

## SUMMARY OF ISCA'S RESPONSE TO THE AUSTRALIAN INFRASTRUCTURE AUDIT 2019

### INTRODUCTION

The Infrastructure Sustainability Council of Australia (ISCA) supports Infrastructure Australia's mission to deliver better infrastructure for all Australians. Therefore, ISCA has taken the opportunity to respond to the Australian Infrastructure Audit, conducted by Infrastructure Australia in 2019.

With the launch of the IS rating scheme, infrastructure has sought more sustainable outcomes through innovation and commitment to best practice. In the space of just seven years, IS-rated projects have collectively avoided 20 million tonnes of emissions, diverted 150 million tonnes of waste to landfill and avoided consuming 170 million megalitres of potable water. But a massive challenge remains as cities continue to expand and place more pressure on existing infrastructure.

Beyond the infrastructure sector, ISCA's work influences Australian industry more broadly. Its many partnerships with other key industry players, academic institutions, professional associations and sustainability bodies enables learnings and practices to better penetrate the value chain.

### ISCA'S RESPONSE TO THE AUDIT FINDINGS

A key theme that resonates through almost all the findings detailed in the 2019 Audit is the need to develop, deliver and operate assets in the transport, telecommunications, energy, water, and social spaces that are sustainable and resilient. This outcome requires sustainability to be embedded throughout the whole asset lifecycle, from planning through to operation, from design through to asset renewal and re-purposing.

Sustainable and resilient infrastructure requires the careful consideration of social, environmental and economic impacts, including regional relevance, local community inclusiveness and well-being,

climate change adaptability, materials and waste reduction, social and economic uplift, and step-change efficiencies in the use of energy and water. It also needs a holistic approach that embraces the core principles of the circular economy. These concepts are applicable to large and small infrastructure, be it federal, state or local government, public or privately owned and operated, in both urban and rural environments.

### REDUCING INFRASTRUCTURE EMISSIONS

Infrastructure is a significant contributor to Australia's emissions both directly, through construction and operation, and through the human activities and patterns of behaviour it embeds over long timespans. Up to 70% of our total emissions can be traced to the construction and operation of the infrastructure itself, or to the patterns of economic and social activity that the infrastructure supports.

Together with ClimateWorks Australia and the Australian Sustainable Built Environment Council (ASBEC), ISCA is currently delivering a milestone project to help the infrastructure sector lay the foundations for a 'net zero Australia'. Through research, modelling, engagement and knowledge-sharing, this project will chart a course that can help shape government policy and industry practices to support such an outcome. An issues paper will be released in mid-November 2019 and form the basis for further engagement with government and industry.

### ENHANCING SUSTAINABILITY PERFORMANCE

While no longer fringe, sustainability is certainly not mainstreaming and is not consistently addressed in the planning phase, nor coupled with appropriate evaluation to track implementation and performance to benefits realisation.

All stages of the infrastructure lifecycle – from planning, design and construction through to operations – require good governance, stakeholder inclusivity, the application of best industry practice, demonstrable performance, innovative approaches and a ‘whole of life’ consideration of impacts. This is ideally encouraged and evidenced by an industry-led benchmarking framework, with both clear performance criteria and transparent third-party verification.

ISCA’s IS Rating Scheme evaluates and rewards infrastructure projects in Australia that embed sustainability as a core deliverable. Because IS ratings cover almost the whole project lifecycle, ISCA can influence key aspects such as long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, recycling and upcycling. These aspects also sit at the heart of the “circular economy”.

The IS Rating Scheme already covers more than \$165 billion worth of infrastructure in Australia, which include 76% of IA assessed projects in delivery or operations, so its capacity to support transition in the sector is significant. ISCA recently commissioned an independent study to evaluate the economic return on investment that the IS Rating Scheme delivers to the infrastructure industry, and the results indicate a significant return on every dollar invested in the scheme.

## **DRIVING INNOVATION**

Many of the most pressing issues raised in the Audit require new ways of thinking and radical changes in industry practice. ISCA places significant emphasis on innovation in rating infrastructure assets, as this drives step change. ISCA’s rating program is ideally positioned to influence the market and drive innovation in practices. Industry is responding positively and has developed and implemented a significant number of innovative practices in design and construction that are Australian firsts and, in some cases, world firsts. A recent study found that the IS Rating Scheme

delivers substantial co-benefits including capacity building which drives collaboration, innovation and continuous improvement in the industry.

## **SPECIFIC CHALLENGES AND OPPORTUNITIES IDENTIFIED IN THE AUDIT**

Over 180 specific challenges and opportunities were identified in the audit, many of which ISCA believes are relevant to its mission and within its scope to help resolve. Broadly, these include:

- Planning and decision making
- Market depth and skills
- Security, resilience and sustainability
- Changing urban travel patterns
- Funding and maintaining transport assets
- Passenger transport sustainability and resilience
- Transporting, storing and making the most of waste
- Green, blue and recreational infrastructure
- Harnessing Australia’s energy advantage
- Changes facing urban water
- Water oversight, regulation and decision making
- Balancing competing needs for water

ISCA, in its submission, has provided detailed responses to each of these aspects from a solution-driven point of view.

ISCA is a firm believer that a more sustainable, resilient approach to infrastructure design, construction and operation does not require drastic compromises nor does it necessitate loss of revenue or extra costs to asset owners, operators, contractors and suppliers. Instead, sustainability and economic outcomes are often inextricably linked, making ISCA’s model both financially viable and profitable.