

Posted Wednesday 26 August 2009, by Kate Lundy

Green ICT: are you ready for this?

Yesterday I addressed a Green IT forum “Are you carbon ready?”, held at Old Parliament House in Canberra. It was a great timing as that day we would begin the debate in the Senate on the Carbon Pollution Reduction Scheme Bill that the Rudd Government is proposing as Australia’s emissions trading scheme.

My presentation reflected on the combined social and economic imperative of addressing climate change and nation-building to hasten the economy out of recession, and how investment in Green IT served both. If you factor in the national broadband network (NBN) as part of the nation building investment, the imperative turns into an opportunity for Australia to lead in the field: provided we invest in the development of the professional expertise to implement the excellent ideas described as ‘Green IT’.

The most common percentage used to describe the contribution of information and communication technologies to the global greenhouse gases is 2%. This is the first part of the Green IT challenge: make sure our use of ICT is as green as possible. This means energy efficiency.

We often hear about Green ICT solutions and some of the common examples include:

- low power, low heat netbooks;
- the related usage of mobile devices for web browsing and business applications,;
- virtualisation to make more efficient use of hardware;
- tele- and video- conferencing and tele-presence to reduce the carbon footprint of meetings.

The government has a responsibility to do our part to reduce our carbon footprint, and by leading by example to encourage others to do the same is an essential start. The federal government is the single biggest purchaser and user of ICT in Australia. Not only will reduced energy consumption of ICT lighten the carbon footprint, it will save on direct energy costs. This creates a calculable business case for investment in Green IT initiatives right from the start on which to build a fully fledged strategy.

One example of this is the Department of Defence, which has already realised savings of over \$5m per annum, or in environmental terms, approximately 31,000 tonnes of carbon dioxide each year by a innovative switch off of their desktops. Several other agencies including ABS and Medicare are also already finding significant savings. Other ‘quick wins’ are listed on the website, but please note there is a medium and long term goals to follow these immediate initiatives. There is also an Australian National Audit Office Report (pdf) titled Green Office Procurement and Sustainable Office Management. Among the recommendations is the requirement for core mandatory performance indicators for operational environmental impacts in key areas such as energy, water and waste.

The second part of the challenge is the enabling capacity of ICT to help everyone else lighten their carbon footprint. **Graeme Phillipson** in his presentation following mine, called this “other 98%”. Graeme elaborated on the critical importance of IT as a key enabler of all industry sectors and added substance to the examples I referred to, which included the use of geospatial applications to plan efficient transport logistics for goods.

It is this other 98 percent that requires the technological tools to innovate their business practices towards a lighter carbon footprint. Again, Graeme’s presentation provided a sophisticated but very clear approach to how these challenges can be logically approached within a business, or indeed a government department. They will also need software to help them assess, implement and monitor the change. (I reckon that open standards to ensure interoperability will have their part to play in reaping efficiencies from ICT use as well.)

Fortunately, the number of companies offering these kinds of services is growing and some work done by **William Ehmcke**, also from **Connection Research** apparently shows that of the hundred or so companies in that space, around 25% are Australian. This augurs well for leadership aspirations!

Both the public and private sector will need people with the skills to innovate across the whole enterprises. The first

reporting period for the National Greenhouse and Energy Reporting (NGER) began on 1 July 2008. I predict that the strategic importance of ICT professionals with an understanding of Green ICT will continue to grow with the growing sense of urgency to combat global warming.

It's one thing to have all the good policy, and all of the enthusiastic sentiment, but we need leadership to drive Green IT and we need people with the skills and tools to implement and then monitor results as part of programs for continuous improvement. So it was great to see that the breakfast briefing hosts, [Connection Research](#) and Excom Education, have created Green IT courses and are working in partnership with RMIT in Melbourne. I have blogged about Tom Worthington's ANU course previously, so want to keep promoting what's on offer around the place.

I also want to make the point that as a result of the investment in the Digital Education revolution, in the longer term, all students going through Australian schools and universities should be gaining a good understanding of basic green ICT skills, along with other important ICT skills to help them use technology well, and innovating no matter what their expertise or industry.

BTW, there is a Green IT Report Card also published by [Connection Research](#) that is worth a read (pdf). Here are links to other Green IT related government policies and programs that aren't linked above.

- ICT Innovation Council funding for ICT, biotechnology and Green ICT
- Smart grid
- Green Jobs
- ICT Reform Program: Gershon Review

Please add links to more through your comments! I am also encouraging [Connection Research](#) to make a submission to the Gov2.0 taskforce!

Source: <http://www.katelundy.com.au/2009/08/12/green-ict-are-you-ready-for-this/>