

Bell Micro is a specialist IT distributor that occupies a central position in the IT supply chain between those companies who create IT products and services and those who supply end-users. We provide a complete service that is designed to enhance the capabilities and performance of our partners in this channel. In addition to specific skills and services around vendor technologies, Partner Services provide invaluable insight around the solutions areas facing your customers. This guide, one of a series, provides detail around how we can help you to confidently approach green IT projects.

All business energy use is now under scrutiny as the world moves towards greener, leaner living. The energy consumed by IT is fast becoming a real focus in the business community, representing an ethical issue for your key business decision makers and presenting a genuine opportunity to drive new IT business.

The datacentre in particular has been identified as the chief culprit in IT CO2 emissions, with an alarming set of statistics now surfacing about the energy consumed by large server and storage racks. Similarly, everyday IT devices such as networked printers, desktops and monitors provide significant scope for IT end-user organisations to improve their green technology approach.

Of course a move towards simpler, leaner computing that makes better use of resources is not new. Cost and time pressures have been prodding IT strategy for some time now. With initiatives around consolidation, virtualisation and utilisation rates all paying into these business drivers and providing real scope to build new IT infrastructures that deliver adaptable, lowest-cost and ethically acceptable IT environments.

Bell Micro is investing in understanding the green IT debate. Not only to improve the way in which we conduct our business, but also to provide our partners with the business arguments needed to leverage opportunity from the momentum surrounding environmentally friendly technologies.



The business issues driving 'green IT'

The political/ethical debate

There is a strong political and cultural momentum in the UK around climate change, impacting business just as much as in the home. Government is spearheading the challenge to businesses through the efforts of DEFRA and new bodies such as The Carbon Trust, specifically set up to help business leaders explore the green issue.

"Office equipment and small power machines (PCs, monitors, fax machines, photocopiers, printers, vending machines and water coolers) are the fastest growing users of energy in the business world, accounting for 15% of all electrical energy used in UK offices. This is expected to double by 2020."

Carbon Trust

For any business there is a potential cost attached to not being seen to respond to the green issue and significant opportunity to be derived from managing the green issue proactively.

Relationships with stakeholders

Employees, customers and the local community are now all observing the business closely to see how it is responding to emerging corporate responsibility for managing carbon emissions.

Businesses are facing increasing pressure from their customers, special interest groups and all forms of government to operate in an environmentally friendly manner. There is also increasing pressure to offer transparency around the impact of their operations, publicising the businesses green activities and achievements.

Building the IT infrastructure of tomorrow

Many of the issues raised by green IT overlap with the key industry initiatives prevailing in recent years. Consolidation, virtualisation and data management are some of the IT solutions already at the top of the agenda for IT decision makers which tie in closely to the outputs required by a green IT strategy.

Reducing server sprawl, sharing workloads and building leaner, more flexible infrastructures offer cost savings, improved availability and the positive impact on energy consumption required by an effective environmental strategy.

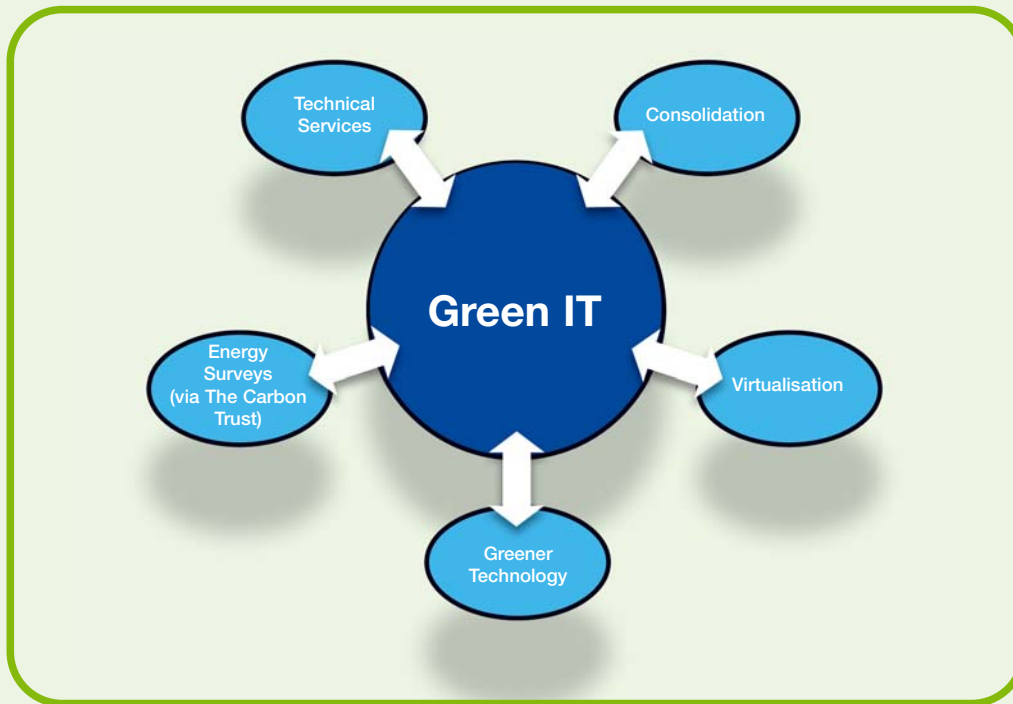
Cost

Consuming up to 25 kilowatts of power per hour in server heat output and the same amount again in power required for cooling systems, the modern datacentre is an insatiable power consumer. Even a small 30,000 sq foot datacentre pumps the equivalent of 44,000 tonnes of CO₂ into the atmosphere each year. (Source. HP)

Add to this the power requirement and heat output of myriad smaller devices across the office and rapidly rising power prices and it soon becomes clear that addressing the energy needs of IT in the business provides rich scope for savings. Gartner estimates that a typical business spends 5% of its IT budget on energy today, a figure currently set to triple to 15% within five years. The imperative to explore energy savings now is strong.



The technology and services



What we can offer you:

It's getting harder to manage a datacentre efficiently with rising utility bills and ever-increasing demands due to processor power and server density increases. Growing user requests mean heavier strain on servers and air conditioning units in the data centre. For many companies, this puts data centre costs and performance under the spotlight – making them essential factors for a successful adaptive enterprise.

Our vendor technologies can help alleviate datacentre challenges.

- **Save money** – energy and cooling costs can be reduced without sacrificing performance
- **Increase capacity** – more equipment can be added to an existing datacentre, avoiding or postponing the need to build a new datacentre
- **Improve reliability** – future failures can be mitigated by reducing overheating risks

Our vendors offer new breakthrough services that anticipate how datacentre power and cooling needs will continue to grow and change for enterprises worldwide.

Consolidation

One of the most effective ways to lower energy consumption is to consolidate servers, especially little-used servers. By moving these applications onto a single platform, IT sites save almost the entire energy costs of the original server, the cooling costs of that server and gain greater manageability by having applications running on fewer physical machines.

Business issues addressable via consolidation include:

- Controlling IT costs of ownership
- Delivering IT as a service
- Building flexibility into IT estates

Virtualisation

Virtualisation consolidates existing and expected future workloads. This reduces the number of physical servers required, thereby reducing floor space, cooling and capital costs. It also increases the utilisation of servers to improve energy efficiency.

Business issues addressable via virtualisation include:

- IT cost of ownership
- Reducing risk
- Improving service levels
- Building flexibility into IT infrastructures

Greener Technology

There have been many advances in power and cooling technology, as vendors continue to address power efficiency issues across the datacentre by introducing new technology solutions to meet the needs of its customers, particularly those building next-generation datacentres.

Customers today benefit from advances in:

- green storage technology that can cut storage array power and cooling costs in data centers by 50 percent
- Blade technology that significantly reduces power consumption when compared to standard servers
- Energy management systems which are designed to deliver savings in cooling energy costs.

W.E.E.E. Directive guidance

The Waste Electrical and Electronic Equipment (W.E.E.E.) Directive deals with the increasing impact of waste devices on the environment and will impact almost all UK businesses. Bell Microproducts has registered as a producer under W.E.E.E. regulations and can help you to work with customers to manage this increasingly important business issue.

Free Energy Survey

The Carbon Trust, a government sponsored organisation, works with businesses who spend over £50,000 per annum on power to help them manage energy use more efficiently. Their expert consultants identify energy saving opportunities and offer practical advice on how to achieve these. Look at www.carbontrust.co.uk/energy/assessyourorganisation/energy_survey.htm to see if you or your end-users qualify.

A green IT case study

Bell Micro is committed to building a greener future for our business, and we have already taken a number of significant steps towards reducing our corporate carbon footprint.

Planning is at the heart of any successful green strategy and for us this means focussing on three areas:

1. Buildings & Infrastructure: We have measured the carbon footprint of our Haslingden operations and are taking steps to reduce our energy consumption through changes to our lighting, heating and computer output. Similar steps for our other sites are planned.

2. Office waste and efficiency: Bell Micro has already implemented the following green initiatives:

- a. 'Think before you print' campaign for emails and other documents encourages people to reduce paper use and printer energy requirements
- b. Our 'green dot' campaign sees energy hungry devices marked with a prominent green dot to remind users to switch them off each night
- c. We have placed a range of recycling bins around the office to encourage people to recycle wherever possible

d. Energy efficient lighting and appliances are a top priority – with all devices being checked and replaced where appropriate, new 'natural lighting' options are actually reducing energy use whilst improving the light quality in our business environment

e. All printer cartridges are now recycled

f. Our 'green suggestions box' – placed at the heart of our business enables Bell Micro colleagues to add something to our green debate on an ongoing basis

3. Travel costs: Bell Micro is developing a comprehensive plan for the way in which we interact with all of our stakeholders in order to make better use of virtual meeting technology and reduce the miles we actually travel.

Our focus is to encourage buy-in and action for our people – through initiatives such as our Reduce, Reuse, Recycle communication programme; and to generate measurable results through a number of specific targets, such as the number of radiators in use. By doing so, we expect to significantly reduce our carbon footprint by 'going green' in many ways.

The Partner Services offer:

Bell Micro Partner Services offer a uniquely broad perspective on technology, with proven experience across many types of systems, projects and IT environments. This experience extends and supports the in-house skills of our channel business partners helping to plug the skills-gap or extend capacity, ensuring our partners are able to fully meet the needs of the customer quickly and without the need to recruit.

- Our field experience means that we can deliver technology solutions that will not fail, are flexible enough to grow with customer demand and are constructed with both the needs of the business and the wider IT infrastructure in mind.
- Bell Micro has invested heavily in regular training for our Partner Services personnel to ensure they understand the issues around all key IT initiatives and all of the technology they affect. This training translates quickly into the solutions provided to your customers.
- Bell Micro is committed to acquiring all the necessary accreditations to ensure that the solutions delivered by our channel partners meet the strict standards of the major IT vendors.
- The Partner Services team are trained to see beyond the technology issues, building business partner solutions that address the real commercial drivers faced by your customers.
- Bell Micro Partner Services offers a range of off-the-shelf packaged services that support business partner solutions. Where these don't fit, we are able to work with partners to create a bespoke solution to exactly meet the customer's requirements.

Partner Services offer support from design to deployment, helping partners with identifying issues, recommending technologies, designing and scoping solutions, project management and implementation.

What to aim for:

An effective strategy for green IT

The key to success in almost any endeavour is great planning and green IT is no exception. End-user organisations with significant IT estates must now be formulating a plan for reducing the environmental impact of IT (and other) operations, either driven by their social conscience, pressure from stakeholders or the motivation of very significant energy savings.

By documenting and publishing an environmental strategy, the organisation is able to make measurable commitments to change and communicate its green objectives clearly to employees, investors and suppliers.

A holistic approach

Blade technology is at the forefront of greener, leaner technology but it's just one element in a whole range of hardware, software and infrastructure solutions being developed by vendors to help customers minimise energy needs whilst maintaining or improving performance.

Customers now have options spanning the whole IT infrastructure, including systems management solutions, power and cooling management solutions, groundbreaking server design and architecture, datacentre services and energy efficient systems initiatives.

Proactivity around the green issue

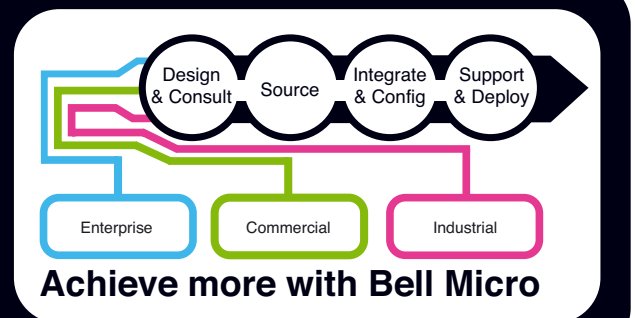
The increasing importance of the environmental debate will make green technology a key ongoing topic in business. It's important that end-user organisations build innovation into their environmental strategy, tasking IT administrators with scoping emerging technologies with a view to implementation.

Awareness of the green technology debate will help to create an environmentally friendly culture in the business, one where users more readily accept change and confidently make their own suggestions around energy saving changes to the IT infrastructure. A forum for communicating and discussing how the organisational IT impacts the environment will provide the catalyst for future ideas.

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For more information and contact details visit:

www.bellmicro.eu



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