

# Can The Poor Economic Climate Drive Green IT?

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## The Mixed Messages

Recently a number of articles have been asking if Green IT is a focus or should even be considered in these challenging economic times. The conclusion has varied between a resounding 'Yes', a resounding 'No', and just as commonly a resounding 'We'll have to wait and see'. The common factor is that the question of whether Green IT is a concern has come from the position of Green IT being the goal rather than whether the economy could be the driver for Green IT itself.

## Is Green IT Misunderstood?

Let's consider Green IT as a whole; when we speak about Green IT we are looking to IT to recognise its position in the world and the impact it has. IT has historically been a rapidly changing area full of new technologies, new trends, and constantly evolving business practices. In many cases this constant change becomes a constant consumption of resources whether this is increased power for PCs and server, growing cooling requirements, resource consumption due to the procurement of new equipment, millions of miles of cabling, or the impact of the disposal of this obsolete technology. IT is normally perceived as a 'cause of' rather than a 'solution to' environmental issues; it could be assumed therefore that Green IT is difficult due to the fundamental changes to standard practice that it would require.

There is truth in this view, but what is often overlooked is the fact that IT has introduced new ways to work within organisations that are often less impactful on the environment than previous methods. If we perceive IT as the enabler it can be more than just a necessary cost of operating. We can then see Green IT in a different light.

## Green IT Enables and Enhances the Business

IT is now an essential part of business more than it has ever been before. In current times the majority of businesses rely on IT in some shape or form; therefore in an economic downturn a change in IT practices for Green purposes also needs to benefit the business.

If done correctly, IT should enable activity with less effort or expenditure of resource. Consider the following potential opportunities:

## PC Power Management

Probably one of the simplest things for IT to adopt yet so far rarely implemented outside of data centres. A coherent PC power management policy could save in the region of \$30 to \$60 per PC per year and over 600lbs of CO<sub>2</sub>, the equivalent CO<sub>2</sub> absorbed by 35 trees in 10 years!<sup>1</sup> With granular control it is possible to reduce PC power consumption without impacting end user productivity. Also, many people consider that power savings mean turning off PCs when this is actually misleading. Powering off PCs can consume more resource and impact productivity because of the overhead of restarting a system. Basic standby can save over 70% of power and hibernation can save as much as (if not more than) turning off a PC. Don't forget those monitors, especially if you still have old CRT screens still in use; these can consume more than your PC.

## Web or Videoconferencing

With the advances in bandwidth availability video-conferencing becomes more of a possibility, but also as new laptops often have web-cams built into them personal video conferencing becomes possible. Web-Conferencing can be especially useful for sales-related activities and be leveraged as an environmentally conscious first step with prospective clients, as well as reducing the cost of initial contacts with clients. Don't under-estimate the benefit of a Green approach with clients and how combined with an IT-provided solution can benefit productivity and cost of operations.

## Virtualisation

Most people have considered virtualisation for a number of reasons including the Greening of Data Centres and the EPA estimates that virtualisation and power management can reduce power consumption by up to 55%<sup>2</sup>. However many IT professionals still need to overcome the preference for physical hardware rather than virtual hardware. Soft benefits include faster response to provisioning requests and hard benefits include reductions in power consumption if done correctly. Admittedly, this can be harder to achieve in an economic downturn as virtualisation often requires a large outlay, so for those organisations that haven't already begun, start small by combining some projects and hosting them on shared platforms. The outcome of this can be a greater efficiency in project planning and cheaper overall costs relating to hardware.

## Printer Management

A surprising amount of power is wasted with printers and vast quantities of natural resources (paper) used for little reason. An average 100 person office uses 5 tons of paper at a cost of \$5,000 in a year<sup>3</sup>. Look at how you work today, if you print a document to review, does it use both sides of the paper? It is still the case that in most companies, the default printer settings do not enable duplex even on printers that have the option. IT is not normally responsible for the consumables budget, individual departments often carry this burden, but IT can help by implementing these settings on the printers and on the workstations so that print paper consumption is reduced by up to 50%. If a similar approach to that of PC Power Management is also taken, then power consumption for these devices can also dramatically drop.

## Identifying Energy Efficient Vendors

IT can't prevent the demand or need for replacement or updated equipment, but IT can heavily influence the available selection. Has your organisation made energy efficiency an important factor when selecting a hardware vendor or has the list of approved models used energy consumption levels as a factor during creation? With the average PC consumption estimated at 84w<sup>4</sup> but highly efficient systems consuming as low as 20w<sup>5</sup> or less, significant long-term savings can be made by making an informed vendor decision.

PC Power Management reduces the environmental impact of the PCs already in your environment, but your PCs are there to be used so PC Power Management only goes so far. Planning ahead can considerably reduce the impact of the systems during their operational period and over time you can make a major impact to the environment and also to the company's bottom line.

## Green IT is a By-Product of Good Business Practice?

IT can be Green in so many ways. The examples above are just a handful of high impact examples, but ultimately, anything IT can provide that will extend useful life, make essential purchases more efficient, and reduce the need for travel or consumption allows for IT to be Green while at the same time reducing cost to the business.

The economic climate requires change and IT is best placed to handle this change in a cost-effective manner that produces Green benefits as an automatic by-product. Look out for those win-win scenarios; there are plenty of them.

### References:

<sup>1</sup> Carbon equivalence values (EPA) : <http://www.epa.gov/cleanenergy/energy-resources/refs.html>

<sup>2</sup> Huge Savings Seen in Power Hungry Datacenters : <http://www.federaltimes.com/index.php?S=3323596>

<sup>3</sup> Cutting Paper (Lawrence Berkeley National Lab) : <http://eetd.lbl.gov/Paper/>

<sup>4</sup> Lawrence Berkeley National Lab

<sup>5</sup> Example Green PC Supplier : <http://www.very-pc.co.uk/>