

# Construction innovation delivers for all

Many contractors and consultants in the construction industry have traditionally been sceptical about the potential benefits of innovation. The BRITE project has explored this issue and documented results in a new guide **Innovate now!**

**O**VER THE PAST THREE YEARS, the project surveyed 400 businesses, 14 government organisations, 8 industry associations and 4 universities and selected 12 best-practice case studies. "We are very excited by changing perspectives," said project leader, Dr Karen Manley. "There seems to be growing interest in innovation as a means of ensuring on-going competitive advantage."

The BRITE research revealed that scepticism about the value of innovation was misplaced. It showed that 93% of all innovators in the construction industry, achieve higher profits as a result of their efforts, while all of them reap improvement to their reputations and are subsequently likely to be more successful in winning projects.

Clients are keen to work with innovative businesses because of the substantial benefits that can be achieved. The improved prospects for future work provide the incentive for consultants and contractors to search for new ideas.

## Innovation benefits

Four of the documented projects were in Queensland, four in New South Wales, two in South Australia and one each in Victoria and Western Australia. They included three sporting stadiums, two bridges, two art galleries, two commercial buildings, two very different roads (a motorway and an access track) and one case of contaminated land.

The size of the project made no difference to the extent of benefits gained. At Cattle Creek Bridge (case study no 6), 50% of the project cost estimate of \$1m was saved, while on the National Gallery of Victoria (No 4), 5% of the project cost estimate of \$65m was saved.

The table also shows that the range of potential benefits is broad, with the 12 cases of innovation showing savings related to

- gas supply
- water usage
- material supply
- material weight
- fabrication time
- erection time
- road transport
- traffic management
- requests for information
- project duration
- overall project cost



From iconic building projects, to small road projects, the case studies show that it pays to innovate!

The Innovate now! guide and contributing case studies, are lodged at [www.brite.crci.info](http://www.brite.crci.info) for free download. The guide provides detailed steps for businesses wanting to improve their innovation performance, along with detailed checklists to help businesses develop an innovation program.

More information: [k.manley@qut.edu.au](mailto:k.manley@qut.edu.au)

	Case study 1	Case study 2	Case study 3	Case study 4	Case study 5	Case study 6
<b>Project name</b>	William McCormack Place	Lang Park Sports Stadium	Port of Brisbane Motorway	National Gallery of Victoria – Australian Art Building	Coutts Crossing Bridge	Cattle Creek Bridge
<b>Innovation summary</b>	Chilled water thermal storage tank and moisture absorbing thermal wheel	Precast prestressed polystyrene voided concrete planks with formed rebates	Project delivered under an alliance contract	Fire engineering enabled use of unprotected steel	Fibre-reinforced polymer (FRP) bridge deck	Ground penetrating radar to find defects in bridge beams
<b>Main benefit achieved</b>	37% saving in energy costs	8% saving in cost of grandstand steelwork	10% project cost saved, 30% time saved	5% of project cost saved	75% saved in transport costs, 90% saved in traffic management costs	50% of project cost saved
	Case study 7	Case study 8	Case study 9	Case study 10	Case study 11	Case study 12
<b>Project name</b>	Gladesville Road Community Centre	Imago Site	Stadium Australia	Art Gallery of South Australia	Adelaide Oval	Tomago All-Weather Access Road
<b>Innovation Summary</b>	Managing stormwater with storage gutters and infiltration	Saving site-remediation costs through a new waste disposal method, sprinkler and wheel wash system	Post-tensioned steel trusses to create long span roofs	Twin-coil air-conditioning to improve energy efficiency	Relationship based contract and 3D CAD to efficiently deliver complex project	Using recycled tyres to create a permeable road pavement while meeting strict environmental and community requirements
<b>Main benefits achieved</b>	26% reduction in mains water demand	13% project cost saved	50% reduction in steel weight; 25% reduction in roof erection time	30% reduction in energy consumption	50% reduction in prefabrication time, 90% reduction in requests for information	15% of project cost saved