

Connecting with a low carbon future

In March this year we released *Connecting with a Low-Carbon Future*, a report highlighting the central role that ICT can play in a low-carbon economy.

The report found that the ICT sector is in an ideal position to help government, business and consumers minimise their energy consumption. Seven ICT opportunities were investigated: remote appliance and context-aware power management, personalised public transport, decentralised business districts, real-time fleet management, increased renewable energy, and high definition video conferencing, to determine their potential for reducing national energy costs and greenhouse gas emissions.

The report found that these opportunities have an even greater cost-benefit and carbon reduction potential than originally thought. It found that increased use of ICT in Australia could save up to \$8.1bn per annum in electricity, fuel and aviation travel costs, and reduce national emissions by 4.7 per cent.

The report also identified three new carbon-reduction ICT opportunities:

- Clean cloud: Improving the energy efficiency of data centre operations through consolidation of smaller data centres to achieve economies of scale, and using low-cost renewable energy alternatives to power them
- Smart cities and infrastructure: Using advanced communications, sensing and metering to more efficiently manage electricity supply, and facilitating efficiencies in water, waste and transport
- Mobile carbon guidance: Providing information to consumers via mobile devices to enable a step change in consumer behaviour in favour of low-carbon choices.

It was determined that key barriers to uptake such as capital cost, complexity, cultural resistance to change and lack of uniform availability of technology must be addressed for a low-carbon future to be realised.

