



The Fibreoptic Industry Association

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SHIFTING THE FOCUS OF INFORMATION TECHNOLOGY AND ENERGY EFFICIENCY

by

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for Networking+ (June 2009)**

During May 2009, two events were held which have concentrated on "green IT". The first was the Green IT 09 exhibition and seminar, the other was the BSi Green IT seminar at the CBI Conference Centre chaired by yours truly.

Making data centres more energy efficient seemed to be the order of the day at both events. This is hardly surprising when one considers the total energy consumption of data centres (56 TWh in 2007 and predicted to almost double by 2020 if nothing is done). Lots of activities are underway ranging from the European Union Code of Conduct for Data Centres Energy Efficiency to the standards-based actions in ETSI on "energy efficiency and broadband deployment". As I reported previously CENELEC established a standards body has been to review future standardization activities in Europe on energy efficient data centres and work has already started in one CENELEC group on addressing the issue of energy efficiency when constructing data centres.

However, "green-ness" needs to be viewed on a global scale. Overall reductions in CO₂ emissions and energy consumption are the necessary objectives of society as a whole - rather than the preserves of isolated groups of technologies. The continual focus on data centres is somewhat disappointing, firstly because it is actually a very easy target - particularly when there are so many easy solutions to reduce the consumption - and secondly because the totality of energy savings by effective use of "information technology" in residential and commercial premises would dwarf savings in the data centre market.

I would posit that "information technology" is an enabler of green-ness. Information technology should therefore be viewed as a "means to an end" - and should not be confused with the "end" itself. Rather than simply asking how IT can reduce its own energy consumption, we need to be focusing on how IT can maximise its own energy efficiency while supporting the global ambition of overall reductions in CO₂ emissions and energy consumption.

Mobility is critical to reducing CO₂ emissions associated with travel. True mobility places demands on broadband and other multi-service networks fed by telecommunication operators data centres and therefore those data centres need to become more energy efficient not only because they are being asked to do more but because in some cases there is no more power available. However, it should be noted that both mobility and the more general uptake of broadband deployment have a serious side effect - they transfer the energy usage from the employer to the employee, from the organisation to the individual.

Energy efficiency regulations and Codes of Conduct may be valuable for specific components, products and organisations but individuals are not so compliant and do not react well to regulation or legislation. Codes of Conduct and other more direct regulations are being prepared for residential broadband terminal equipment, stand-by modes for equipment etc., but there are many in this country (and others around the world) that believe that our personal activities are already over-regulated and that powers to survey and thereby control those activities have already gone too far.

People only really react positively when they can see a payback. Individuals certainly expend a growing proportion of their overall energy consumption on IT-related equipment but few use IT to reduce their energy consumption in other areas - particularly with regard to environmental controls.

We need to be careful that isolated actions do not damage the opportunity that IT has to provide real solutions to the global objective by enabling change in our working practices and implementation of environmental control systems that will automatically reduce our CO₂ emissions and energy consumption.

To join the FIA, e-mail jane@fiasec.demon.co.uk or, alternatively, you can contact the FIA Secretariat in 01763 273039.