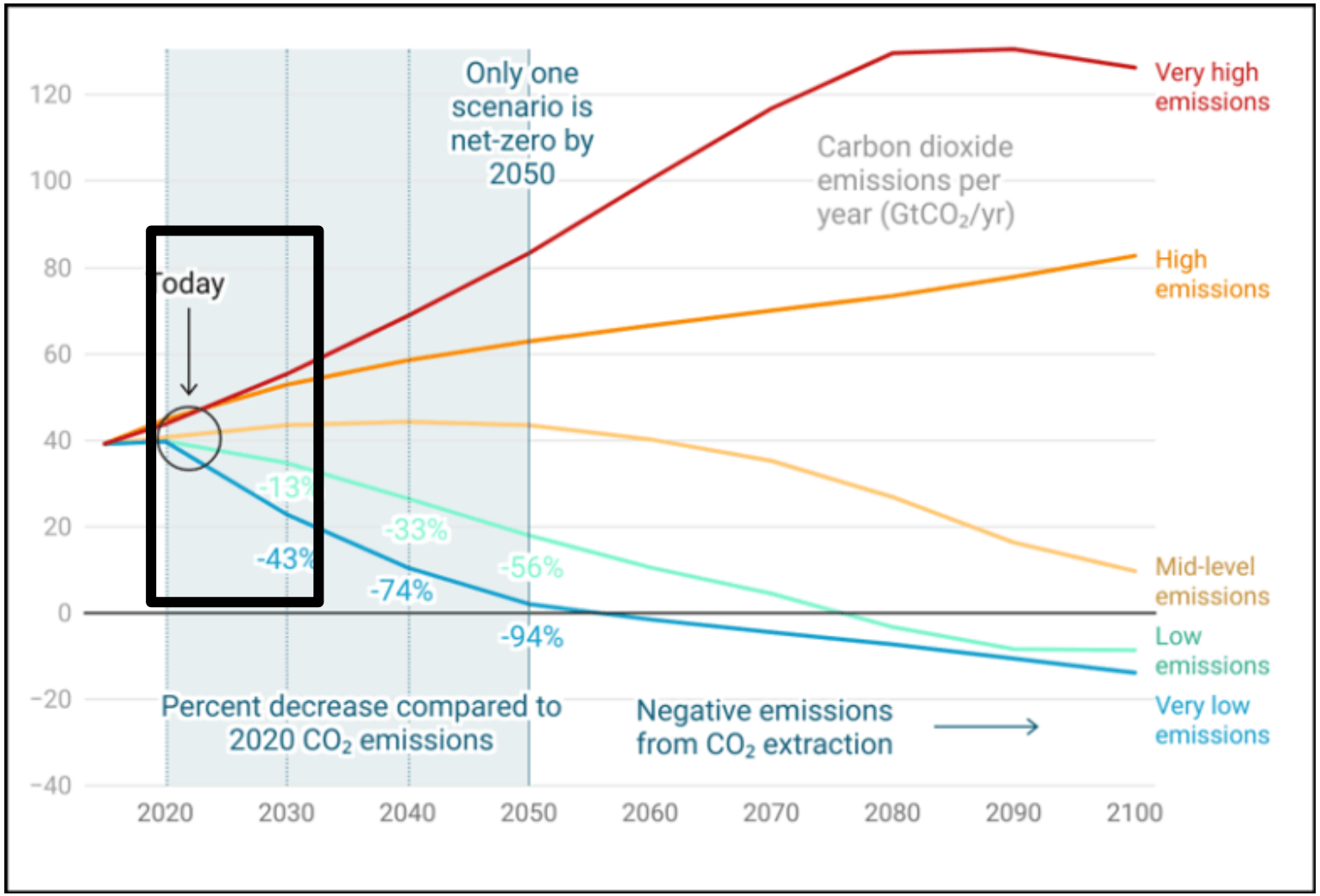
1. Renewables will produce most or all domestic energy by 2050
2. More productive use of energy can keep domestic demand about the same, despite population growth
3. Carbon capture, utilisation and storage (CCUS) can play an important role, complementing renewables
4. Unprecedented capital investment is needed, which will produce significant benefits
5. Domestic energy's share of GDP need not rise above today's level, while being less prone to price shocks
6. Clean energy can replace our fossil fuel exports
7. The cost to export clean energy may rise, but should be competitive in a decarbonising global economy
8. A large workforce with new skills will grow across the nation, particularly in northern Australia
9. Emissions from farms, forestry and waste should fall, but are unlikely to reach net zero
10. Large changes in land and sea use will occur, and will need careful planning and community engagement

Dynamic, agile system change in 8 years

Climate action involves a duty to communities, the workforce, the environment, and the economy.

Climate action:

- accelerates systemic **decarbonisation**
- increases **resilience and adaptive capacity**
- creates **economic opportunity** through circular economy, innovation and research
- delivers long-term value and impact reinforcing **sustainable finance and investment**
- prepares and partners with the **infrastructure workforces for a just transition**; and
- protects and **regenerate natural ecosystems and landscapes**

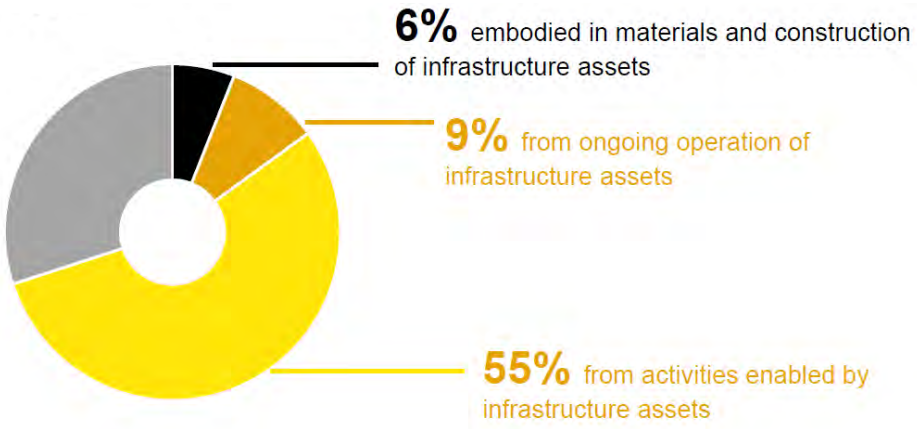


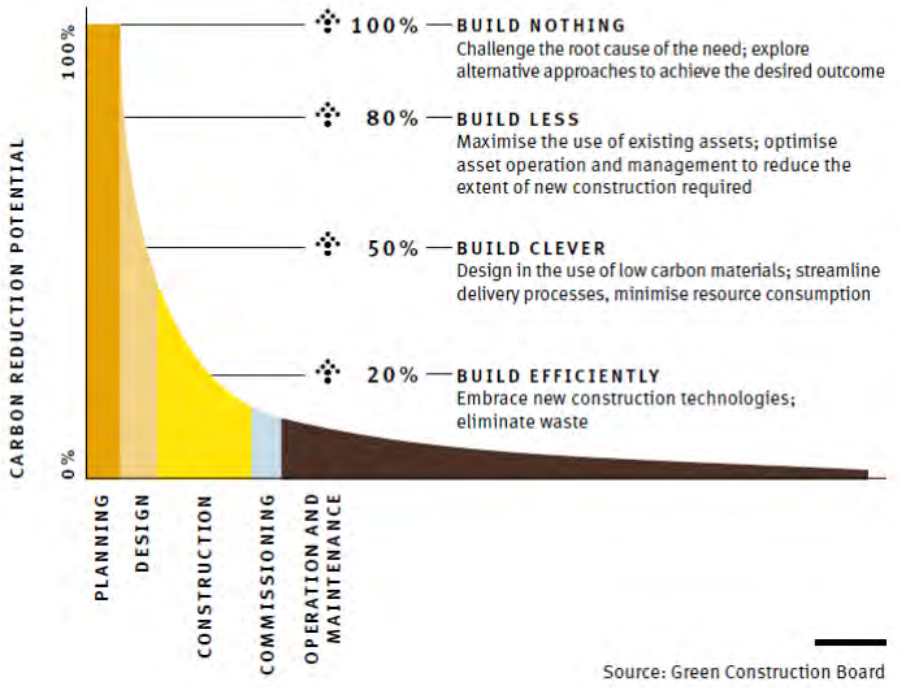
Source: *IPCC* [2021]

Net Zero

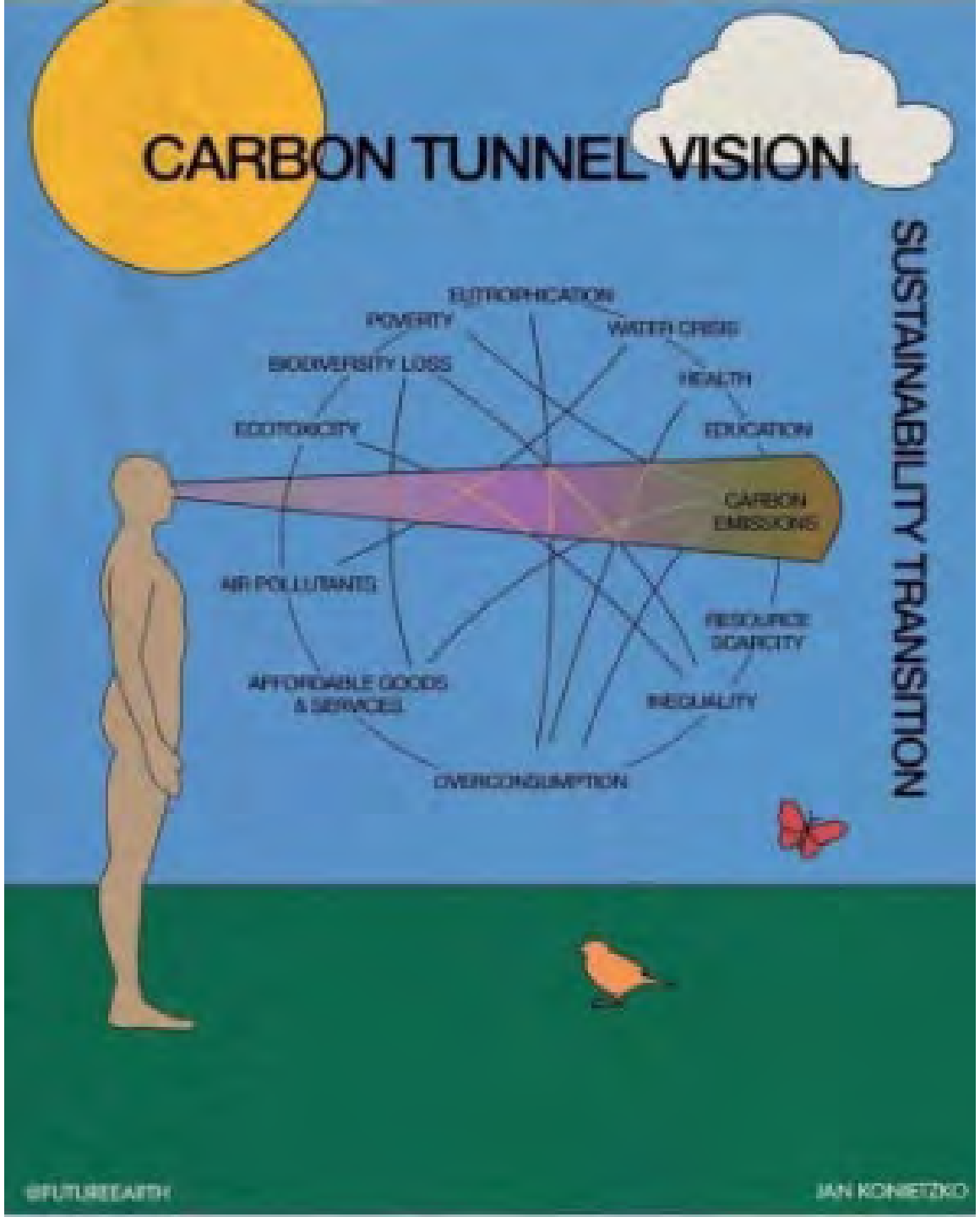
A shared responsibility to make more intentional, strategic decisions

70% of AU emissions: enabled by infrastructure

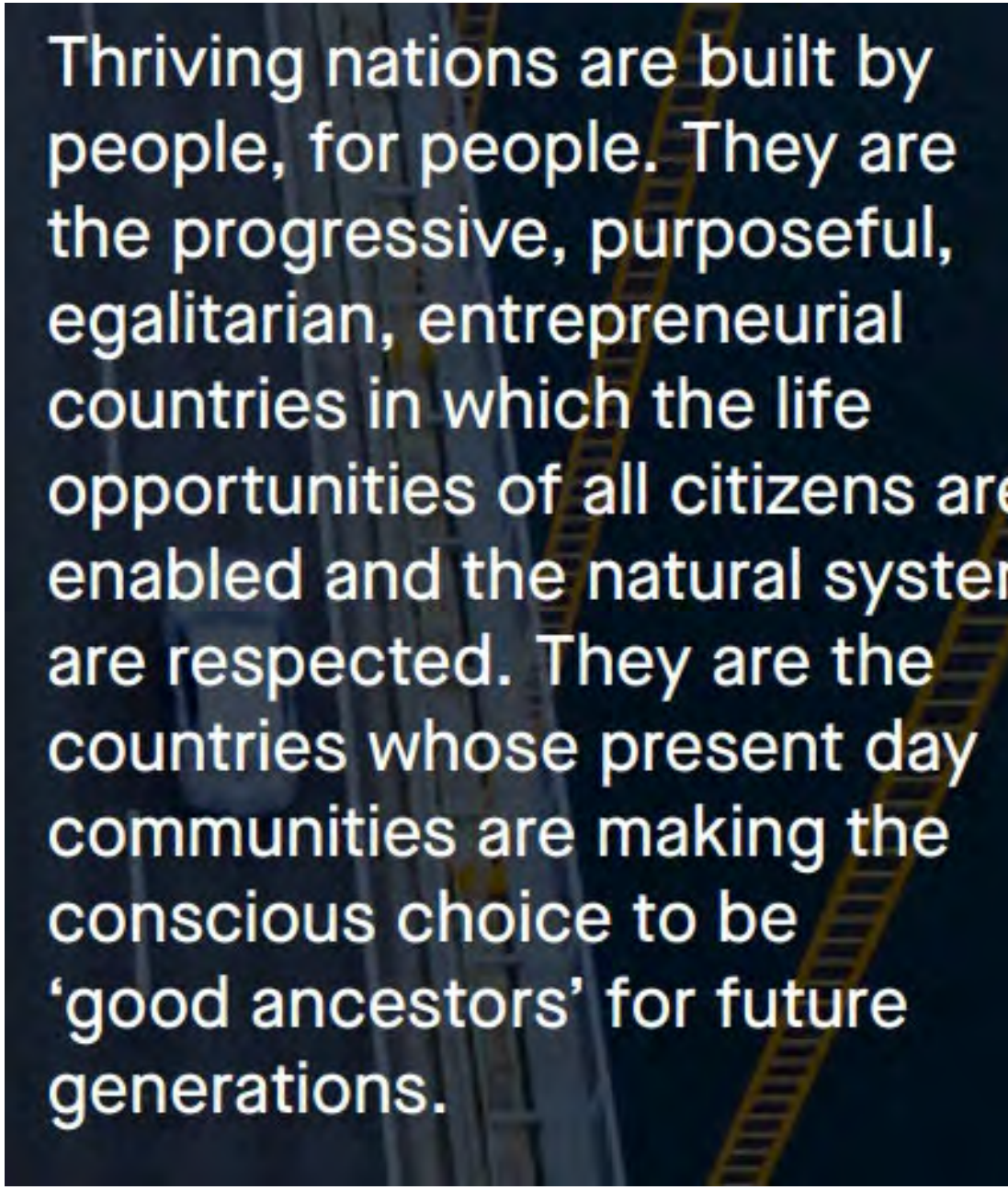




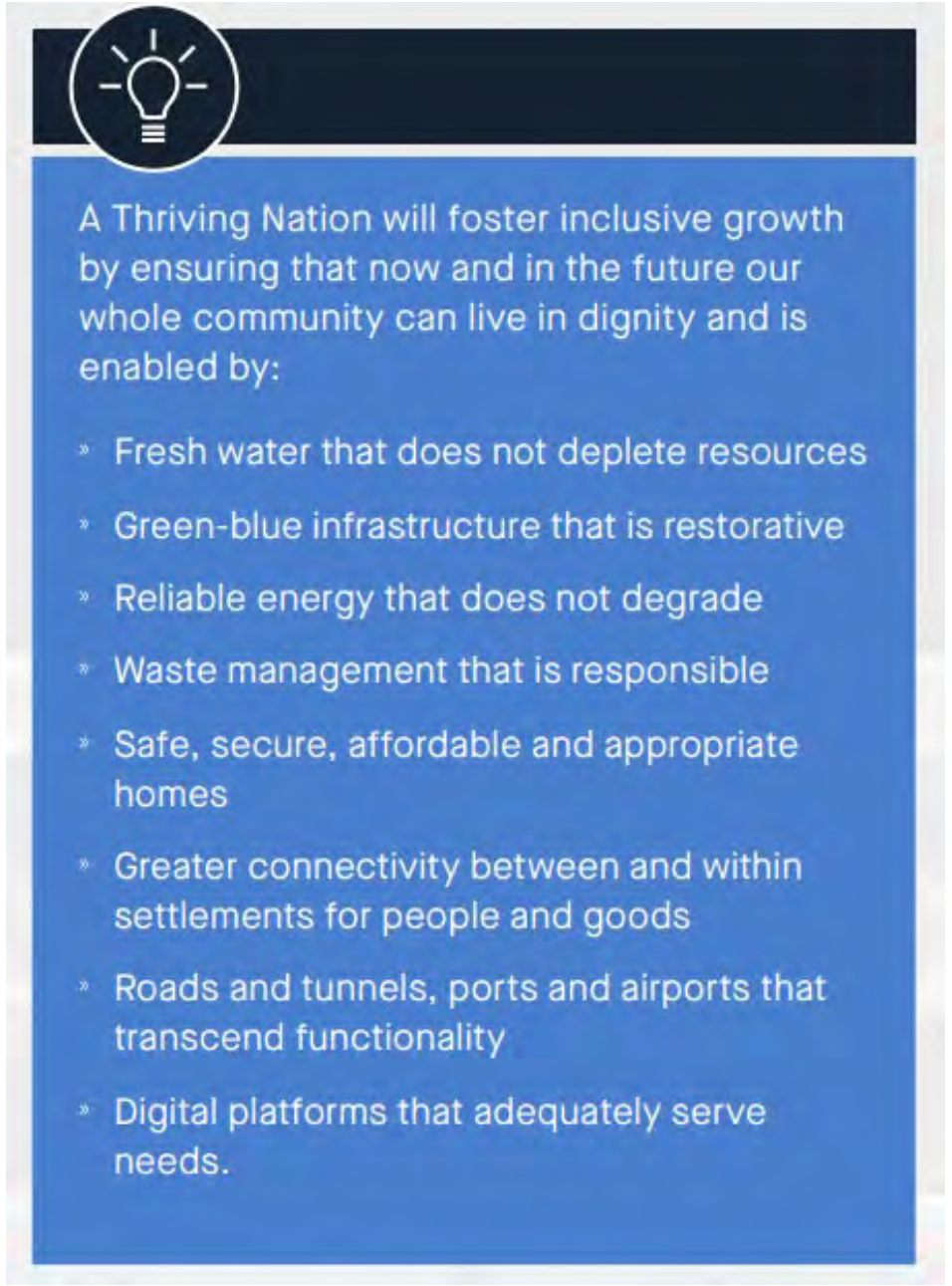
Source: Green Construction Board


CARBON TUNNEL VISION
SUSTAINABILITY TRANSITION
EUTROPHICATION
POVERTY
WATER CRISIS
BIODIVERSITY LOSS
HEALTH
ECOTOXICITY
EDUCATION
CARBON EMISSIONS
AIR POLLUTANTS
RESOURCE SCARCITY
AFFORDABLE GOODS & SERVICES
INEQUALITY
OVERCONSUMPTION
@FUTUREEARTH
JAN KONIETZKO

What is a Thriving Nation

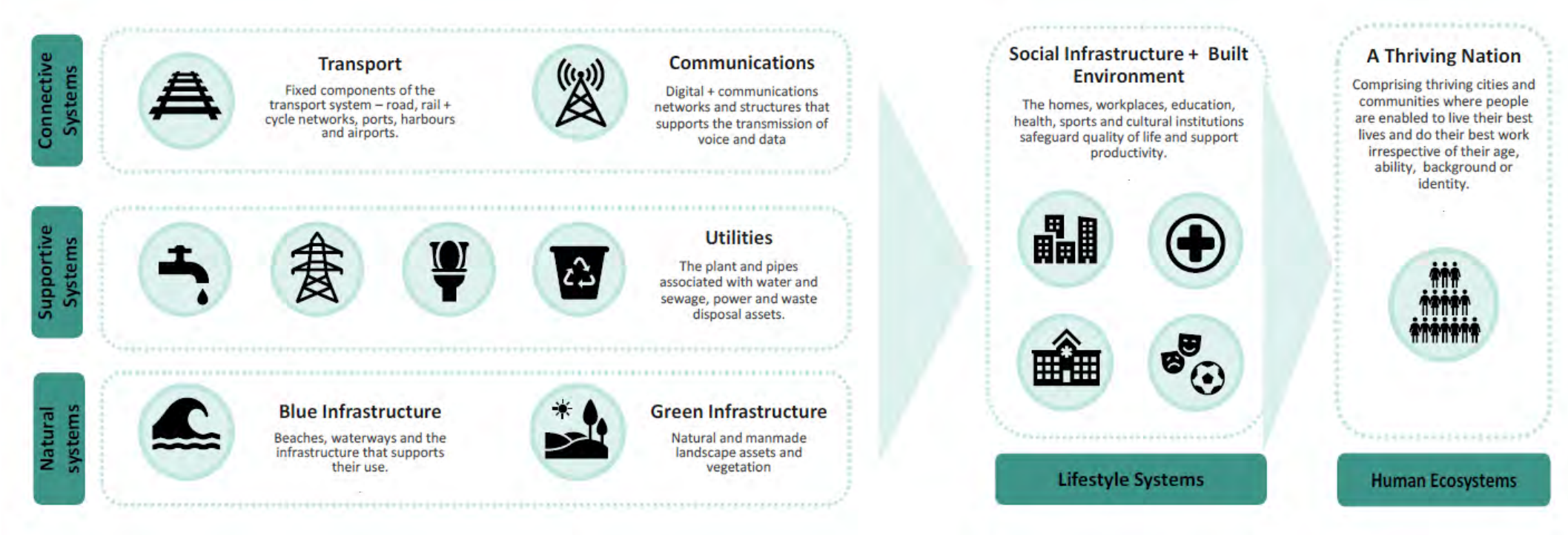


Thriving Nations

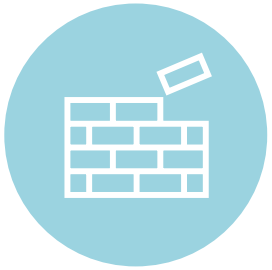


Infrastructure enables people to thrive

Infrastructure for people by people



A whole of life approach which embeds long-term outcomes into planning, delivery and operations, ensuring all infrastructure delivers social, cultural, environmental and economic benefits



Embedding Legacy

Consistent approach to infrastructure sustainability

Building Capability

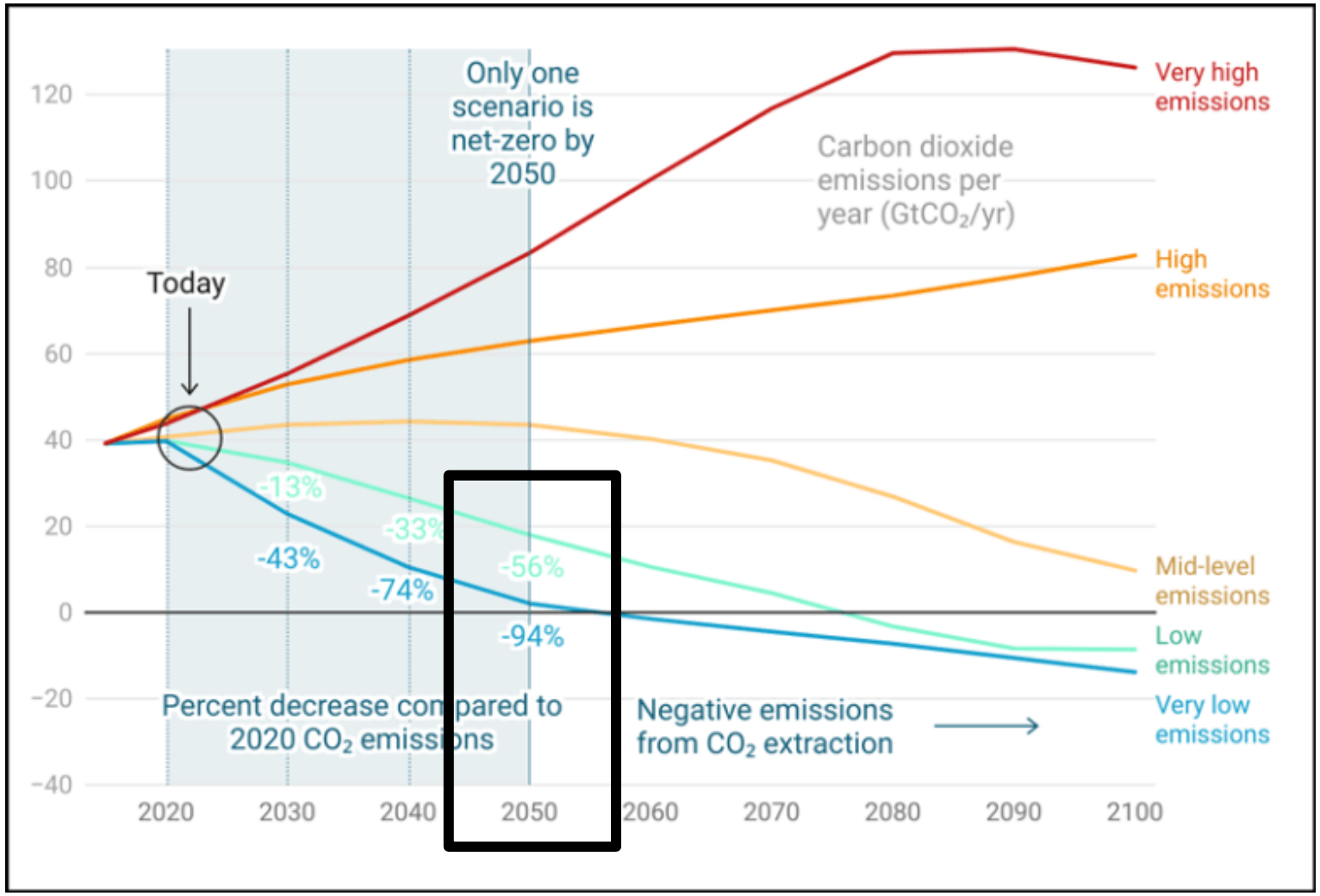
Industry capability as a global leader

Climate Action

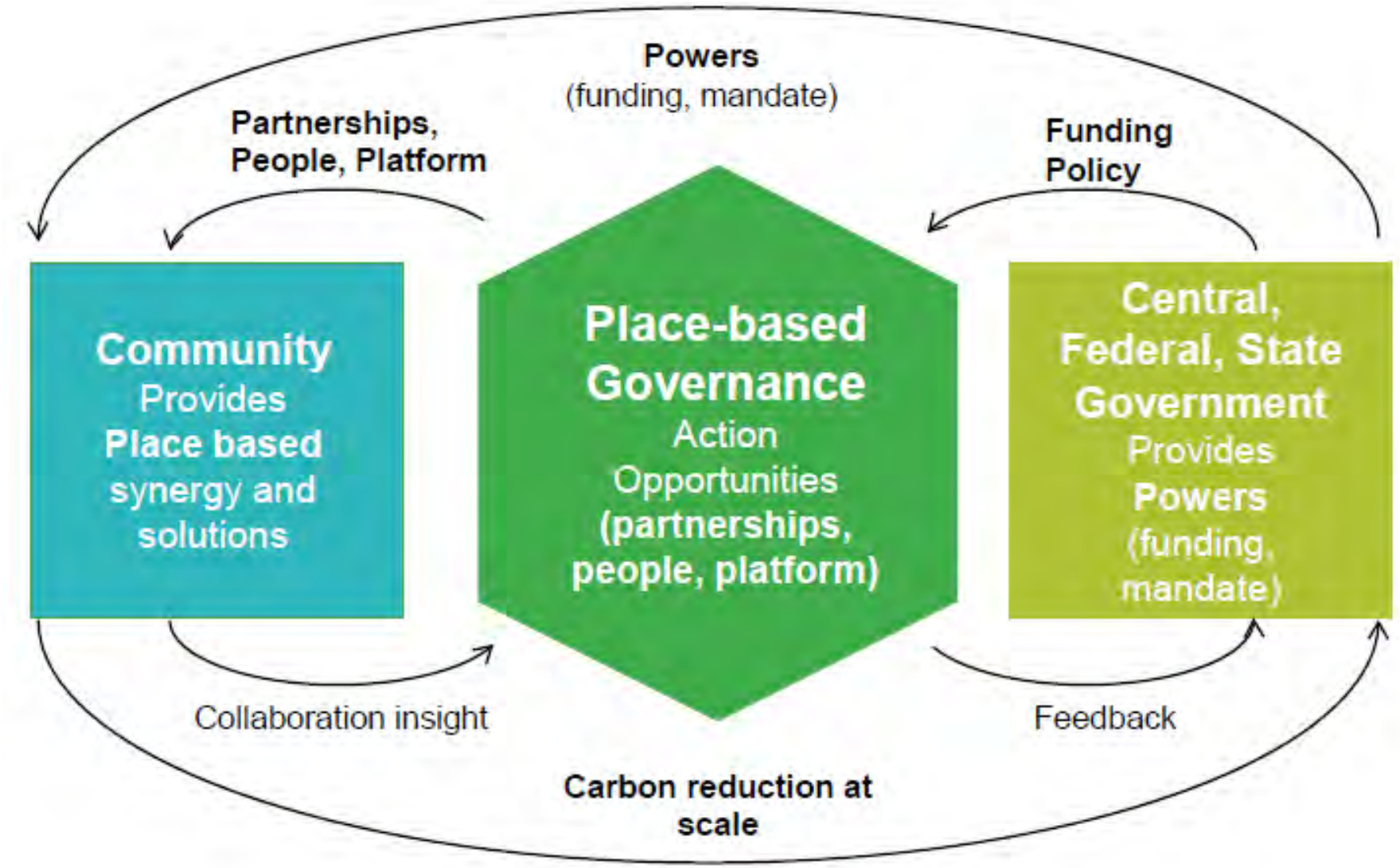
United, effective and productive transition

Enhanced assurance and transparency

Dynamic, agile system change in 8 years



Source: *IPCC* [2021]



Place Based Approaches to Net Zero, 2022, Mott MacDonald

Driving Benefits

Infrastructure Sustainability Council

Leadership | Capability | Commitment

Drivers which maximise

cultural, social, environmental and economic benefits

Ensuring all infrastructure delivers environmental, social, economic and cultural benefits

The ISC has created a systemic approach to delivering sustainable outcomes in the infrastructure sector.

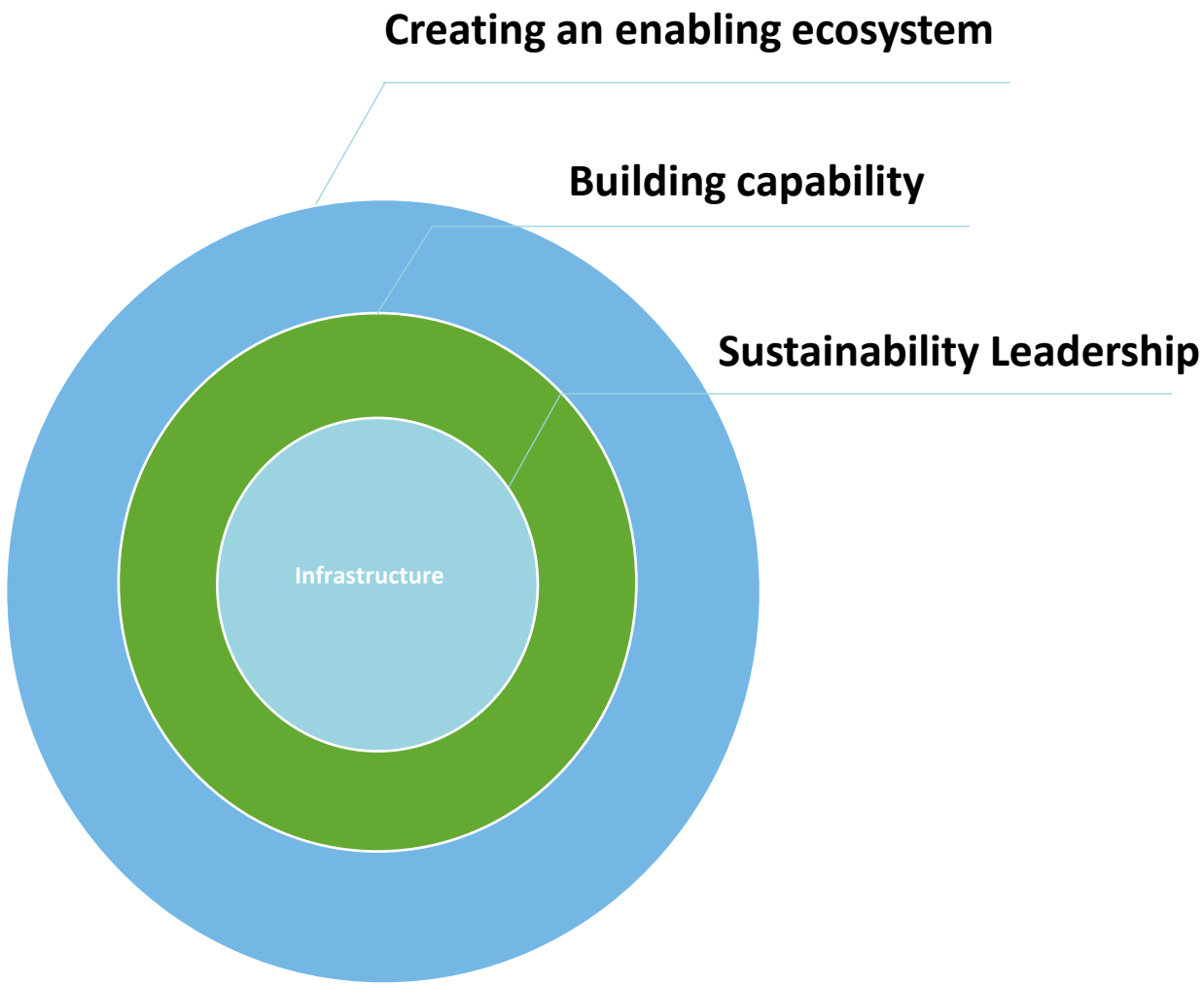
This involves three key levels of work for maximum impact:

1. **Sustainability Leadership** - Defining and driving leading sustainability outcomes through the IS Rating Scheme across lifecycle and supply chain.
2. **Building capability**– engagement and capability building with workforce, supply chain and systems to accelerate through learning curve in order to scale and deliver greater value.
3. **Creating an enabling ecosystem** –creating alignment of strategy, policy, planning; staying ahead of emerging risks and opportunities through research and policy; and collaborating to address common and macro-opportunities and challenges.

Successful implementation and alignment across all three levels achieves a reduction in barriers to change and impact; along with accretive returns in value for all stakeholders.

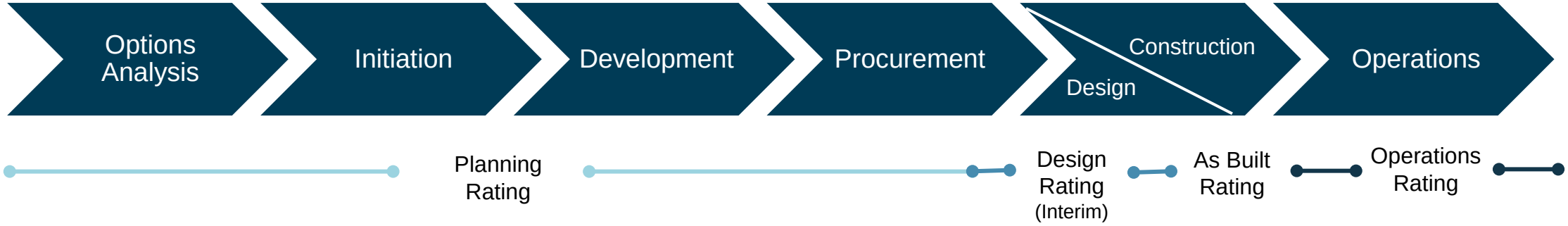
This scoping report, particularly focuses how sustainably leadership, through the IS Rating Scheme could be structure and deployed through Defence Estates, with preliminary scoping for relevant and material opportunities for other two areas enabling areas of work.

Also integrated into the approach is scope for mutual capability building in order to set both organisations for the best success in engaging with each other.

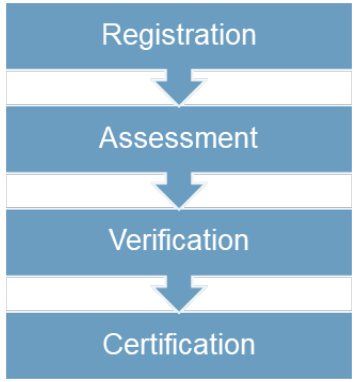


Whole of Life Consideration

Whole of life consideration



4-Step Process



Quadruple Bottom Line Metrics

IS Rating Scheme: Measure what matters

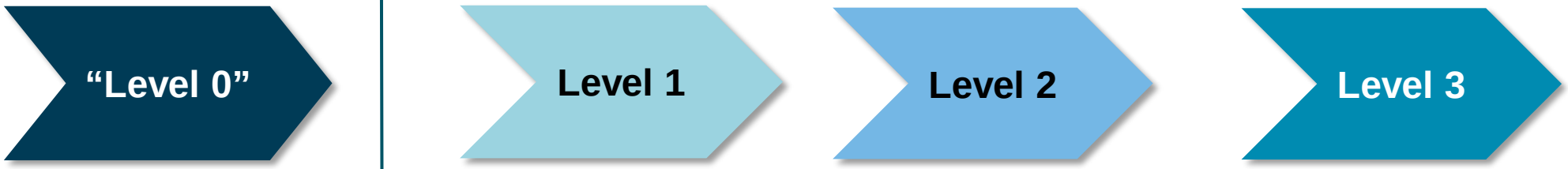
Governance	Environment	Social	Economic
Place	Energy & Carbon	Stakeholder engagement	Options Assessment & Business Case
Leadership & Management	Environmental Impacts	Legacy	Benefits Realisation
Sustainable Procurement	Resource Efficiency	Heritage	
Resilience	Water	Workforce Sustainability	
Innovation	Ecology		

The IS Rating Scheme

Driving best practice

Compliance

Beyond Compliance



Business as Usual

Measurement

No recurring / net impact

Restoration & Enhancement

IS Essentials

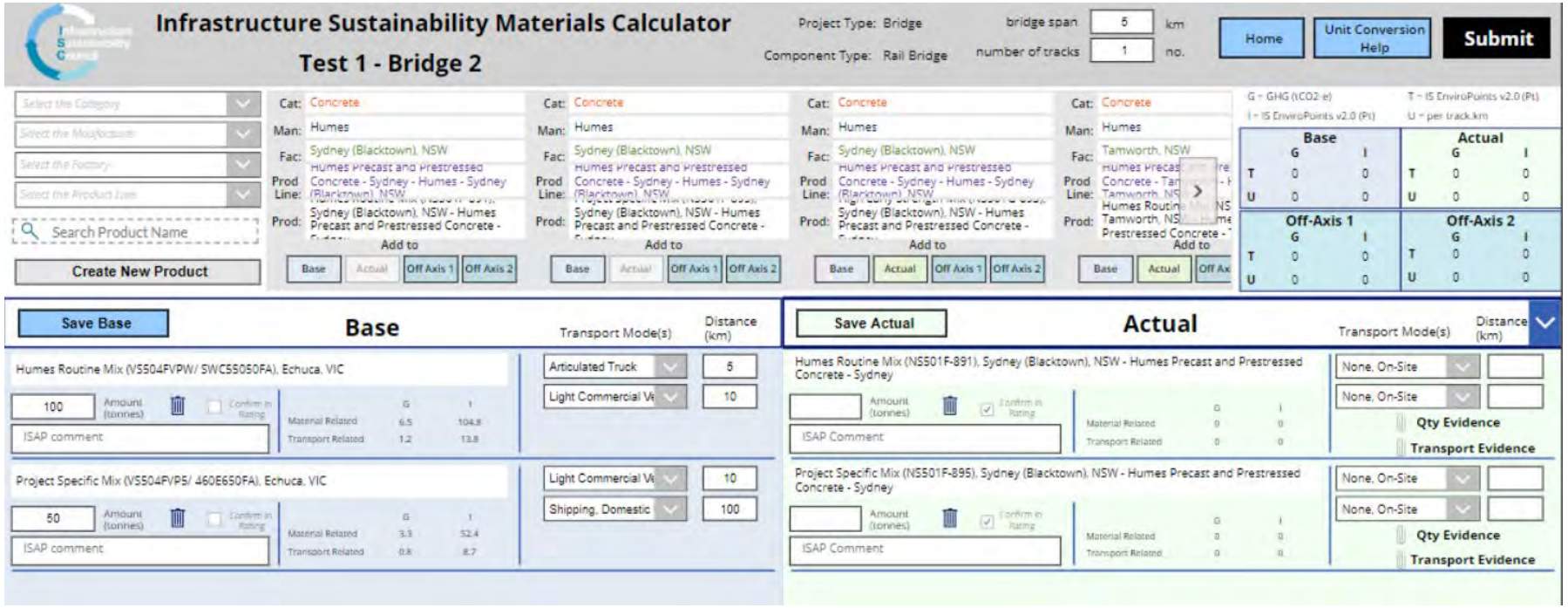
IS Essentials is the rating tool for infrastructure projects with capital values between **$5m and below $100m**

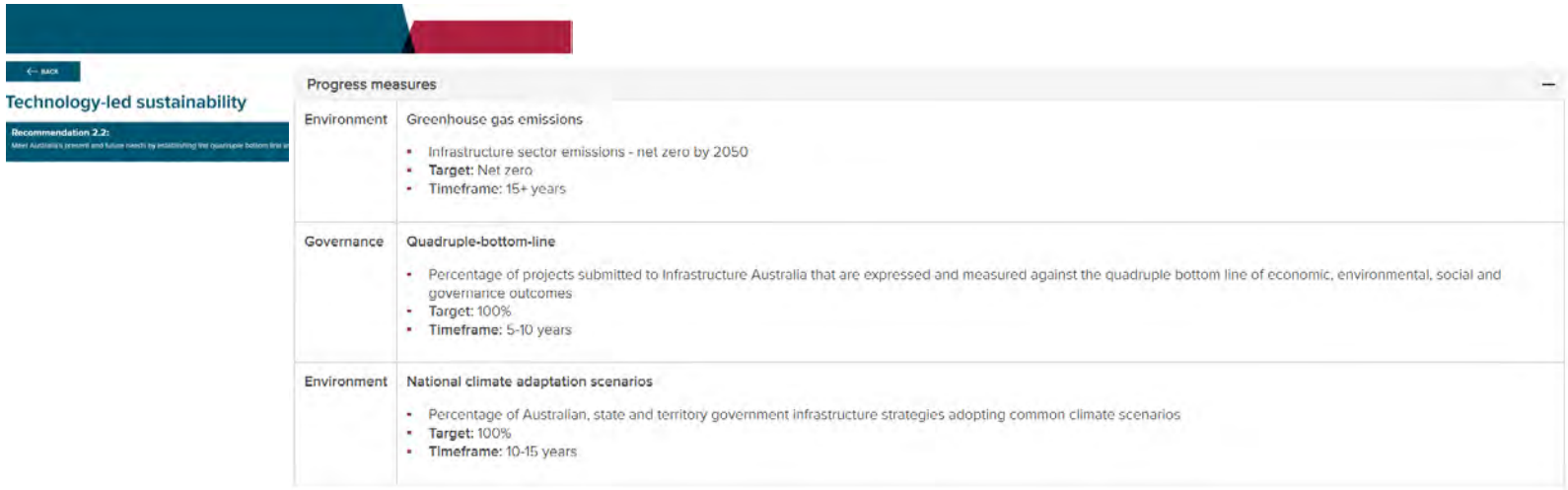
Target customers: Local Government, Infrastructure Proponents/Procurers

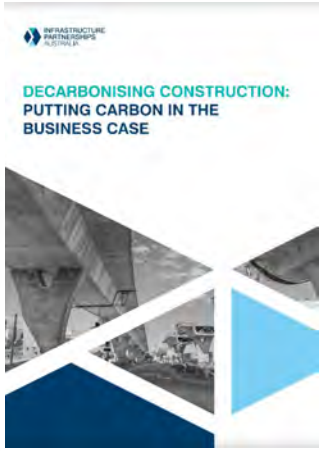
Problem statement: Providing sustainability performance assurance for projects under $100m that is accessible, scalable and cost-effective.

Value proposition: Improve the social, cultural, environmental and economic outcomes of all infrastructure projects using an established and recognised framework.

Embodied Carbon Calculator







Innovation Challenge

Contributing to a Circular Economy – Rewarding innovation through the IS Rating Scheme

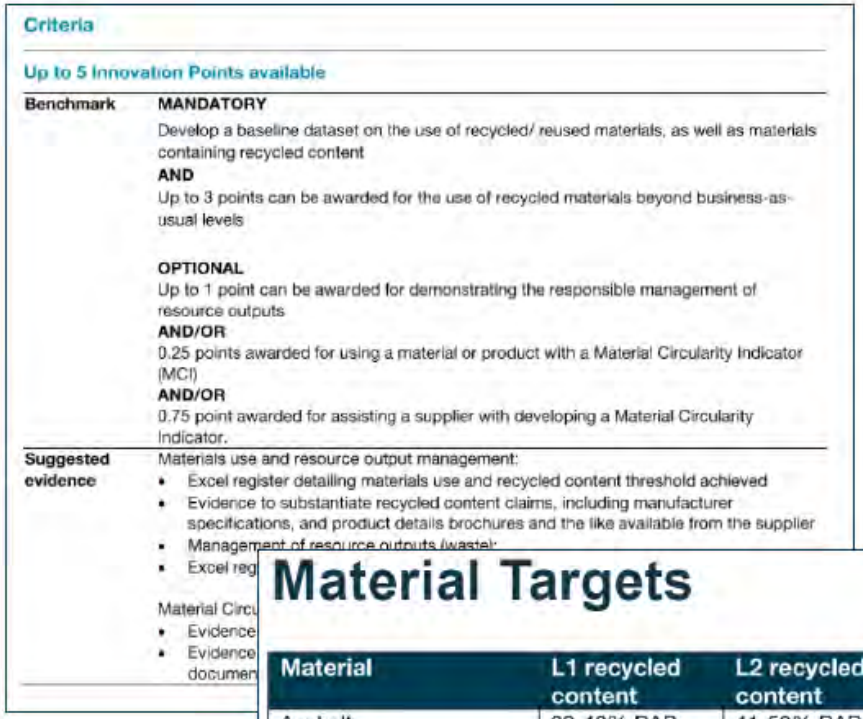
The design and implementation of the Innovation Challenge is aimed to encourage projects, assets, and organisations to increase the use of recycled content beyond existing business as usual levels. The data collected will be evaluated to understand the challenge, opportunities and capabilities of the industry.

Used as a feedback mechanise to understand the industry, and shape future national policy.

The materials measured in the challenge: Asphalt, Bitumen, Concrete, Aggregate, Piping, Timber and Permanent fencing etc, are aligned with materials identified in the National Waste Action Plan and present an opportunity in the industry. They are explored further in other partnership deliverables.

Four components to the Challenge

1) Develop a Baseline
2) Increase the use of recycled materials beyond business as usual levels
3) Responsible resource output management
4) Material Circularity Indicator



Criteria

Up to 5 Innovation Points available

Benchmark	**MANDATORY** Develop a baseline dataset on the use of recycled/ reused materials, as well as materials containing recycled content **AND** Up to 3 points can be awarded for the use of recycled materials beyond business-as-usual levels **OPTIONAL** Up to 1 point can be awarded for demonstrating the responsible management of resource outputs **AND/OR** 0.25 points awarded for using a material or product with a Material Circularity Indicator (MCI) **AND/OR** 0.75 point awarded for assisting a supplier with developing a Material Circularity Indicator.
Suggested evidence	Materials use and resource output management: • Excel register detailing materials use and recycled content threshold achieved • Evidence to substantiate recycled content claims, including manufacturer specifications, and product details brochures and the like available from the supplier • Management of resource outputs (waste): • Excel reg Material Circu • Evidence • Evidence documen

Material Targets

Material	L1 recycled content	L2 recycled content	L3 recycled content	Points per level
Asphalt	30-40% RAP	41-50% RAP	>50% RAP	0.2
Bitumen	4% - >3% virgin bitumen	3% - >2% virgin bitumen	<1% virgin bitumen	0.2
Concrete – cement	Threshold not prescribed under this challenge; the high clinker substitution innovation challenge is available for projects aiming to reduce the use of Portland cement.			
Aggregate	30-50% recycled aggregate	51-70% recycled aggregate	>70% recycled aggregate	0.2
Piping[1] (all materials)	10-20%	21-30%	>30%	0.2
Timber (reclaimed, reused or recycled)	10-30%	31-50%	>50%	0.1
Permanent fencing, bollards, decking, noise walls and outdoor furniture	20-40%	41-60%	>60%	0.1

Global Leadership

The most comprehensive and rigorous assessment process

[Link to paper]

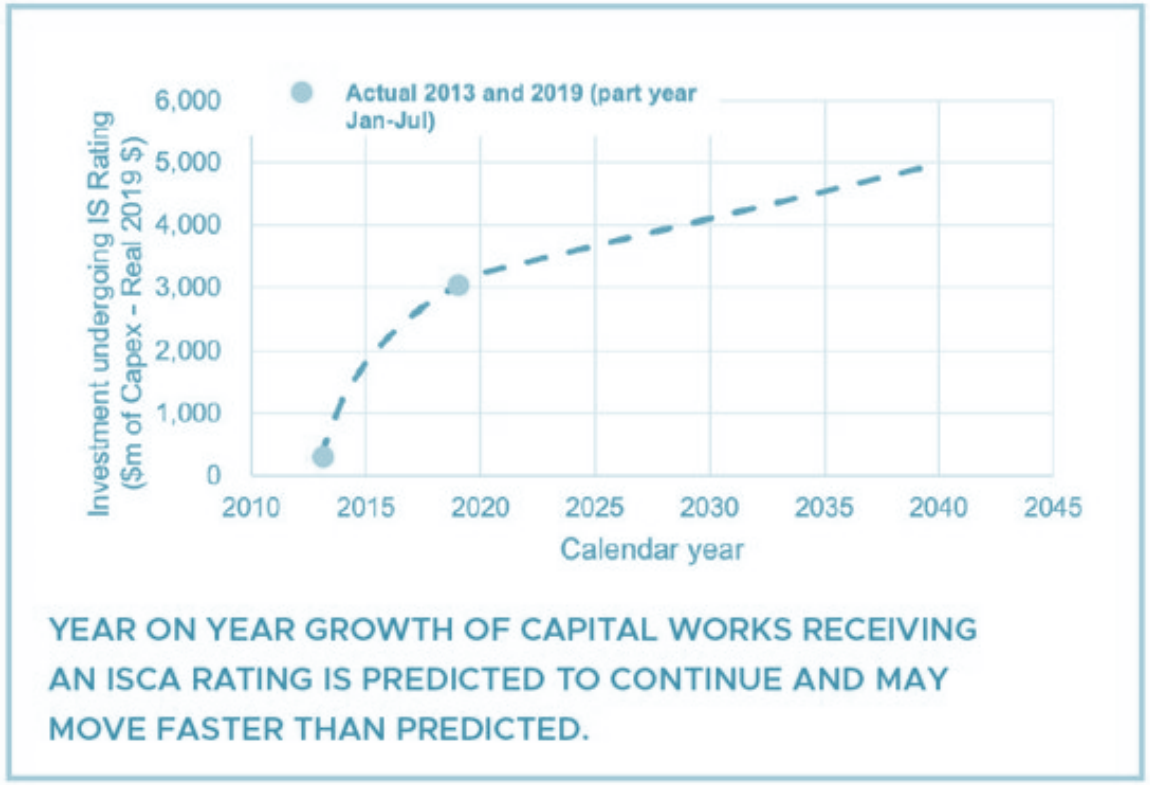
Figure 7: Assessment Verification Requirements and Result Aggregation

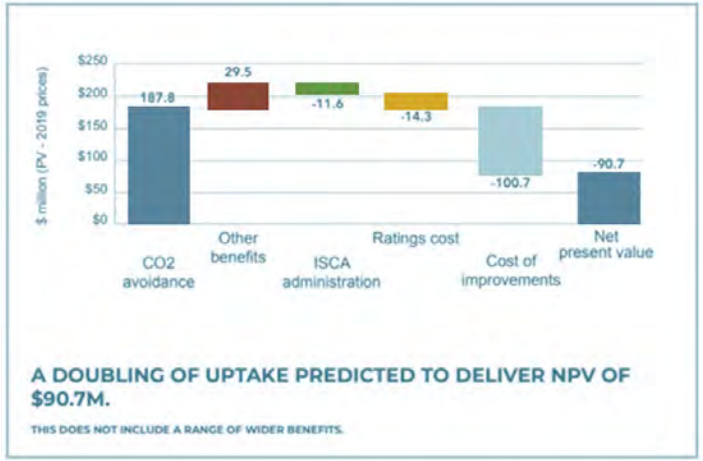
"the most comprehensive and rigorous assessment process"

"public procurement practices are a key success factor"
highlighting the global leadership across Australia and Aotearoa New Zealand

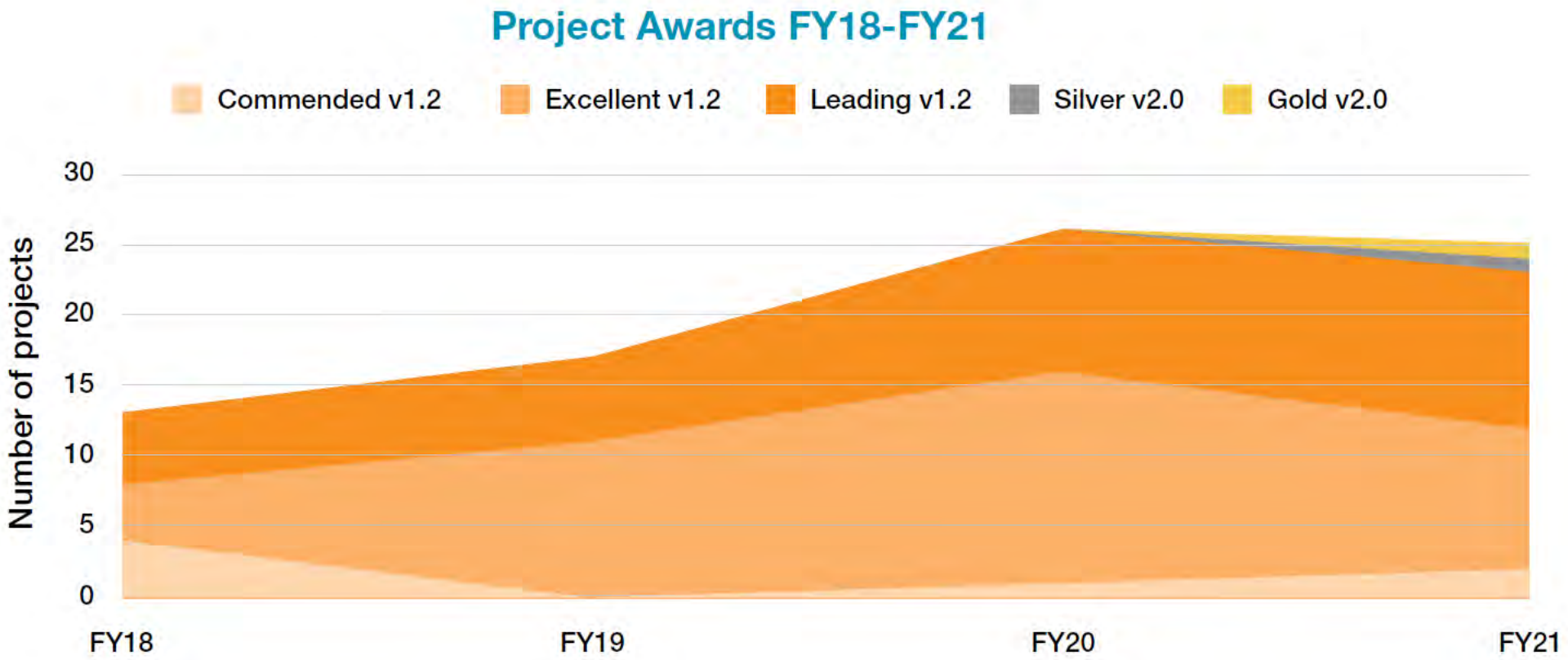
Sustainable infrastructure ROI

As part of a study undertaken by RPS in 2020 it was determined that there is a return on investment of at least $1.60 and possibly as high as $2.40 for every dollar spent. This is likely to be a conservative assessment as it does not include a range of wider benefits that are more difficult to quantify.



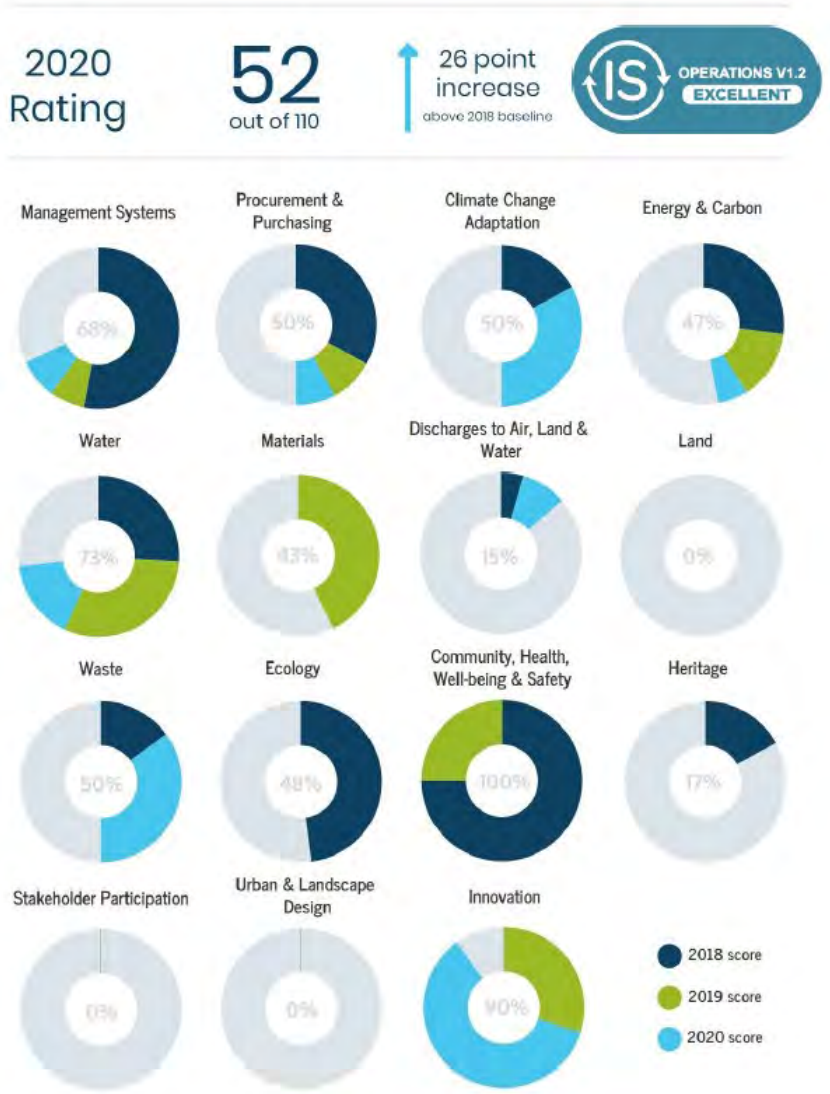


Scaling performance throughout industry



Operations Rating – Outcomes example

Actual outcomes achieved on a three years IS Operations Rating for a rail asset.



IMPACT

Our 2021 Impact Report highlights the value creation of IS ratings.

Lifecycle materials GHG emissions reduction **56%**	Lifecycle energy GHG emissions reduction **43%**	Lifecycle energy use reduction **47%**
Lifecycle water use reduction **50%**	Materials with sustainability credentials **1.5M tonnes**	95% of waste diverted from landfill = **14.5M tonnes**
97% of spoil re-used = **14M tonnes**	27 innovations from certified projects, including **1 WORLD FIRST**	1st IS Planning Rating Certification **12** IS Design Certifications **10** IS As Built Certifications **2** IS Operations Certifications

Existing Members

More than 200 organisations committed to accelerating sustainability through collaboration and contribution

Delivery Agency

Watercare
KiwiRail
NZ Transport Agency
CityRailLink
NSW Government – Transport for NSW
Government of South Australia – Department for Infrastructure and Transport
Queensland Government
Queensland Government – Department of Transport and Main Roads
Major Transport Infrastructure Authority
Metro
ACT Government – Transport Canberra and City Services
ARTC
mainroads Western Australia
NSW Government – Sydney Metro
North East Link
NSW Government – Public Works Advisory
Major Road Projects Victoria
Rail Projects Victoria
Level Crossing Removal Authority
SA Water

Contractors

Ghella
Downer
Fulton Hogan
Harrison Grierson
Fletcher Building
Kingfield Galvanizing
acciona
HEB construction
Arenco for infrastructure
Diona
CPB Contractors
Dempsey Wood
Decmil
Degnan
Laing O'Rourke
AW Edwards
Gamuda Australia
John Holland
ferrovial
FCC Environmental Services
Bielby Holdings Pty Ltd
McConnell Dowell Creative Construction
lendlease
BMD

Government, Policy & Regulation

Auckland Council
Australian Government – Department of Agriculture, Water and the Environment
Christchurch City Council
Sustainability Victoria
Victoria State Government – Environment, Land, Water and Planning
Australian Antarctic Program
Queensland Government
NSW Government – Planning, Industry & Environment
NSW Government – Office of Environment & Heritage
Victoria State Government – Department of Transport
Sunshine Coast Council

Consultants

KPMG
Tonkin+Taylor
TSA
Enveng Group
WSP
MG Solutions
makao
Losee Consulting
URBIS
wolfpeak
AECOM
ARCADIS
Beca
aurecon
Mott MacDonald
Moody's
Clayton Utz
Dassault Systèmes
GHD
EDGE
SMEC – Member of the Surbana Jurong Group
MinterEllisonRuddWatts
thinkstep anz

Existing Members

More than 200 organisations committed to accelerating sustainability through collaboration and contribution

Operator

ventia
Transurban
ALSTOM
QUBE
PORTS OF AUCKLAND
TĀMAKI HERENGA WAKA
AusNet services
UGL
transdev
the mobility company

Suppliers

BORAL
BLUESCOPE
BINGO INDUSTRIES
nation partners
SiteHive
HUESKER
Ideas. Engineers. Innovations.
FENCEPAC
ANZ
SoilCyclers PTY LTD
InfraBuild
Holcim
EARTHING SOLUTIONS
enosi
RARE Environmental
REPURPOSE IT
Dobbs Landscaping
State Asphalts
Vital Chemical
RED SAND
Hanson HEIDELBERGCEMENT Group
GEOFABRICS Sustainable solutions
RESOURCECO
ECHO BARRIER Environmentally Sound
AUTODESK
XYPEX
CIRTEX GAIN MORE GROUND
RMIT UNIVERSITY
EcoOrigin
BarChip Inc. The Synthetic Fibre Experts

NFP/Industry Association/SME

Infrastructure New Zealand
DIVERSITY WORKS NZ
CIVIL CONTRACTORS NEW ZEALAND
CEMENT CONCRETE & AGGREGATES AUSTRALIA
galvanizers ASSOCIATION OF AUSTRALIA
AUSTRALASIAN RAILWAY ASSOCIATION
DLPA
Jobsbank
AAPA AUSTRALIAN ASPHALT PAVEMENT ASSOCIATION
AustStab
TyreStewardship AUSTRALIA
PIPA PLASTICS INDUSTRY PIPE ASSOCIATION OF AUSTRALIA LIMITED
ACRS
Ash Development Association of Australia
refugeetalent KEY PEOPLE
SUSTAINABLE ENGINEERING SOCIETY ENGINEERS AUSTRALIA

Enablers

Policy | Planning | Procurement | Investment

Proposed approaches to wider public benefit

through infrastructure planning, delivery and operations

Driving positive outcomes and impact

Infrastructure	Industry	Impact
Public infrastructure driving value and producing more for every dollar invested	A skilled and capable workforce serving current and future infrastructure needs	Resilient, inclusive and sustainable infrastructure with assured performance

Leadership	Systems & Processes	Resourcing

ANZ Sustainability Leadership on the rise

Levers deployed across Australia and Aotearoa New Zealand

+**$217b** capex

220 active projects

+160 certified ratings

Policy ▲

Planning ▲

Procurement (threshold)

Investment practice ▲

ANZ Traction and Mandating

Location	Agency	Mandating thresholds / requirements
NSW	*Dept of Planning and Environment*	ALL state critical infrastructure
	Transport for NSW	ALL projects >$50m, High risk projects <$50m
	Sydney Metro	ALL project in program
	Queanbeyan Palerang Regional Council	ALL projects >$2m
QLD	State Infrastructure Plan	ALL projects >$50m
	Transport and Main Roads	ALL projects >$100m
	Dept State Development, Infrastructure Local Government and Planning	Stage 3: Detailed Business Case
	Olympics	Economic Infrastructure for the Olympics
WA	Main Roads WA	ALL projects >$100m
	Office of Major Transport Infrastructure Delivery	Metronet program
ACT	State policy	ALL project > 10m
SA	Dept of Infrastructure and Transport	ALL projects >$100m
VIC	Major Roads Projects Victoria	ALL projects >$100m
	Office of Projects Victoria *(Sustainable Investment Guidelines)*	High Value, High Risk
	Level Crossings Removal Authority	ALL projects in program
	Rail Projects Victoria	ALL projects in Melbourne Metro program
	City of Casey	Capital works projects
AU	Transurban	All capital works projects >$100m
NZ	Waka Kotahi New Zealand Transport Agency	All capital works projects >$15m
	City Rail Link Ltd	ALL projects in program

Sustainability and Impact Finance

NSW Sustainability Bond Programme

Spotlight: The sustainability achievements of the Transport Access Program

Infrastructure Sustainability Council (IS Council) highlights

Transport for NSW takes a broad approach to delivering sustainability through the Transport Access Program (Tranche 3) – which primarily aims to improve access to public transport for those with a disability, limited mobility, or parents with prams. Upgrades to Waratah Station at Newcastle and Wyee Station at Lake Macquarie were completed in the second half of 2020 and jointly received a 'Leading' Infrastructure Sustainability (IS) As Built rating awarded by the IS Council.

The 'Leading' rating reflects verification of a broad range of sustainability achievements through design and construction. The key achievements across these 2 stations include:

- A 31% reduction in energy usage, achieved through the specification of high efficiency cooling systems for station equipment and service rooms. This equates to a saving of 14,059 GJ over the life of the project.
- A 43% (or 23.5 mega litre) reduction in water footprint over the project's lifecycle through water efficient design. This was achieved through usage of high efficiency fixtures and fittings and avoiding landscape irrigation through drought resilient native plantings.
- A 9% reduction in materials footprint, equating to a saving of 774 tCO_2-e (Scope 3 emissions). Materials reduction initiatives were achieved through design refinements and use of recycled material.
- Over 50% more trees planted than the project offset requirements.
- Creating a sense of place that celebrates the locality through installation of community artwork on the station building at Waratah Station (see right).

Waratah Station.

Artwork at Waratah Station. The mural, titled 'Surround', was painted by local artists and pays homage to the graffiti history of the area and transport culture.

Reliance Rail

The SPTs align to four metrics, with an Infrastructure Sustainability Council ('ISC') Operations Rating score as the cornerstone target. ISC is Australia's leading infrastructure sustainability body, and an Operations Rating will assist Reliance Rail to focus its sustainability efforts.

cefc

- $150 million debt facility.
- First major investment in low-emission transport infrastructure

Training

ISC Internal Training package – Contributing to a Circular Economy Innovation Challenge

ISC Internal Training department created a tailored training package for the Contributing to a Circular Economy Innovation Challenge .The training package was designed to support the pilot partners.

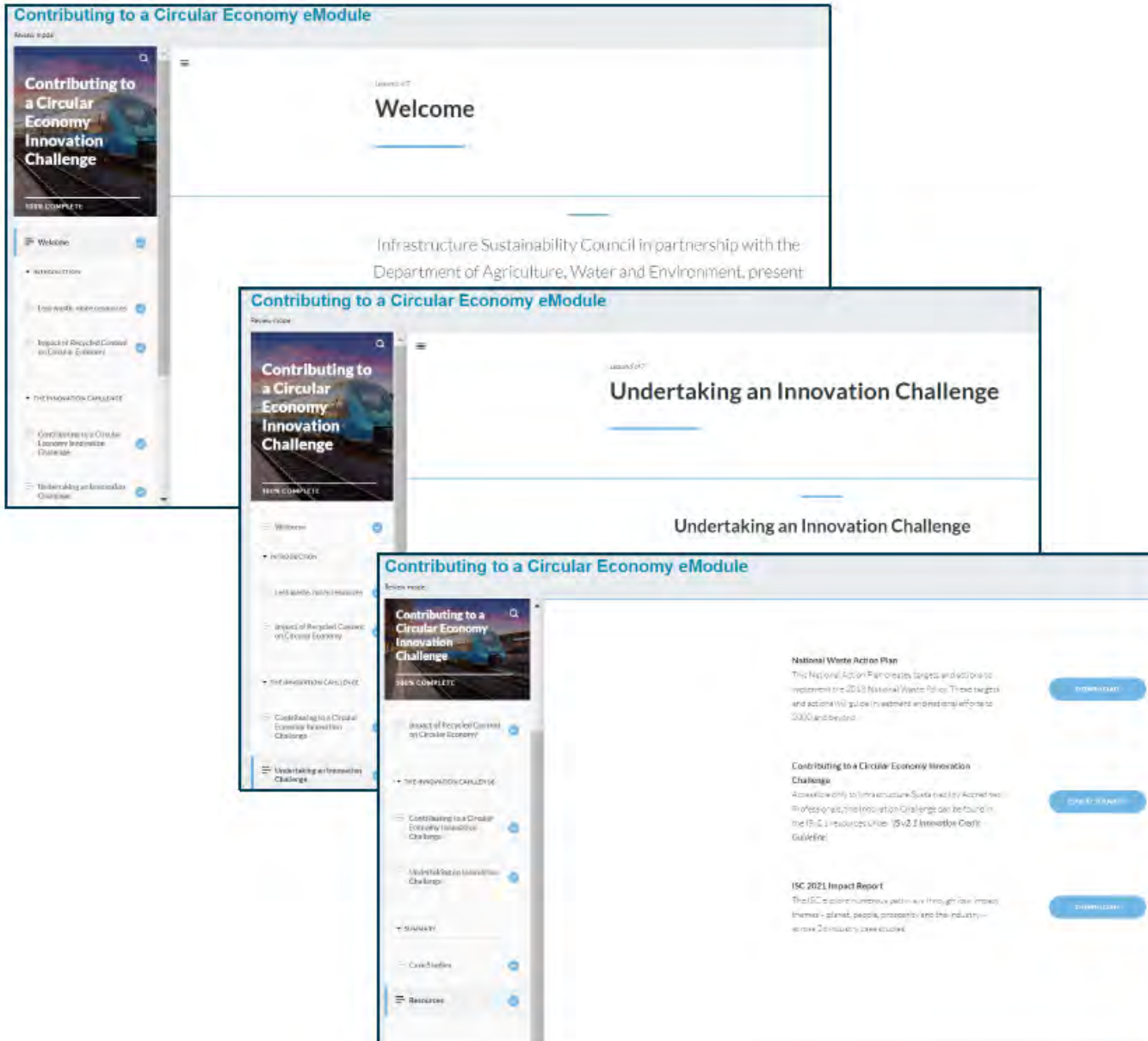
The course presents examples of Infrastructure contributing towards a Circular Economy, explore the National Waste Policy, and introduce the Innovation Challenge, Contributing to a Circular Economy, created in partnership with the Department of Agriculture Water and Environment.

Content:

INTRODUCTION
- Less waste, more resources
- Impact of recycled content on circular economy

THE INNOVATION CHALLENGE
- Undertaking an Innovation Challenge
- Contributing to a Circular Economy Innovation Challenge

SUMMARY
- Resources
- Case Studies



Industry Data Report

Snapshot of the Business-as-usual levels of recycled content used in Industry

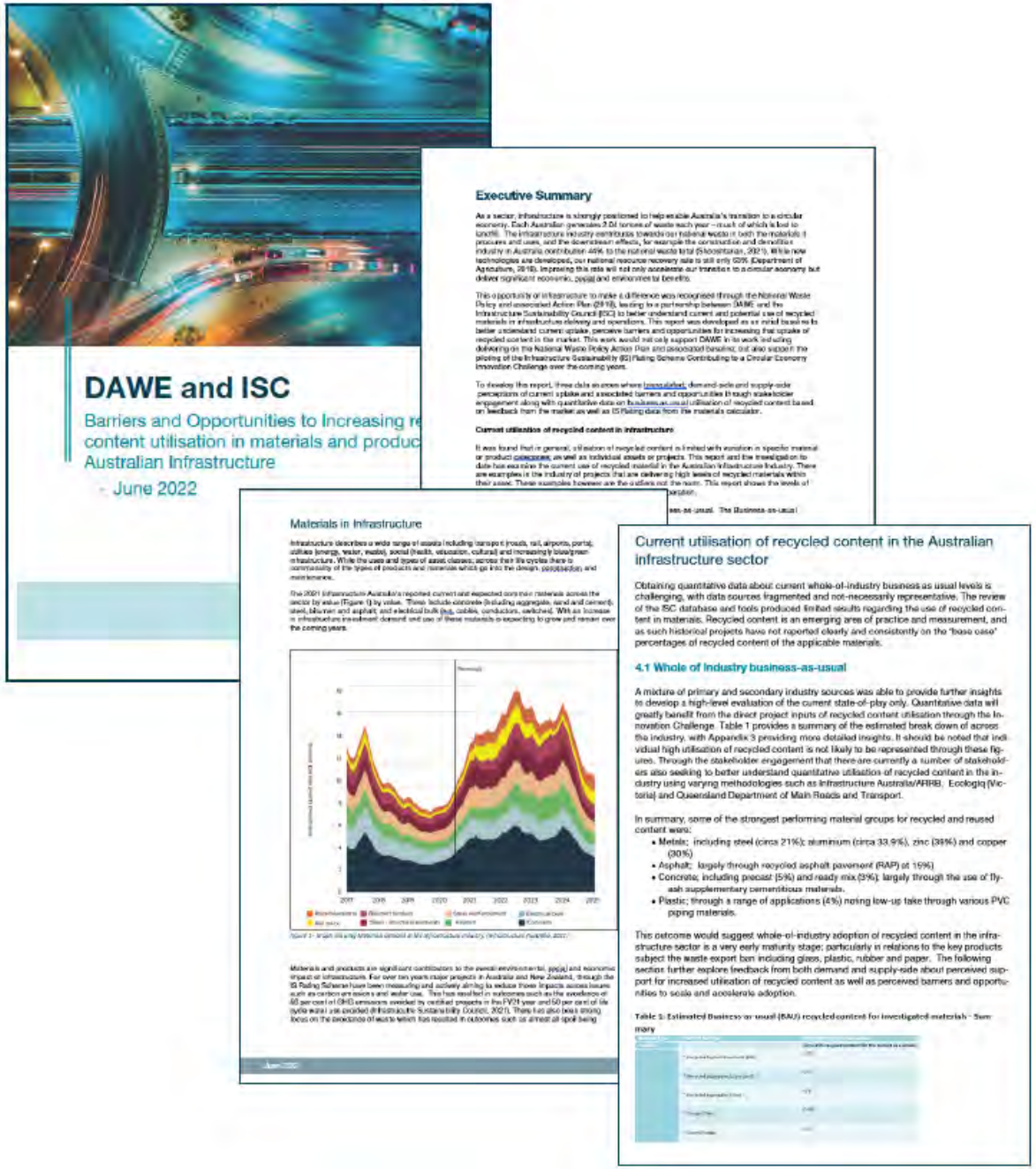
The key report deliverable was completed and delivered on 30 June.

This report provided a comprehensive examination of recycled content use in the Infrastructure industry. Utilising ISC Project databases including technical support and advice from LCA specialist.

Feedback capture from the recruitment of pilot partners was also included.

Industry Data Report

- Background and context
- Qualitative feedback from recruitment of challenges of recycled content use
- Methodology
- Quantitative BAU levels of recycled content use in industry
- Interpretation of data
- Barriers, opportunities and recommendations



ISupply Directory

Driving sustainable procurement practices

Hatelit Asphalt Reinforcement Grid

HaTelit C asphalt reinforcement adopts the high stresses developing at the crack tips in the lower pavement layers and distributes them over a larger area. ...

Credits: **Ene-1, Ene-2, Mat-1, Pro-1, Pro-2, Pro-3, Rso-1, Rso-4, Rso-6**

Cirtex Optimise – Engineering Design Services

Cirtex Optimise is our team of industry professionals dedicated to optimising the use of resources on your project. The Cirtex Optimise team uses ...

Credits: **Ene-1, Ene-1, Ene-2, Inn-1, Inn-1, Lan Rso-6, Rso-7, Spr-1, Spr-2, Spr-3, Was-2, W**

Underground pits made fro

PACT Reuse (formerly Viscount Rotatic for more than 30 years with rotational ...

Credits: **Dis-1, Env-2, Inn-1, Inn-1, Man-1, Mat**

bidim® Green

Geofabrics® is at the forefront of greer for the civil, rail, construction and waste ...

Credits: , **Inn-1, Inn-1, Lan-2, Mat-1, Pro-2, Rs**

Golden Bay Cement

Golden Bay Cement's Portland Manufa remaining in New Zealand. The Plant, lo

Credits: **Mat-1, Mat-2, Rso-6, Rso-7**

Emesh

Emesh recycled fibre reinforcement rep parks, drains, precast products and traf

Credits: **Mat-1, Mat-2, Pro-2, Pro-3, Pro-4, Rs**

Vital Flo-Chem Thick with R

Vital Flo-Chem Thick with Rust Guard is designed to remove concrete residue a

Credits: **Rso-1, Rso-4, Wat-1, Wat-1, Wat-2**

Holcim Ready-mix Concrete

Holcim Australia is a leading supplier of construction materials in Australia, originally serving the industry under the well-known Readymix and Humes brands dating back to ...

Credits: **Ic-2, Ic-5, Mat-1, Mat-2, Rso-6, Rso-7**

PlastiPhalt®

PlastiPhalt® is an innovative, environmentally-friendly asphalt pavement containing recycled waste plastic. Unlike other asphalts modified with recycled plastics, PlastiPhalt® uses specially selected polymers which are ...

Credits: **Mat-1, Pro-2, Rso-1, Rso-6, Spr-1**

EZ Street Bioblends®

EZ Street Bioblends® is a premium, polymer modified cold asphalt, for the permanent repair of pot holes, utility trenches, edge repairs, and is also ideal ...

Credits: **Ene-1, Ene-1, Mat-1, Rso-6, Spr-1**

Warm Mix Asphalt

Warm Mix Asphalt is a sustainable alternative to traditional Hot Mix Asphalt. Traditionally, asphalt is produced at temperatures around 160-180°C to optimise the coating of ...

Credits: **Dis-1, , Ene-1, Ene-1, Env-1, Mat-1, Pro-1, Rso-6, Spr-1, Wat-1, Wat-1**

GripPhalt™

Not only is GripPhalt™ a good choice for the environment because of its high percentage of recycled and renewable material, its superior skid resistant properties ...

Credits: , **Mat-1, Pro-3, Rso-6, Spr-1**

Case Studies

Christchurch City Council

In May 2019 Christchurch City Council declared a Climate Emergency and updated their procurement policy to include sustainability as a priority, a similar and necessary approach taken by world leading local governments.

Their next bold move, the first of its kind across Australia and New Zealand, was to sign an Memorandum of Understanding to use the ISC's tools to measure, monitor and report on the Council carbon load across its infrastructure asset portfolio.

The MOU sets out a collaborative pathway with Council to begin recording a baseline and consistently measuring progress towards carbon neutrality.

Sydney Roads
Asset Performance Contracts

- Forward-thinking, innovative with a strong focus on the customer and a set of objectives that help deliver economic growth and sustainability.
- The contracts use the IS Rating framework to be consistent with the UN Sustainable Development Goals
- This will make best use of available resources and assets, and ensure a resilient transport system that contributes to the NSW Government's objective of net-zero emissions by 2050.

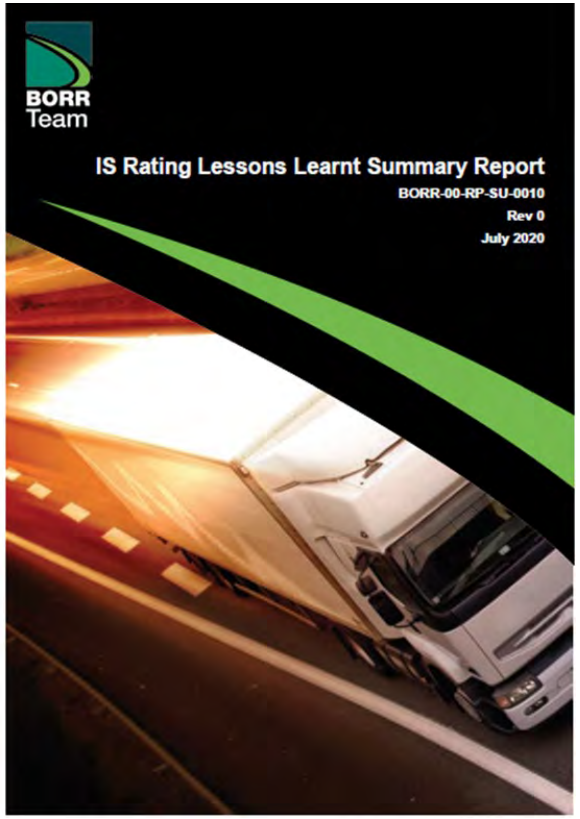
With 3-year rolling IS Operations ratings, continuous improvement will occur across the quadruple bottom line – achieving more from the existing asset network.

1 xxxxx

Planning Rating – The Bunbury Outer Ring Road project

Bunbury Outer Ring Road (BORR) is a 27 kilometre section of highway that will connect Forrest Highway to Bussell Highway in Western Australia's south west region.

- First project registered for an ISv2.0 Planning rating.
- The Project Team targeted a Bronze rating but delivered a Silver Planning rating
- The team went beyond a business-as-usual approach to implement sustainable initiatives



Energy and Carbon

Lesson 1: *The highest emission contributor was from vehicles using the asset during operations. Limited actions from an infrastructure design perspective to achieve emission reductions from the vehicles using the built asset.*

Lesson 2: *Project street lighting was estimated to contribute 50% of operation and maintenance emissions (when excluding vehicle use). By investigating opportunities to reduce emissions, significant benefits are anticipated to be realised, including:*

- Saving of $3.5M across the 7 interchanges on the BORR project
- Saving $35,000/annum operational costs
- Saving 160 tCO2e- per year
- Reduced light pollution for residents in close proximity to the road
- Greater emphasis on street lighting at the northern and southern interchanges to improve amenity and address community concerns.

Resources Credits

Lesson 1: *The resource efficiency workshop and development of a Resource Efficiency Strategy proved useful in identifying project specific targets and opportunities for the design, construction and operation phases.*

Lesson 2: *Assessing materials against embodied greenhouse gas emissions, rather than by volume or cost, challenged designers to consider opportunities to reduce net impacts.*

Design and As-Built Rating – Regency Rd to Pym St

The project comprises an at-grade motorway from the existing motorway infrastructure to the north (South Road Superway); an overpass of the motorway over Regency Road; and an at-grade motorway from Regency Road to Pym Street, transitioning to the lowered motorway infrastructure (Torrens Road to River Torrens Project)

Balancing the need for an efficient freight and transport corridor, while creating and maintaining a connected, accessible, green, liveable and desirable public realm providing ongoing benefits to users and the wider community for years to come

Outcomes

- Development of EPD (Downer) / promote EPD products
- 30% recycled aggregate in kerbs
- Maximising SCMs in concrete
- 100% recycled asphalt in carpark / soft plastics in asphalt
- Support apprentices / trainees
- Workforce- and local industry participation targets
- Enforcement of waste hierarchy
- Replace diesel with hard-wired connection
- Lower wattage operational lighting
- GreenPower
- Increased spoil movement efficiency
- Pavement material reduction reduced fuel use
- Reduced Portland Cement content - structural (20% to ~30% SCMs)
- Regency bridge: 22% ↓ CO2-e
- Retain existing pavement
- Match design life of pavement tie ins
- Increased RAP (30%, up from 20%)
- Reconophalt (soft plastics)

Metro Trains Melbourne

Metro Trains Melbourne (MTM) have committed to measuring sustainability performance annually using the ‘IS’ Operations rating scheme.

MTM completed an initial operations rating under the ‘IS’ scheme in 2018, forming the baseline for continuous improvement. In 2019 they achieved a 44 percent improvement from the baseline and were awarded a ‘Commended’ IS Operations Rating.

1 https://www.metrotrains.com.au/wp-content/uploads/2019/12/MET8780-MTM-Corporate-Responsibility-Sustainability-Statement-2019-FA-WEB-8MB-1.pdf

For further information

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Infrastructure Sustainability Council