

## Greening your IT work space

Today the need to reduce greenhouse gasses and consumption of power is widely accepted.

Information and communication technologies are an increasingly important contributor to carbon emissions in the UK and with the growing business and domestic use of ICT, its footprint now exceeds that for the UK aircraft industry.

With UK public sector, at £12bn (2007/08), having the largest IT budget, UK departments and local authorities are embarking on aggressive plans to reduce their IT footprints. These public sector commitments will put pressures on all its suppliers to use and provide greener IT assets and services, and along with those from UK international commitments, will eventually ripple through to all of us.

Why take action now? Advantages of green IT include:

- Enhanced reputation (green image);
- Feel good factor (making a difference, saving the polar bears);
- Reduce energy bills (carbon comes from energy and energy costs money);
- Reduce future energy requirements by purchasing green assets, services and consumables;
- Use IT to facilitate working from home, and reduce the cost of travel, remote meetings.

The journey to effective greening

- Raise awareness at all levels;
- Assess green impact of your technologies, practices and behaviours, identify hot spots, establish baselines and identify simple things to do first;
- Establish a senior manager as a green 'champion';
- Engage all staff to win hearts and minds;
- Corral the problem - adopt green criteria and accounting for new investments.

Staff awareness - examples, from the carbon trust, include:

- A computer left on 24/7 will cost about £37 a year, whereas by switching off at night and weekends, the charge can be reduced to about £10 a year - enough energy to make some 34,900 cups of coffee.

- A PC monitor switched off overnight saves enough energy to microwave six dinners.
- Turning off all non essential equipment in an office for one night will save enough energy to run a small car for 100 miles.
- Monitors account for almost two-thirds of a computer's energy use.
- Office equipment is the fastest-growing area, accounting for up to 20 per cent of total UK energy use.

### **Assess technologies and behaviours - take simple actions first**

Reduce daily consumption turn it down or switch it off.

- Awareness sessions and posters to staff to switch off the lights when not required.
- Lights to automatically switch off when no movement within the room.
- Switching off computers, when not required, either by the users or automatically.
- Reduce brightness on monitors.

Consume less with what you have

- Remove active screensavers - same power used to run a screen saver as in working.
- Reduce screen brightness and increase contrast.
- If monitors and printers have standby settings use them.
- Where available enable active power management on PCs and laptops.
- Apply timer switches to non-networked technology and printers.
- Share printers and other devices e.g. comms devices, faxes, servers.
- Share PCs and hot-desk.
- Rethink data storage policies to reduce servers.

Take less from the environment

- Use recycled paper and recycled print cartridges and re-cycle again,
- Ask yourself - why print? If you have to
- Set printers for double-sided or side by side printing as the default
- Set printers for draft and grey printing
- Adopt high density fonts and maximise print areas

Use IT to reduce carbon from other services/ activities/ overheads out of peak times e.g. office space

- Utilise the concept of hot rooming to reduce the heating and lighting to a limited area.
- Improve the physical security so staff feel able to start and work earlier / later, to reduce space required to house everyone.
- Use teleconferencing and video-conferencing to save travel and meeting room space.

### **Build your green ICT champion**

Gear up your IT manager/ person to:

- Understand best practice from journals, latest reports, many freely available from the Internet.
- Do the obvious things now, e.g. buy greener kit at next refresh e.g. Energy Star rated.
- Get others to be aware of how to use IT to work and do business in greener ways.

Engage staff - win hearts and minds

- A survey by Logicalis indicated that 85 per cent of employees switch off their home PC when they have finished with it, whereas only 66 per cent turn off work machines after use.
- Provide visualisations of consumptions e.g. toner and paper carton mountains.
- Set up a staff group to come up with their ideas.
- Provide metrics and monitoring to show and encourage progress and if possible harmless competition with rewards.

Procurement - take less, use more

- Why procure, why not re-use or re-cycle.
- Upgrade rather than purchase new equipment.
- Check green rating of all purchases and get information on manufacture and transportation.
- Invest to save
  - buy video and tele-conferencing services to save travel;
  - buy laptops to enable staff mobility - but safeguard data;
  - buy multi-function and shareable devices;
  - future proof - buy modularised, upgradeable devices.
- Assess investments in energy terms consumption as well as business value.

- Specify low-power consumption CPUs and high-efficiency power supply units (80 per cent or better).
- Choose goods made from partial or wholly recycled products / materials.
- Require information from suppliers on the greenness of their products and services including transportation.
- Rethink just-in-time policies to reduce transportation.
- If you have to dispose of kit - do so carefully.

Remember...

- Best practice evolving at a fast pace, need to invest in keeping up to date.
- Given energy price issues and ability to use IT as a tool to effect gains elsewhere, the business case can now be made for green IT.
- There are some things you can and should do now.
- Pressure in the supply chain from greener government practices and demands.
- Many global organisations are making demonstration of green / energy efficiency a requirement for identifying suppliers / products.
- Cannot afford to be left behind.