

Greener IT

Green computing is one of the fastest growing concepts in business today. Companies are no longer only looking at the financial benefits of their IT systems, they also want to ensure that their businesses are energy efficient and planet-friendly. Enterprise level companies are leading the way with energy-efficiency projects, ahead of government initiatives which will inevitably force companies to employ environmentally friendly practices.



Electronic data –friendly or a danger to the environment?

At a basic level, businesses are looking at reducing their physical waste, and cutting down on the use of paper products. As a result the use of email and digital documentation has increased considerably, along with the need to store that information. As a consequence the number of computers and servers has also increased. The drawback to all this is that energy consumption has grown along with it. The savings made from reducing physical print are starting to be undermined by this energy consumption, and computing is no longer regarded as the cure for reducing environmental impact. However, there are still gains to be made, as highlighted in a 2008 report by the Department of Communities and Local Government, that claimed that increasing online services reduced carbon emissions to a level that outweighed the impact of the increased server capacity needed to run it.

Ways to improve your company's impact

- Alternative power

For the dedicated environmentalist, you could be thinking of putting solar panels and windmills on your company's headquarters to reduce electricity consumption from the National grid. For most businesses however, this is not a cost-effective solution, and in a wet and cold Britain, solar panels are not the ideal solution, especially for the energy-consumption a server would need. The best you could hope for would be to run your mobile phones off solar powered battery chargers.

- Virtualisation

The best way of cutting on your power consumption would be to reduce the number of machines you are using. Virtualisation can consolidate your existing bank of servers down to the bare minimum, thus cutting costs by reducing the cooling needs of your server room, the power needed to run the servers and the cost of constantly purchasing new hardware. Virtual tape libraries also cut down the need to store physical tape which would over time end up in landfill.

Overland Storage have produced a white paper on this called [Efficiency is Green](#).

- Power management

Since 1992 and the US Environmental Protection Agency's Energy Star program, power efficiency and power-down technology has improved exponentially. Most electronic equipment today has a sleep mode to reduce power consumption when the equipment is not in use. For servers however, this is clearly not an option. Modern CPU's have developed intelligent voltage adjusters to limit power usage, and modern disk systems can also power-down idle drives, but the only real way to save on server consumption is to only have servers running that you need. Consolidating and virtualising your systems is still the best way to reduce your power consumption.

- Newest equipment

Business should ensure they keep informed about the latest innovations in computer systems. Power use and capacity of servers changes constantly. Businesses should think carefully about investing in new technology every 3 years to benefit from innovation. Heat generation is an area that has seen vast improvements over the years, from using LEDs that emit very little heat to solid state drives which have fewer moving parts.

Storage Partners specialise in getting the right storage solution for you. If the right solution is an environmentally friendly one, then we can concentrate our recommendations to reflect this. Get ahead of the game, don't wait until Government legislation forces you to act, the cost saving could be worth it.



Storage Partners Tree Planting Initiative

In order to off-set carbon emissions there are various tree planting initiatives starting all around the country and throughout the world. Not only will tree-planting reduce carbon dioxide levels they also provide shelter for wildlife, create natural flood defences and prevent soil erosion.

As part of our Greener IT promotion, we will purchase a tree for every customer who buys from us. Each company will receive a certificate to display. A lovely addition to your qualification and award wall.