CONSTRUCTION INNOVATION has 2020 vision for the future

Construction 2020 is a national initiative undertaken by the Cooperative Research Centre (CRC) for Construction Innovation to identify how it can lead the Australian property and construction industry in applied research and best contribute to the industry's national and international growth and competitiveness. It is the first major report on the long-term outlook for the industry since the late 1990s.

An extensive process of industry engagement has been driven by the Centre's CEO Dr Keith Hampson and supported by Professor Peter Brandon a leading UK research leader at the University of Salford. It began with a questionnaire and a nation-wide workshop series in 2003, seeking views on the direction and challenges facing the industry today and into the future.

The hundreds of participants represented a broad spectrum from the public and private sector and included builders, contractors, architects, engineers and representation from industry associations. The workshops provided an opportunity for members of this somewhat adversarial and fragmented industry to talk and work collaboratively about their visions for the industry.

On June 23, this consultation process culminated with the Canberra launch of the report Construction 2020 — A Vision for Australia's Property and Construction Industry by Minister Peter MacGauran, Minister for Science, and Minister Ian Macfarlane, Minister for Industry. "This is a vision that comes directly from industry. To become a reality will require the resources and commitment of both industry and the CRC," said Mr Macfarlane.

Over 80 key figures from the industry celebrated the success of the consultation process, including John McCarthy, Chairman of the CRC for Construction Innovation, who stated "Our industry has spoken out loud through this report and it is obvious they want change and development in the areas of business environment, environmental sustainability and information and communication technologies."

The report identifies nine key themes for the future of the property and construction industry. These visions describe the major concerns of the industry and the improved future working environment favoured by its stakeholders.

"The first and clearest vision, agreed across the industry, is that environmentally sustainable construction — the creation of buildings and infrastructure that minimise their impact on the natural environment — is an area of huge potential," says Keith Hampson.

"Here technologies like Construction Innovation's LCADesign can make a big difference. This is a calculator that works out automatically from 3D computer-aided design the environmental costs of materials in a building — all at the push of a button."

"By 2020, working with industry, we'd expect to have a comprehensive set of eco-design tools for all stages of the construction life cycle, to minimise energy use, greenhouse and other forms of waste or pollution."

Other technology and management visions identified through consultation with the industry include:

- greater flexibility in meeting client demands
- a better business environment, with greater sharing of ideas and skills and a lower regulatory burden
- greater health and safety for the construction workforce, and upskilling for a fast-changing business environment
- leading-edge communication and IT embedded in industry products and processes
- virtual prototyping for key products and major steps in the construction process, to ensure greater efficiency
- off-site manufacture and on-site assembly for a majority of construction products for enhanced quality control and lower environmental and financial costs
- a re-engineered industry supply-chain using leading edge manufacturing processes and quality control throughout.

Other significant areas of focus in the report include the development of nationally uniform codes of practice, new tools to evaluate design and product performance, comparisons with overseas industries, and a worldwide research network to ensure that Australian technology stays at the cutting edge.

To disseminate the results of the Construction 2020 Vision Report and to gain additional input and guidance from industry, a second series of workshops were hosted around the country in mid 2004. Keith Hampson says the feedback has been two-pronged: "We have been, and we want to continue to deliver essential outcomes to industry. What this Construction 2020 feedback is giving us is valuable information about how the industry wants to look by the Year 2020 and what R&D is needed to get it there."

"There are more than 230,000 firms and 730,000 individuals in the industry — but what is clear is that many are now prepared to work more closely together. Using the latest in management practices and technology, the industry can achieve even greater feats than in the past, especially in the field of sustainable construction. It's a very exciting prospect."

"This also gives small and medium companies a chance to get on board with the larger players, to capture the latest technologies and to share in the global expansion of our industry."

The continuing support shown by industry for Construction 2020 will ensure that this initiative based on vision, consultation and collaboration will have a long-term impact on developing a robust, information is available at http://construction2020.construction-innovation.info. For a hard copy please call Catrina Waterson at CRC for Construction Innovation on 07 3864 1393 or email c.waterson@constructioninnovation.info