

SUSTAINABILITY—THE WAY FORWARD WITH ICT



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Sustainability – the way forward with ICT

The heart of the concept of "Sustainability" is that society should conduct its affairs in the best interest of the environment as a whole, and that the world we leave to our children should be at least as healthy and as fair as the one we inherited.

It is through our work and the way we work that our impact on the environment is at its greatest and is most destructive. Re-evaluating the way we work, where we work and how we arrive there, are an important part of creating a more sustainable working environment.

A growing trend in organisations, particularly in the public sector, is to undertake an "Environmental Audit" of all their work processes. These involve examining all processes to look at the impact on the environment: typically these will focus on energy efficiency, waste, and purchasing policies. But increasingly these are likely to include examination of the effects of location and communications.

ICT can promote sustainable working through a wide range of deliverables. These include the electronic delivery of services which can reduce the movement and transport of people. Activities and transactions conducted on-line occupy less road space, and consume fewer resources and include:

- Telecommuting (i.e. eliminating the commute trip at least some days per week by working at or nearer to home)
- Teleworking (eliminating trips by teleworking between sites – whether fixed, mobile or from client sites)
- Online financial services such as bill payments
- Online procurement
- Online information services
- Online learning.
- Conferencing and Collaboration

Use of ICT does not of course provide some magic wand to make all business processes sustainable, any more than it necessarily makes them more efficient. However, there is strong evidence that ICT can be used to make organisational behaviour more sustainable.

Every year, companies adopt new technologies. And while these technologies typically provide more productivity, sometimes they also consume more power, which can be bad for the environment – not to mention your facilities budget.

The environmental impact of the IT infrastructure itself should be considered, for example how the heat and power requirements of the infrastructure can be optimised. Public sector organisations are encouraged to put in place wide ranging environmental impact policies and there is a growing set of central government targets that need to be met.

Central Public Sector has a wide range of solutions that can help you to address the sustainability challenges faced by your organisation.

We can provide a combined GigE (Gigabit Ethernet) IP desk phone solution that offers precise control over individual workstations and desk phones and other Power of Ethernet (PoE)-capable devices, enabling you to maximize power efficiency. The solution uses less power to begin with and gives administrators the ability to manage individual or group-based resources easily, for more efficient electrical consumption.

With a growing focus on environmental considerations and a need for all organisations to carefully consider their environmental impact, IT and communications play an obvious role. This includes the use of technologies such as broadband,

IP Desk Phone Solutions Example:

An office-based work force working a regular 9 to 5 shift in most current scenarios, the phones would be powered around the clock, 24x7, consuming wattage unnecessarily. But with the combined GigE solution, those phones – energy efficient to begin with – become even less of a drain on power, as their power profile is controlled by the Networks' intelligent Universal Port capability.

Phones can easily and automatically be powered down at 5:00 in the evening and then restarted at 9:00 the next morning (while still allowing for individual exceptions for late workers and early risers). If you also power down on weekends, that's an immediate 75% potential savings in electrical consumption for the block of phones under automated

voice/data convergence and video conferencing to develop a flexible workforce with a reduced need to travel to and from a central place of work.

As well as enabling services such as mobility, VoIP and video conferencing, that can deliver a reduced impact on the environment for a public sector organisation, Central's Public Sector solutions contain features that offer direct savings on the environmental cost of the service infrastructure.

Most parts of the UK have Local Agenda 21 (LA21) projects in place. These are typically organised by Local Authorities by themselves or working in partnership with other agencies. In some areas LA21 policy is being developed to encourage working nearer to home and travel reduction and teleworking has a role to play in this respect.

The CBI has recently produced a report Roads to Market, which is its response to the government's Transport White Paper. Poor and congested transport infrastructure is identified as inflicting major costs on industry. "Teleworking to minimise the need to travel" is at the top of its list of solutions. This is sometimes referred to as "transport substitution".

Illustration:
Amongst the most significant findings was that for County Council headquarters staff and field workers based in the Cambridge area:

- Commute miles could be reduced by 500,000-1.25 million per year (depending on level of uptake)
- Commute hours could be reduced by 40,000 – 75,000 per year
- In-work mile could be reduced by 300,000 – 900,000 per year
- Reductions in emissions would include up to 26,200 kg CO, 323,000 kg CO₂ and 4,500 kg NO_x.
- Further projections for the city as a whole showed reduction in commute of up to 8 million miles.

A recent DETR study conducted by The Home Office Partnership, Hague Consulting Group in association with Cambridgeshire County Council identified the forms of work most amenable to becoming "location independent" (or "teleworkable"), and projected the traffic impacts using the local network traffic model.

A key step towards achieving these goals has been the roll out of a Intelligent Communications infrastructure for Cambridgeshire County Council by the Central Public Sector team.

Awareness of the sustainability implications of ICT is growing, and will be reflected in policies for planning and growth. For example, South Cambridgeshire became one of the first local authorities to include teleworking in its local plan. In an area of restraint in terms of new developments, but where there is high demand for business location, teleworking is seen as offering a potential way forward for more environmentally acceptable business development.

The "paperless office" is a goal that forever recedes into the distance as we advance towards it. One aim of the introduction of online processes should be the elimination of wasteful paper processes. Many organisations are doing this. Key elements are:

- Using email to replace memos – but emails should not be printed, unless absolutely essential
- Developing an intranet – put manuals, directories, widely distributed corporate information etc online on an internal version of the World Wide Web, so that information can be updated from a single point and paper circulation be virtually eliminated
- Working collaboratively online – share electronic files that can be worked on by multiple users, rather than the slow process of passing on paper files
- Sharing information electronically before meetings, rather than distributing paper files before and during meetings.
- Reducing the amount of paper at the interface with customers, clients and suppliers, by moving towards EDI, extranets and Internet-based services.
- Working online can be promoted as much as an environmental initiative as an efficiency one.

Illustration

Manual faxing is expensive, potentially insecure and definitely not 'green'. A fax server can handle all of this electronically, saving your organisation time and energy - improving operational efficiency, reducing your costs and your carbon footprint – and can pay for itself within months. Combine this technology with Intelligent Communications around mobile and home working and incoming faxes can be delivered via email for a quicker, more secure, auditable and paper free method of distributing documents.