

Green ICT: more than a PR buzzword?

Are environmentally-friendly IT products and services simply nice-to-haves at times when business is going well? Or can they also drive efficiency and cut costs? Best Practice asked two experts for their views.

For

IT urgently needs an energy label

Against the backdrop of climate change, resource consumption is coming under critical scrutiny in many industries. Unfortunately, IT professionals in many areas have yet to grasp the importance of this issue. The IT sector, too, must face up to its environmental and social responsibilities. Investment in high-tech solutions can bring about significant improvements. In the past three and a half years, we at BSH Bosch und Siemens Hausgeräte GmbH have focused on the following aspects of our IT: computing power, security and reliability, and sustainability. Thanks to high-end, energy-efficient servers, extensive virtualization and cutting-edge cooling technologies, we have doubled our systems' performance and slashed energy use by 50 percent.

We also deploy a variety of simple energy-saving mechanisms at our data center, operated by T-Systems in Munich. For example, we use the hot/cold-aisle containment approach. In conventional data centers, cool air is circulated throughout the entire space. But we use a more focused cooling method: since our servers are placed back-to-back, we only deliver cold air to the backs of servers. Air from remaining aisles, referred to as hot aisles, is ducted out from above. In addition, we have attached cables to servers from above, not from below. This frees up valuable space below servers, improving air circulation and making cooling more efficient. And we also use virtualization. All in all, these solutions help us save 1.3 million kilowatt-hours in operating our SAP systems – equivalent to 793 metric tons of carbon dioxide. To offset these emissions, we would have had to plant 70,000 pine trees.

More sustainability in data centers

These examples illustrate that it is possible to improve performance while using fewer resources. So we should all do more to reduce the ecological footprint of our IT. Careful planning and targeted investments can bring about lasting benefits – not just for the environment, but also for our business. But we need more pressure from the public: from professional IT users, vendors, consumers, political figures and businesses. It is simply unacceptable that the ICT sector has still not introduced an energy label, especially considering that many other industries did so years ago.

And we should not stop at greening IT – we should also green business through IT. The deployment of state-of-the-art information technologies in transportation, telematics and manufacturing can result in significant energy savings and lower carbon emissions. Green IT should go beyond the walls of the data center. It should encompass entire production processes and value chains, and play a role in all areas of life.

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Links: www.bsh-group.com

www.t-systems.com/green-ict

www.t-systems.com/bestpractice/background-ict

Video: www.t-systems.com/video/fuel-cell



“The IT industry needs a transparent, meaningful energy label – like the ones that have been introduced in other sectors.”

Dr. Jürgen Sturm,
CIO at BSH Bosch und Siemens Hausgeräte GmbH

“Green IT must be about more than reducing energy costs – it must be more comprehensive in nature.”

Norbert Walter,
Chief Economist at Deutsche Bank

Against

IT is not and never will be green

In the face of rising energy costs and ongoing discussions about climate change, who would dispute the fact that green IT is a hot topic? These three facts speak for themselves:

- ▶ The ICT sector accounts for 2 percent of the world's carbon emissions – the same volume as the air travel industry.
- ▶ Electricity consumption for ICT devices in British households has more than doubled in the last five years. By 2020, it will account for around half of a household's power usage.
- ▶ Energy costs at data centers are climbing eight times faster than hardware expenses, and make up the lion's share of IT budgets. Based on optimistic estimates, this energy consumption could be cut by as much as 50 percent.

Is this not proof enough of the importance of the issue? So why are there still people who claim green IT is nothing more than hype?

Highly toxic e-waste

One reason is that the term itself can be easily misinterpreted. IT is not really “green” at all. And that is not just because of the energy usage associated with high-tech devices – there are other factors to take into account. Toxic substances such as lead, mercury, cadmium, and bromine are used to manufacture hardware. If used improperly, these materials can pose a significant danger to humans and the environment. What's more, the IT sector is accountable for the majority of electronic waste and, due to its properties, this is extremely difficult to recycle.

Green IT must be about more than reducing energy costs – it must be more comprehensive in nature. It should sever the historic link between energy consumption and economic growth. In many sectors, IT is already helping companies reduce the volume of resources they deploy. For example, many enterprises are using state-of-the-art technology to improve process monitoring and increase production efficiency.

Green IT should not focus so much on energy savings in IT, rather on saving energy and resources through IT. Both the private and public sector must grab every opportunity to break the tie between energy usage and economic growth. Even if IT is not and never will be green – green IT is much more than short-lived hype.



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