



# Sustainability built on pillars of respect

SUSTAINABILITY is a buzzword in the infrastructure sector. Whether most people truly know what the term means is questionable.

At a recent Australian Green Infrastructure Council conference, experts grappled with the difference between sustainable infrastructure and infrastructure sustainability.

"To the uninitiated, it's probably semantics," admits Tony Stapledon, group sustainability manager of Leighton Contractors and one of the keynote speakers at the conference.

In short, he argues that sustainable infrastructure relates to a big-picture view whereby the imperative is to have an environment in which infrastructure itself is sustainable. Infrastructure sustainability, he says, is more about a particular project and how to deliver a sustainable outcome.

Leighton sets the bar high when it assesses whether a project is sustainable.

**'What we need to do is think about everything in a very balanced way'**

TONY STAPLEDON

"It has to be long-lasting, it has to be consistently profitable for communities that it's constructed for, it's got to be corporately responsible, it's got to be socially beneficial and it's got to be environmentally responsible," Stapledon says.

He argues that achieving a balance between such factors should be the aim.

"If the environment was there at the exclusion of everything else it would probably be just as bad as having money there at the exclusion of everything else.

"What we need to do is think

about everything in a very balanced way."

Erin Cini, national sustainability co-ordinator of engineering, construction and services company KBR, believes sustainable infrastructure is all about "building towards a sustainable vision" courtesy of initiatives such as green design or architecture.

"What it means is that you're planning infrastructure that will meet the objective of a sustainable future," she says.

Infrastructure sustainability, on the other hand, refers to a scenario whereby a project may or may not be based on sustainable goals.

It often still requires big calls to be made around social, environmental and economic outcomes, including sustainable procurement decisions on issues such as recycled materials, improved energy efficiency and alternative water supplies.

"It may mean that if you're building a road or a rail or a pipeline that you select the route or the direction or the location of that infrastructure while taking into account . . . things like heritage or societal concerns," Cini says.

In addition to Rudd government targets such as a 60 per cent greenhouse gas reduction by 2050 and a renewable energy target of 20 per cent by 2020, Cini notes there are also less prescriptive sustainability targets. "(They) involve strengthening communities and strengthening education," she says.

Cini says as part of the push towards sustainable infrastructure the emphasis has now shifted beyond just parks and open spaces to factor in "live-work-play communities".

"With (such) communities, it means you don't have to travel too far to go to work and you've really got a strong community (in the sense that) you can live there

and you can have your leisure time as well as working there . . .

If you can make communities stronger then you're generally providing for a stronger population and a happier community."

She believes sustainability will increasingly tie with other infrastructure imperatives such as quality and safety. "In the long-term we'll find that sustainability will have an equal footing with those two," Cini says. "So I see . . . safety, quality and sustainability being the three pillars that we consider prior to any other decisions."

As part of its efforts to formalise sustainability standards for infrastructure, AGIC is developing the world's first sustainability rating scheme. It sets performance benchmarks and rewards infrastructure projects and organisations that achieve high outcomes against these standards.

AGIC chief executive Doug Harland says the rating scheme will consider multiple assessment categories ranging from climate vulnerability, energy use, emissions and materials consumed to factors such as community amenity, safety and economic viability.

Harland says under the sustainable infrastructure definition, people "are starting to question the very nature of the infrastructure that is being built". For example, he notes that NASA scientists argue that no more coal-fired power stations should be built.

"Obviously, some people would like to shut them down tomorrow and that's just not an option," Harland says. "We all need our fridges running. There has to be a practical transition."

With an eye to the future, Harland believes society must consider infrastructure as a "whole of life" concept.

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