

Green ICT – taking the strategic approach



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The green agenda is gathering pace as the impact of climate change is now being felt in more unstable weather events, and as government steps up policy and legislative initiatives to cut carbon emissions and promote sustainability.

The UK government is committed to reducing carbon emissions by 20% from 1990 levels by 2010. The forthcoming Climate Change Bill will probably set a legally binding target of 60% reduction in carbon emissions by 2050. Central government has committed to make the office estate carbon neutral by 2012 and local government efforts will be part of the performance assessment framework from 2008.

The green agenda is a global issue and government targets will involve us all in reducing emissions and conserving energy. ICT is an obvious target with its relentless growth and high turnover of technology, but it is also a key tool for delivering green services and implementing a green policy across the organisation.

This briefing aims to give you some ideas and examples of how ICT can contribute to the green agenda, from reactive responses such as compliance with the WEEE directive to proactive initiatives such as promoting ICT systems that can support sustainability.

Socitm Consulting can support your organisation in recognising its legal obligations and complying with them. More importantly, we can help you develop and implement Information and ICT strategies that reduce the carbon footprint of the organisation as a whole.

Initiatives and innovations: best practice in action

Public, private and independent sector organisations are already trailblazing green initiatives that work. It's important to be aware of these so you can promote awareness and sponsor quick wins within your own organisation. Sharing examples and checklists of best practice will be increasingly important as organisations seek to comply and innovate against a background of green auditing, inspection and benchmarking. Current examples include:

- A number of UK local authorities have signed the Aalborg Commitments to sustainable development.
- Over 200 local authorities have signed The Nottingham Declaration on Climate Change. There is now an action pack, developed by the Improvement and Development Agency in partnership with others, to help you formulate an organisation-wide carbon reduction strategy.
- The Welsh Assembly Government, Welsh local authorities and other bodies have jointly developed the Green Dragon initiative. Participating organisations can be certified for environmental management, improve their green profile and improve competitiveness.

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- OGCbuying.solutions has secured a deal with EDF Energy that guarantees central and local government customers receive a third of their electricity supply from renewable sources until 2011.
- Bracknell Forest BC has reduced the carbon footprint of employees' journeys to work after over 30% of employees adopted more flexible working practices. This also enabled the Council to reduce estate costs by over £350,000 p.a.
- The London Borough of Hillingdon has consolidated its servers and made substantial energy savings as a result.

The information organisation gets the green light

A key way to reduce carbon emissions is to minimise work-related journeys. The overall cost of personal and freight travel for the UK public sector is over £5 billion, so a strategic approach to reducing commuting will realise significant savings and productivity improvements.

ICT can facilitate more collaborative and less carbon-intensive ways of working, but if mobile, remote, home and flexible working are to be implemented effectively, cultural change is as important as the technology.

The most important requirement is a strategic approach to information management and security. Without this, any shift to home, mobile and flexible working could generate more problems than it solves. Implemented properly, the benefits can be enormous.

For example, Salford and Bradford have both introduced full time home based working for Benefits service staff. With the right electronic document and records management (EDRM) and workflow monitoring systems and administrative processes in place, both Councils have reported significant increases in staff productivity, retention and well being, as well as rapid payback on investment.

Organisations introducing mobile working have made similar gains. Cumbria County Council substantially reduced the number of journeys Social Services staff made to the office when the team was given Tablet PCs to record home-based interviews with clients. Replacing face-to-face meetings with digital equivalents can be similarly cost-effective: BT claims to have saved £400m since 2001 by using video conferencing.

The green and other benefits of a mobile, remote, home and flexible working strategy provide a powerful business case for its adoption. The key lies in careful preparation, so that the changes needed in information and cultural management align with technology and business processes. Get that right, and the shift to making your organisation green can really gather pace.

Procurement and outsourcing: the green approach

Many public sector organisations already have a corporate green procurement policy. Belfast City Council, for example, has adopted an Environmental Purchasing Policy which actively encourages suppliers to supply environmentally friendly products and processes and which uses environmental criteria in the selection of suppliers and award of contracts.

The government plans to introduce a quality mark in late 2007 to help ICT buyers choose suppliers with genuine carbon offsetting schemes. More substantively, it is also planning to use the Sustainable Procurement Action Plan to channel £150 billion of public sector investment into transforming the supply chain to provide large-scale demand for low-carbon products including computers.

Just as important is to challenge any assumptions about regularly replacing equipment. The manufacture of a PC may generate up to four times the carbon footprint of its lifetime use. While it's possible to reduce the latter by using power saving options (both electronic and human), the former is not directly controllable. The safest policy is probably not to buy new PCs until you really have to, and to consider replacing most of them with thin clients.

Of course, if your ICT service is outsourced, how can you retro-fit environmentally friendly policies into an existing supplier contract? There are no easy answers here, but if a true partnership exists between the parties there will be scope for constructive discussions. It could be that the outsourcing supplier can itself benefit from adopting green policies – both in terms of current business targets and with a view to gaining new public sector customers in future.

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Waste not, want not: lifecycle management and sustainable recycling

Two important pieces of legislation governing recycling have come into effect in the UK in 2007. The first is the UK implementation of what is known as the WEEE directive – the EC Directive on Waste Electrical and Electronic Equipment. This requires companies manufacturing electronic products to register with the DTI and to contribute to recycling of waste equipment.

The second is the Energy Using Products (EuP) directive which is due to be implemented nationally in August 2007 and which requires lifecycle environmental information to be available on all products with significant volumes of sales that may have an environmental impact. This includes office equipment and electronic goods.

Manufacturers are required to consider the entire lifecycle of product groups and to assess the ecological profile of the equipment from raw materials to end of life. In addition to helping with disposal and recycling efforts, these criteria may also give us a good handle on how to specify green equipment in future procurements.

More and more authorities are recycling old ICT kit. Waltham Forest passes on refurbished PCs to local senior citizens, while Walsall gives them to disadvantaged children.

It is also worth considering whether product packaging can be recycled, and asking the suppliers to provide this information.

Reducing ICT energy use – and saving money

Reducing the energy use of ICT equipment can be part of a wider organisational strategy to reduce the carbon footprint of the estate. Woking Borough Council has demonstrated what can be achieved by taking an organisation-wide approach to carbon reduction: it has cut carbon emissions from its council buildings by 75%, saving about £700,000 each year.

Significant energy and financial savings can be made by choosing the right ICT equipment and configuring and using it in energy efficient ways. UK CEED has created priceXtra <www.pricextra.co.uk/> which allows purchasers to compare the environmental impact of certain products including computers. Its calculations show that, for example, a low energy LCD monitor can be up to 75% more energy efficient than a CRT monitor. An organisation with 3000 desktops working 8 hours a day, 5 days a week for 42 weeks of the year can save up to £46,000 p.a.

Given the increasing use of ICT in schools (PCs, white boards etc), any opportunity to reduce the environmental impact of educational ICT needs to be taken. The Building Schools for the Future programme, in which Socitm *Consulting* has been heavily involved, places great emphasis on green buildings, ICT equipment and infrastructure. Specialist solutions developed for this environment use ultra low energy thin clients and servers to minimise power use and heat emissions. Suppliers such as Sun are producing products for schools that are sustainable, energy-efficient, use less harmful materials and have a clear plan for reuse or recycling.

Software can now automatically shut down PCs overnight or sense that a PC is off and automatically turn off all its peripherals. Peterborough City Council installed software to shut down all computers left on at evenings and weekends and claims it will save £50,000 a year and cut annual CO2 emissions by one tonne, while delivering a return on investment within three months. Do be careful, however: many licensing and automatic upgrade programs currently run overnight and could fail if PCs are unavailable.

Power at work – leading by example

Changing your own behaviour and life style is an obvious way to make a difference and to set an example for others. We can cut down on commuting, arrange our meetings to reduce travel, change our choice of transport – and maybe even give up the car allowance! We can cut back on wasteful energy use and use technology for conference calls, collaborative working and video conferencing – and of course, refrain from printing emails wherever possible. As with any change, leading from the top by example is an important contribution to overall success.

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What you can do now

- Watch out for the upcoming Socitm Insight briefing on Green ICT, which will feature case studies of best practice.
- Encourage your organisation to join a corporate initiative such as a Local Policy, a Partnership Concordat or a national declaration.
- Focus on the development of a longer term green ICT strategy. All ICT investment decisions should consider positive and negative environmental impacts.
- Investigate how ICT can contribute to an organisation-wide shift to lower energy consumption, including a review of printer and paper usage, rationalisation of servers, a possible shift to thin client technology, and the use of heat exchangers
- Plan for the formal auditing of carbon emissions reductions. Socitm benchmarking will take carbon footprints into account for the first time in 2007.
- Investigate cases of best practice, available toolkits and sources of support and funding. SustainIT (www.sustainit.org/index.php) focuses on the relationship between ICT and sustainable development and may be a good place to start.
- Join or set up a networking group such as 'Sustainable development and IT' hosted by GovXchange.

How can Socitm Consulting help?

At Socitm Consulting we "walk the talk". We already practice flexible working as a virtual organisation, we use technology to reduce the use of paper, we use teleconferencing to reduce travel and encourage our consultants to use public transport wherever possible. We work with the majority of UK local authorities and see many good examples of best practice. Our consultants can educate, inspire and support you and your colleagues in taking a strategic approach to information management and ICT, thereby reducing the carbon footprint of the organisation and its service delivery

For more information on how Socitm Consulting can help you in this area, please mail us at consulting@socitm.gov.uk or call 0845 450 0904.

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