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GREEN IT

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editorial Fleur Doidge

The future is green

Environmentally friendly IT is moving from marketing to mandate

The heat is on, with the G8 group of nations in July agreeing to cut greenhouse gas emissions globally 50 per cent by 2050.

The UK government, as a G8 member, is moving to encourage organisations to get greener – looking at operations across the board from IT infrastructure and human behaviour to building construction and design.

Its 15 July *Low Carbon Transition* plan says that 10 per cent of the annual emissions cuts between now and 2020 must be achieved through greater efficiencies in the workplace.

Carbon reductions must go hand in hand with cost reduction or improved productivity for businesses to play. UK offices, factories, schools and hospitals need to reduce emissions to almost zero by 2050 for the UK to meet its obligations. IT and energy efficiency are perhaps many organisations' best bet in this.

The environmentally friendly business of the future will need to take a holistic look at all its inputs, resources and outputs to see where

there is waste, for example.

Cuts need to be made – but this also means that work and opportunities will emerge for large numbers of IT resellers, if they are prepared to adapt their approach to these newest requirements for all homes, offices and workplaces, in both private and public sectors.

VARs, integrators and developers will be called on to help organisations in this time of need. Skilled consultancy that can supply solutions tailored to specific individual analyses will be in high demand.

Pure product sales will also be forced to go greener. Customers are already starting to ask about the relative energy efficiencies of diverse kit, and resellers who can answer such questions will benefit beyond the tough times.

IT resellers must step up to the plate to ensure they can deliver, in part or in whole, a genuinely greener solution for every customer.

It will be a long road, but those that start now with the additional learning and work required are surely most likely to succeed in the years ahead.

Fleur Doidge is CRN's features editor

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Big Blue is going green – so can you

Increasing regulatory pressures, focus on corporate social responsibility, and rising energy costs are forcing companies to reassess environmental issues, says **Helena Williams**

In the current economic environment, arguments for the adoption of greener IT are focusing more sharply on how companies can save money.

However, broader and increasing pressures on business towards the adoption of environmentally sustainable practices are becoming clear.

As a result, the market for green initiatives is growing exponentially as businesses and consumers become environmentally aware

Demand for energy is only expected to grow, outpacing supply. The carbon footprint associated with this demand has a value, and offers growing economic incentives for companies to manage their carbon output more efficiently.

These incentives will grow alongside the maturity of emissions caps and trading systems.

At IBM, our approach is twofold: we are developing innovations that can accelerate the adoption of products and services that have less environmental impact and are working to make our existing products and processes more efficient for both the environment and business.

Examples include our new Intel servers that we believe can deliver twice the performance of the previous generation in the same energy envelope, as well as our new energy-efficient IBM Power systems and IBM BladeCenter servers.

For now, resellers need to deal with common misconceptions that associate

greener IT products with a premium price. This can best be done by educating buyers about how more environmentally sustainable IT can improve their bottom line.

Discussions with purchasing decision-makers should address factors such as energy efficiency and supply consumption against a context of the total cost of ownership.

Resellers can also highlight for customers the costs that can be incurred from disposal of equipment where there is no asset buy-back scheme.

This Focus supplement on green IT looks at different aspects of the inevitable movement of customers towards more environmentally sustainable IT systems and how the channel can take advantage of this opportunity.

Helena Williams is director of the mid-market business at IBM UK

Business the green way

Regulation changes and cost issues means firms are rapidly becoming more environmentally driven, says **Fleur Doidge**

In a recently released film, *The Age of Stupid*, a man living alone in a devastated 2055 reminisces over footage from 2007 and asks why the human race did not take any action to stop climate change when it had the chance.

Tracey Rawling Church, director of brand and reputation at print vendor Kyocera Mita, previewed the film. "It asks, 'When we have the chance to save ourselves, why don't we?'," she said. "I am aware that there are people who claim it is all a conspiracy, or that it is all Al Gore's fault, but it doesn't take rocket science to work out that our future depends on looking after this planet and if we don't it is pretty much curtains for us."

Kyocera has long been keen to present itself at the forefront of moves towards increasing environmental sustainability. Its environmental charter states that it will operate in accord with its basic management philosophy, which is not only to provide for the material and intellectual growth of the company and its staff but to "contribute to the advancement of society and humankind".

The Japanese parent company believes that preserving the environment is central to achieving those goals. It requires all its affiliates to actively participate in sustainable measures that will protect the environment.

But green IT is not just the latest fad.

Andy Lawrence, research director of analysis on eco-efficient IT at The 451 Group, said green IT really started in around 1990.

"They were more concerned then with paper and chemicals in manufacturing, as well as waste and disposal," he said. "And it did result in some reductions."

We all know that the vision of the paperless office turned out to be a mirage. Costly paper consumption actually increased as businesses and customers alike found the need to create more records and archive electronic files – many of which were never used again.



Plugged in: Desktop management software is effective but few organisations have deployed it

Paper is only finally being less used now as cost pressures are brought to bear. "There are signs that paper consumption is falling, but it is unclear whether that is just because of the recession or increased use of collaboration technologies," said Lawrence. "It is also possible that paper production may be a form of carbon sequestration. The real issue isn't the paper but printing: the toner and the ink."

The business imperative

Scientists do generally agree that we must take better care of our environment. The

devil is in the detail, and research therefore continues. But whether you agree or not, the business imperative – one that's not going away any time soon – is about cost and waste control.

And printing waste is not the only or even the most important issue. Lawrence said that the EU's Waste Electrical and Electronic Equipment (WEEE) directive has mandated improved management of electronic waste. And today the emphasis is increasingly moving to the datacentre.

"Around 2003, people started to realise that datacentre energy costs were very, very

high, which again raised questions about the carbon footprint of all that energy use," said Lawrence. "The focus went very much to the datacentre, especially in 2007 when the Environmental Protection Authority (EPA) reported to the US Congress."

The difficulty for resellers and their customers is in differentiating genuinely eco-efficient offerings from the merely greenwashed, he added. But that choice is an important one to make – because the 2007 report revealed that datacentres account for 1.5 per cent of US energy use. That figure is expected to be similar in other developed nations and to double by 2012.

"Existing technologies and strategies could reduce typical server energy use by an estimated 25 per cent, with even greater energy savings possible with advanced technologies," the EPA reported – and that was all the way back in 2007.

Since then, organisational eco-efficiency strategies have concentrated on improving the energy use and insulation of datacentres. This is particularly critical when much datacentre kit is habitually left running whether it is in use or not.

Beyond that, most businesses could save a lot of energy by deploying simple things like desktop power management software. Surprisingly, few firms have done this, according to Lawrence, despite

evidence suggesting it is very effective in saving energy and money.

Suppliers have been growing their desktop power management sales 20 per cent, 30 per cent or even 100 per cent a year as a result, and the market may double or even quadruple in three or four years. "But it is hard to predict," added Lawrence. "For example, Microsoft is always capable of integrating a lot of that technology into its own products. But it is a good market right now."

The UK government's CIO council has also indicated that a plan around desktop use will be formulated – although it is likely that it will be carefully worded to allow CIOs to use their discretion.

"It will provide clear guidelines on when equipment should be replaced," said Lawrence.

Rawling Church said she believes that most green IT initiatives are driven by a near-universal need for improved efficiency. Kyocera has worked towards that goal across its range, redesigning printer technology such as cartridges where needed, bringing technology into line with standards such as ISO 14001.

Developments in motion

Products that create even less heat and use less energy than before are always appearing. Duplex printing has not yet been widely adopted, but even that potential has now been superseded by 'two-up' and 'four-up' – where two or four pages are printed on one side.

Print-and-follow technology means people can no longer hit print and then forget to pick up the document – the cause of the traditional paper mountains at many departmental printers. Instead, they have to swipe a card or enter a passcode at the printer itself to actually print out.

"Since the first Kyoto Summit in 1992,

It doesn't take rocket science to work out our future depends on looking after this planet

Tracey Rawling Church



Alarm button: The recession has pushed the start

people have been talking about things like embodied carbon, counting everything that has gone into a product," she said. "But, actually, the biggest issue is in how people use the products."

Culture and processes need to change. These things provide obvious revenue opportunities for the channel through consultancy, training and other IT-related support to customers.

"The key thing is that it really is not about polar bears," said Rawling Church. "It is all about the sustainability of humankind being at risk. I have heard some really interesting people speak on the subject recently. One man pointed out that fluctuations in climate are natural and not a new thing, but it has never happened when industrialisation was already taking place."

The problem can be summarised as exponential growth and demand for resources colliding with climate change. That means that thinking about green is essential. Governments are falling into line and businesses must as well, notes Rawling Church.

"When people started out with it, there was a huge price premium," she said. "In our technology at launch, that was 10 to 15 per cent. But there is no longer a price premium with our products





button on IT measures that increase efficiency

– in fact, over time they will cost you less. And this is true for a lot of environmentally focused technology.”

With business lobby CBI estimating that some 30 per cent of energy used by UK businesses is wasted, there appears to be plenty of room for increased energy efficiency, said Rawling Church.

Most movies are made pretty much purely to entertain. But like its extremely successful forerunner, *An Inconvenient Truth*, *The Age of Stupid* has a definite message and purpose. It also was not made or sold like other films – it was crowd-funded from the start (the first £50,000 was rumoured to have come from punters in a London bar on a single night) and employs the distributor directly.

It is also likely that innovative, individual approaches from IT providers and the channel will also prove essential if the green message is to succeed.

Popular power

Another company that has already recognised the inevitability of being green – and that has started to make changes that will help its customers towards more environmentally efficient businesses – is IBM. Jacqui Davey, vice president of the business partner organisation at IBM UK and Ireland, said green IT has become a

business imperative. Drivers for action move beyond costs to regulation and compliance, corporate social responsibility, stakeholder reputation and business development.

“IBM recognises that solutions to climate change represent both an opportunity for innovation and an imperative for corporate action,” she said. “As such it is helping clients reduce energy use and carbon across their business, while implementing climate protection as part of its own strategy.”

Critically, IBM tries to take a holistic view of customer needs, moving beyond the close focus on IT through its energy and environment model, and harnessing its 100,000 Business Partners as much as possible. It promises to invest in channel success, offering training, education and incentives that help them offer value-added services.

“Further, we engage our Business Partners in opportunities that arise from emerging technologies and evolving market dynamics,” said Davey. “So, in support of this we continue to share our vision and messages for climate change with the channel and how the channel can take advantage of latest technologies.”

IBM is helping Malta develop nationwide smart grid systems for power and water distribution that are aimed at improving efficiency and customer service. It also tackled Chinese shipping giant COSCO, helping it move from 100 to 40 distribution centres, slashing logistics costs by 23 per cent and CO2 emissions by 15 per cent or 100,000 tonnes a year. It has been building greener datacentres in universities in Australia and the US, that it claims can halve the power needed.

“This is a massive opportunity,” said Davey. “There will be £233bn spent on business upgrades to infrastructure by 2025.”

IBM itself reduced its CO2 emissions by 40 per cent between 1990 to 2005. Big Blue pledges to reduce its own greenhouse gas footprint seven per cent from 2005 figures by 2012, primarily by saving energy. Globally, IBM renewed or recycled £100m of kit in 2006, returning one per cent to landfill.

It is also aiming to reduce energy costs and consumption through system



There are signs that paper consumption is falling, but it is unclear whether that is due to the recession

Andy Lawrence

and resource optimisation.

Businesses and governments are opting for smarter and greener buildings, IT infrastructure, utilities, supply chains, and business operations.

“This is clearly around key emerging technology and is a key evolving market,” said Davey.

However, she added that the market currently appears oversaturated with solutions that have a green label in one way or another. Customers and resellers need to be able to tell them apart.

IBM is looking across customer needs, at IT infrastructure efficiency, at business process transformation, and at the need for the development of new products and services. It has formed the Green Sigma Coalition, an industry alliance to provide better metering, monitoring, automation, analytics and the like for energy, emission, water and waste management.

“The coalition will enable companies using these solutions to better understand energy and water usage, waste, and greenhouse gas emissions across their business operations,” said Davey. “It will help

them make changes to improve efficiency, reduce consumption and waste, and lower environmental impact.”

Other members include Cisco, ABB, Honeywell Building Solutions and Siemens Building Technologies. The Lean Six Sigma business improvement methodology will be applied in assessing customer needs and processes – because when it comes to green IT, the best solutions must be complex and individually tailored.

“There is no one answer,” said Davey. “Solutions can range from developing smart grids, to smarter datacentres, to digitising otherwise paper-laden processes and technologies that monitor and help reduce carbon emissions.”

Taking responsibility

According to IBM, green technology solutions can be most successfully offered by paying attention not just to Return on Investment (RoI) but also the notion of corporate social responsibility – which is gaining ground in an era of mandated accountability, sustainability ideals and regulatory compliance.

Meanwhile, VARs must, as usual, demonstrate real business benefits to prospective customers.

“Particularly in tough times, resellers can encourage businesses to spend money on environmentally friendly initiatives,” said Davey.

Independent analysis may agree. The

There will be £233bn spent on business upgrades by 2025

Jacqui Davey



London office of Datamonitor has just released a report, Can Green IT Bloom in an Economic Downturn?, which indicates that green IT is one area in which businesses are still keen to invest.

Rhonda Ascierio, senior analyst at Datamonitor and the report’s author, said: “The global economic recession has spurred a shift in the way organisations evaluate, budget for and deploy green IT.

“The downturn has also resulted in green IT trends for datacentres, client devices and asset lifecycle management, as well as reshaped return on investment (RoI) models.”

While IT spend overall has remained flat, green IT is a larger proportion of that spend. Organisations no longer regard green IT and cost-effective IT as mutually exclusive concepts. In fact, green IT that lets companies slash capital expenditure is enjoying increased demand – with environmentally focused legislation and cost control as the drivers.

Datacentre virtualisation, datacentre design and layout, as well as asset lifecycle

management, have become increasingly important, and the green IT market is expected to benefit and evolve accordingly, the analyst said, especially as green IT vendors are being forced to develop IT solutions that are more efficient as well as environmentally friendly.

“Flat IT budget growth also means that organisations that face critical datacentre limitations, such as a shortage of floor or rack space, are looking to software or outsourcing alternatives to building new datacentres or upgrading existing facilities,” said Ascierio. “Those alternatives include IT leasing, managed services, virtualisation software, cloud computing and software-as-a-service (SaaS).”

Three-way values: The benefits of greener datacentres

Moving from current...

- Rising global energy prices
- Squeeze on IT and capex budgets
- Soaring real-estate costs
- Overheating server racks
- Older datacentre technology
- Availability problems
- Inefficient use of energy resources
- New hardware consumption
- High carbon footprint

Financial value



... to green datacentres

- Accurate view of energy costs
- Cost saving through efficiency
- Consolidation of physical resources
- Better cooling capabilities
- More energy efficient hardware
- Systemic business continuity
- Fewer energy resources consumed
- Reduced hardware requirements
- Reduced carbon footprint

Operational value



Environmental value



Changes in the datacentre

Cloud computing should also be green. Meanwhile, datacentre virtualisation will become more all-encompassing – with servers, storage, communications infrastructure and business applications being virtualised across a pool of datacentre hardware, the analyst said.

The next UN Framework Convention on Climate Change (UNFCCC) summit is coming up this December in Copenhagen, following an initial June round of negotiations, involving 182 nations, in Bonn.

With the December talks aimed at amending the Kyoto Protocol to take strong action against climate change, it looks like the timing has never been better to go green. Who can afford to look stupid now?

© Courtesy of Datamonitor 2009

Reaching for green shoots

Technology for a greener and more sustainably profitable future is available through the channel, finds **Fleur Doidge**

Technological solutions to the problems caused by climate change are well within our grasp, according to a July report for the Major Economies Forum in Italy by former prime minister Tony Blair.

The report calls for achievable short-term measures, specifically energy efficiency, a halt to deforestation and development of lower-carbon power and investments in further technology developments. It said that these measures are needed to slash CO₂ emissions by 50 to 85 per cent by 2050.

What is more, the report noted that low-carbon technologies also offer substantial job creation and growth potential, giving countries that act towards its goals a way out of what may yet be tougher times.

There is a simply enormous range of products and services that can boost energy efficiency and the like, from diverse vendors that are targeting many markets through the channel. Resellers have a key role, cherry-picking from a smorgasbord of options to produce the optimum solution for customers.

Jacqui Davey, vice president of the UK business partner organisation at IBM, said its Premier Business Partner, Apex, recently helped Devon-based mail order tools and machinery retailer Axminster Tool Centre lower its energy use by 30 per cent.

The family-run business had serious performance issues with its datacentre. Not only were the servers underperforming, but they were underutilised – meaning costs were increasing and orders were taking a long time to fulfil.

Apex proposed a virtualisation programme, to enable the company to manage its servers better, gaining improved resilience across its network and greater energy efficiency.

“Virtualisation is the creation of a virtual, rather than actual, version of something, such as an operating system, a server, a storage device or network resources,” said Davey. “By deploying an IBM server and installing virtualisation

software, Axminster Tool Centre has taken steps to consolidate its IT infrastructure, become a greener company and open itself to new business opportunities.”

The customer not only saved energy costs but its IT infrastructure can cope more easily with new projects without having to add more servers. The efficiency gains are wide-ranging, with application implementation taking minutes where previously it had taken weeks. Axminster Tool Centre has also freed up real estate, giving it room to expand and develop.

According to IBM, many medium-sized firms plan to virtualise their servers, consolidate their storage systems, or retro-fit their server rooms between now and March 2010.

“And we have things such as the Tivoli energy management software, that manages all the smart metering. There is a range of software and hardware products to address the changes on which clients are focusing,” said Davey.

Another Business Partner, Art of Computing, sold greater energy efficiency in an IBM Express Advantage package to hearing implant developer Cochlear, which has sold its devices to about 180,000 hearing-impaired people.

In the UK, the company’s dispersed, non-standardised infrastructure was starved for power, and server management



was getting more and more expensive.

“Art of Computing worked with Cochlear to design, test and implement a virtualised environment based on a standardised and scalable IBM Express Advantage infrastructure,” said Davey. “Managed centrally, the environment is already delivering a step change in energy efficiency, productivity and resilience.”

Power use has shrunk, reducing the carbon footprint. Eight servers were reduced to 15, with greater flexibility and scalability. On top of that, the set-up delivered improved disaster recovery for Cochlear.

Jon Godfrey, director of services at Sims Lifecycle Services, said his business, which offers a service that gives fresh life to old IT kit from businesses – increasing environmental efficiency and cutting costs in the process – is growing despite the recession.

“In total we are processing 30,000 to

35,000 units a month just in the UK," he said. "We are finding that clients at the moment are focused on extracting every possible piece of value from their IT. So re-use is growing."

What goes around

While the market is dependent on how much new kit is being sold into businesses and how much is being replaced or recycled, customers also want to do more with the hardware they have.

"We process everything from the data-centre right down to the desktop, mobile assets, telephones and communications technologies," said Godfrey. "We even go right through to the big infrastructure products, dealing with mobile phone firms and telcos."

Some pieces of hardware recently received by Sims have been refurbished before being sent back to work three or four times. Where possible, an item can be fixed up and reused, but if that is not possible it can be broken down and its component parts are recycled.

"It is a bit difficult to estimate growth, due to some acquisitions," said Godfrey. "But a conservative estimate would be that we grew by 22 per cent last year, and that was in a falling [IT] market overall."

Sims' services are proving a good earner for VARs, resellers and distributors seeking to add value or an additional – even recurring – revenue stream.

"One of our big growth areas is the channel," said Godfrey. "Some of the larger resellers have their own recycling and end-of-life businesses or own a business that does it. We are pushing hard to develop more relationships with people in the chan-

nel. Depending on how much value you add, margins can be about 30 per cent."

Sims seeks reseller partners to offer its services as part of a cradle-to-grave solution for customers. For example, customers buying new kit could opt for a complete package that incorporates refurbishment or recycling when the time comes, or perhaps one that includes a trade-in deal.

Public projections

In return, Sims offers support to the channel players unused to seeing hardware this way. To an extent, resellers are used to promoting and selling brand-new, neatly packaged products and then never seeing them again. A shift in mindset is required, and Sims educates its partners on how to sell its services, and how to remarket refurbished gear as well as teaching them how to negotiate the various regulations and practices that must be followed around data security and hazardous waste.

"We destroy the data; we guarantee the data security and then we refurbish and repair and find it some new life, if you like," said Godfrey.

Anthony Greenhalgh, IBM business unit director for power and storage at Avnet Technology Solutions, said the distributor has had several energy-efficiency-focused engagements via resellers.

"Over the past two to three years, the majority of our larger deployments have been around energy efficiency, in many ways," said Greenhalgh. "Most – about 70 per cent – of our deployments are around virtualisation."

Technologies available

have developed accordingly. The IBM BladeCenter family of blade servers has proven a hit with customers, partly because of the Total Cost of Ownership (TCO) benefits. Different processor technologies – x-86, POWER or Cell Broadband Engine processors – and operating systems in the range let customers run diverse workloads inside a single architecture, reducing complexity and power consumption while easing systems management. Storage and networking options are integrated into the chassis.

Avnet is also seeing success with Big Blue's XIV disk storage environment, based on a scalable grid of off-the-shelf components starting at 27TB. These have built-in thin provisioning and system virtualisation, as well as large-capacity SATA drives and disk capacity optimised for power consumption efficiency per TB. They are meant to be easy to administer and manage as well.

"And from the software point of view,

With projectors we are seeing more 'green' features coming through from our manufacturers

Nick Culley



Storage Volume Controller (SVC) allows users to virtualise what has been deployed already, so they can get greater efficiency with what they have," said Greenhalgh.

Virtualisation is spreading to the desktop, but there are no specific products that can be recommended for resellers wanting to virtualise customers' desktop infrastructures, he added.

"But we are seeing within our partner business a large increase in enquiries about how to start to deploy desktops in a new, more cost-effective way," said Greenhalgh. "We are supporting them in doing that for their customers with IBM and third-party complementary products."

Solutions involving a unified communications (UC) aspect are also becoming important in sales to Avnet customers seeking to get greener. UC can help make a communications infrastructure more efficient but can also enable staff to work remotely – saving overheads across a customer's business.

Green solution selling

Andy Lawrence, research director for analysis of eco-efficient IT at The 451 Group, said IT-related ways of cutting energy use are emerging all the time as customers get more interested in buying in.



"You can see that new investments in greener technologies are about the low hanging fruit – it is about energy efficiency and also a realisation that saving energy is good for the bottom line," he said.

Green technologies that sell well are likely to require low capital investment or have some capital advantages such as fast return on investment (RoI). Desktop power management software is an easy sell and is doing increasingly well – as opposed to some technologies that might save lots of energy over time, but require a bigger outlay up front for cost-conscious companies.

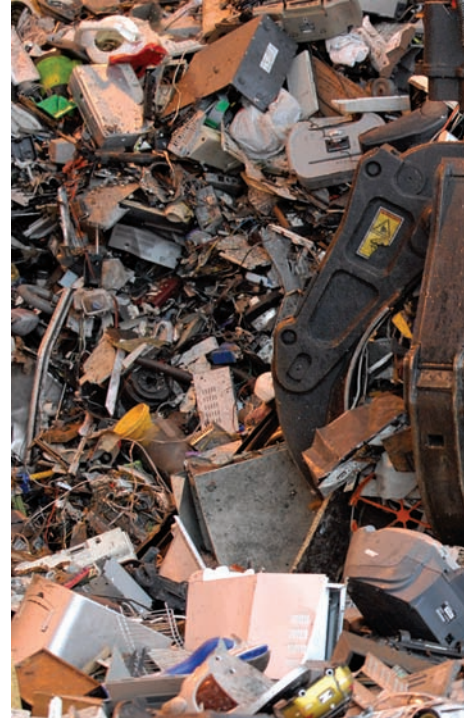
That said, massive hardware manufacturers such as Intel have been targeting improved energy efficiency across their product sets for years, as the other kick-back is improved performance. So users can get increased energy efficiency in other ways – if they need the performance, they can swap older systems for new replacement hardware with greatly increased processing power, removing the need for additional kit.

"Chip technologies have become much more energy efficient and will continue to do so," said Lawrence. "Also, server design generally has improved."

In storage, de-duplication, which avoids unnecessary mass replication of data, and thin provisioning, which parcels out storage incrementally according to the demands of applications, have become increasingly important and uptake is not high yet.

A relatively new development called sleepy disks enables inactive hard drives to be targeted and sent to sleep, which consumes less power. One estimate suggests that perhaps 80 per cent of all data stored by an organisation is nearline or non-active and so can be put to sleep at least some of the time.

"Yet I don't think these [technologies] play as important a role as the actual



Efficient tip: Sims recycles most kit at its facilities

processing, which is really key. Clearly, the datacentre has traditionally been very inefficient," said Lawrence.

A lot of work can be done to bring the power usage effectiveness (PUE) rating down. PUE is found by dividing the total facility power by the total equipment power, to get a ratio of how much wattage is used to keep the IT going, compared with what is needed to drive the datacentre itself. For example, a PUE of '3' means the facility demand is three times greater than that needed to power the IT, with the greatest possible efficiency a PUE of '1'.

"The PUE ratio is probably averaging about 2.5, and people are trying to bring it down to about 2," said Lawrence. "And for new-build datacentres, people are aiming for 1.5 – a significant improvement. Google gets it down to 1.2, but they build their own, design the whole thing and can maximise energy efficiency because they own their cooling systems."

Cooling is critical in datacentre efficiency. A greener datacentre is likely to

Carbon reduction commitments are going to lock in and that ends up as a cash imperative

Chris Gabriel



around the UK and abroad

make use of free air cooling, where air – say, through a window – is allowed to circulate and cool the equipment. The Green Grid consortium released an online tool in April to help US firms work out how much money they could save by harnessing free air cooling.

“People want it but they don’t want to spend a lot of money with it,” said Lawrence.

Nick Culley, managing director of Midwich, said the green IT areas that stand out as opportunity areas for it are printer hardware, projection and document scanning. Printers made by vendors including Kyocera, Brother, Canon and Ricoh are increasingly coming in greener variations, thanks to a broad range of technological advances.

Enhancing green credentials

Many offer print features aimed at helping customers enhance their businesses’ green credentials, by giving greater control over what is printed, how, when and by whom. Most are more energy efficient, and several are designed to produce less waste when replaced.

The projection market is similar, with classrooms and corporates alike increasingly expected to reduce their carbon emissions.

“With projectors, we are seeing more

‘green’ features coming through from our manufacturers,” said Culley. “Lower power consumption is the main one, but we expect to see quite a lot more development in this regard. In classrooms, and in the public sector especially, they want to ensure the products they are using are not harmful to the environment.”

Document scanning is coming to the fore for Midwich as a product portfolio that is being invested in primarily for the increased efficiency and associated green benefits.

Organisations that invest in scanners can meet onerous new regulatory stipulations around document archiving and data security while cutting back on resources such as paper and space. This saves power and shrinks carbon footprints.

Managed print solutions will help clued-up resellers even more, with Ricoh’s new Click offering in particular set to meet customer demands while enabling greener printing operations.

“We are trying to drive a stronger green message through Midwich, and there is a very good story to tell,” said Culley. “I think there is a job for distribution in pushing vendors a bit harder for information about the greenness of IT. I think the buying criteria for greener products will get stronger and stronger.”

Chris Gabriel, solutions director at integrator and service provider Logicalis, said that corporate social responsibility is becoming fashionable once again, although it had been talked about less in recent years as businesses concentrated on cutting costs.

He stressed that the greenest solutions tend not to be about a product or specific offering, but the ability to create tailored solutions for individual organisational needs that increase efficiency and compliance for less cost and environmental damage.

“People then say, ‘double bubble; that’s great!’,” said Gabriel.



There is a range of products to address the changes on which clients are focusing

Jacqui Davey

Mid-range consultancy

Consultancy is key, and resellers that succeed in green IT would do well to take note – especially in a world where product margins may be microscopic.

Mid-range customers, especially with lots of Linux or mainframes used as a Linux consolidation engine, are keen to cut power consumption and go green.

“It’s about, ‘I’ve got a bunch of these; I want less of this’,” said Gabriel. “And that is consolidation up to a bigger platform as much as cramming it in.”

Managed IT services for the public sector can be fertile ground for such deals. Logicalis in March signed a seven-year £6m deal with Greenwich Council to upgrade and deploy LAN and WAN technologies, provide consultancy and boost operational efficiencies intended to support e-services provision during the 2012 Olympics.

Local authorities are under pressure to achieve cost and efficiency savings while offering competitive infrastructure and services. A more efficient, less costly infrastructure will almost certainly mean a greener one.

“We find that successful deals must fulfil at least a few but often all of these four criteria: improved agility, continuity, responsibility and governance,” said Gabriel. “The big driver is cash rather than carbon. However, carbon reduction commitments are going to lock in and that ends up as a cash imperative anyway.”

Vendors are chasing the green pound through the channel. What help can VARs expect? **Fleur Doidge** reports

A guide to green incentives

Taking the initiative is generally a good thing, and vendors are often keen on enhancing and updating their channel programmes. But what incentives are vendors offering VARs to sell green IT?

Simon Jackson, vice president of Northern Europe for NEC Display Solutions, said the greener features of its products are complemented with features such as carbon metering and eco-modes. It is promoting such things as white LEDs and public displays sold with feet as an option – because research shows that most users do not need the feet.

The vendor has worked to qualify for Electronic Product Environment Assessment Tool (EPEAT) certification. “Customers are asking for greener products now,” he said.

Online costing tools

NEC is backing this up with initiatives that reward customers not only for buying these greener products but for actually using their eco-efficient features.

“We have the EcoFive programme,” said Jackson. “It is primarily targeting the public sector and education because, for EA series desktop LCDs run in eco-mode, we will extend the warranty from three to five years. We will also include collection of old LCDs and CRTs free of charge – there normally is a charge now – and they need to be delivered to the reseller in quantities of 10.”

EcoFive is a bolt-on to NEC’s reseller



Gold from green: Vendor incentives can help channel players to grow environmentally friendly IT sales

web site and programme SolutionsPlus, which includes online tools that help dealers sell greener IT by working out the cost savings associated with deploying a particular display with a certain configuration – including parameters such as life expectancy, cost per kW, display size and so on.

“So that helps people first of all understand the cost of their product and compare that with other products,” said Jackson. “People really need to consider the running costs, especially in the public sector. It is more than just capex and opex.”

Eben Owen, solutions channel manager at Emerson Network Power (ENP), has gone hands-on with its sweeteners.

“The main initiative we have launched via the channel is a datacentre assessment service,” he said.

Initially, the service is free for resellers, but progresses to different levels of walk-through investigation and consultancy.

Skills support

It aims to plug the skill gaps for IT resellers that might be selling uninterruptible power supply (UPS) offerings, but do not have the broader range of often non-IT skills required to help customers improve the overall energy efficiency of their datacentres.

“At entry level, we provide a 50,000ft view of the customer datacentre and what its business objectives are and what they want to do,” said Owen. “Then we walk through the datacentre and 90 per cent of the time can help that organisation with the low-hanging fruit in the physical or the IT layer.”

ENP will look at everything from rack organisation to whether they have blanking panels and so on, and communicates what it has seen to the customer. This is then tied into a carbon footprint calculation and how to best reduce emissions.

The vendor also has its own IT special-

Perhaps three per cent of overall energy consumption in a datacentre can be lighting

Eben Owen

ists work with the IT VARs, to cross the expertise divide.

"We can help them spot opportunities in the physical layer that they previously would not have looked at," said Owen. ENP can provide dealers with a total "scope of work" for their customers' datacentres, site by site, and also with "decision assurance" documents that work out what their carbon footprint currently is and how they can reduce it.

Channel partners can get access to a demonstration centre for testing set-ups.

"Perhaps three per cent of overall energy consumption in a datacentre can be down to lighting – which may be left on 24x7," said Owen. "And we have a new partner programme coming."

Gary Fowle, channel and marketing director at Fujitsu, said the channel is not yet sufficiently focused on green IT but vendor incentives could assist.

"People are focused on things that can be included under the green IT banner, such as virtualisation, but I do not think there are a lot sold with a green IT message," he said. "You are going to sell these products because they reduce costs."

Fujitsu has a number of 'green' products, including OW displays and PCs and the Dynamic Cube blade architecture, that are designed to save energy.

"The Dynamic Cube saves a minimum of 30 per cent of energy, out of the box," said Fowle.

New storage line Eternus will also fit into the greener IT category via its drive spin-down technology.

Fujitsu does have programmes that encourage VARs to push its greener products. One programme supplies a specific green IT sales tool around its Primergy x86 servers.

"We supply free power monitors so resellers can show how much power a customer is saving, and online green calculators," said Fowle. "We offer a complete installation support service, to make sure that they get those savings."

Aggressive rebates

Primarily for its tier-one channel partners, Fujitsu offers a "more aggressive" rebate scheme for its greener products. It is explicitly offering more margin to deal-

ers that are successfully selling the greener products.

"The easiest thing for resellers to do is to just sell a standard desktop. So we are reflecting that," said Fowle. "Lots of vendors have a performance-related rebate, but ours is larger for selling green products. It is a cash rebate, effectively."

Marc Groetelaars, director of the northern EMEA partner organisation at VMware, said the virtualisation vendor offers various tools to help partners deliver solutions around green IT.

"One of the most popular is the green calculator on our web site which allows you to work out exactly what the green benefits of virtualisation in an organisation might be," said Groetelaars.

The popular sales tool gives partners a straightforward way to help customers accurately assess how virtualisation fits into their green IT and corporate social responsibility policies.

VMware has also rolled out a seminar-in-a-box programme that VARs may access through its Partner Central portal. Resellers can run seminars for end users on specific topics.

"The Green IT seminar-in-a-box has proven particularly popular because it really cuts through a lot of the hype surrounding this topic," added Groetelaars.

"These seminars give partners a great opportunity to engage with potential customers in an environment that can really stimulate a great deal of excitement and momentum for green IT."

He adds that government-backed incentives specifically for green IT may not be far away and should be a great boost for partners.

"In Ireland, Sustainable Energy Ireland (SEI) announced that certain energy efficient servers and storage arrays would qualify for what they call the Accelerated Capital Allowance (ACA), which effectively gives tax breaks to organisations buying energy efficient equipment," added Groetelaars.

"Virtualisation software is included in the ACA scheme under the server category."

VMware was at the time of writing in the process of submitting its product for inclusion. In the next six months the vendor plans to push for a similar scheme to



Green for go: Vendors could offer financial assistance

start in the UK, which it believes could have a huge effect on reseller opportunities around green IT.

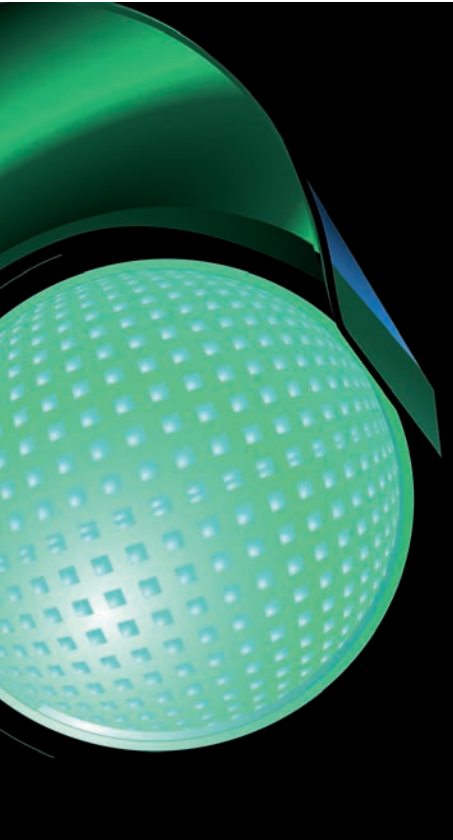
Liz Grant, volume team leader at IBM, said Big Blue – which signed its own first environmental policy in 1971 – has a series of initiatives that help the channel sell greener solutions.

"The reason for that is investing in greener IT is just good financial management and corporate social responsibility," she said. "We take a total cost of ownership (TCO) perspective. If you just come out and try to sell green, especially with the pressures that businesses are under today, it will not work."

Longer payment terms

IBM has also partnered with VMware in an eco-efficient x-server initiative around which it has found firms get RoI in two months. IBM Global Finance is also offering customers that buy the solutions three-month repayment terms.

"The customer is making money before they have to pay for the equipment installed," said Grant. Criteria for eligibility are "industry standard", she added.



to promote energy efficiency sales

In June, IBM held two reseller meetings aimed at educating customers around green IT. Other VAR training is held online, which is not compulsory although IBM “strongly encourages” partners to participate, said Grant.

Meanwhile, Big Blue’s Green Lab Showcase in the IBM Innovation Theatre at Hursley demonstrates integrated rack solutions that cool hardware efficiently and encourage server consolidation. It also shows energy use via Tivoli Service Management monitoring of individual blade servers.

The Hursley centre with IBM ISV and Developer Relations is helping about 50 ISVs develop greener solutions that could become part of IBM’s Green Lab Showcase and Ready for Energy and Environment programmes.

“IBM also has one of the largest recycling operations – so as part of its leasing

programmes we will take back product,” said Grant. “We recycle a vast quantity of the material that we take back, because just one per cent goes to landfill.”

Ready for IBM Energy and Environment is a technical validation for Big Blue’s Business Partners, just announced in February. The logo and criteria identify IBM Business Partner offerings designed and demonstrated to offer energy and environment benefits.

“This is designed to help IBM Business Partners validate, market and sell solutions bearing a unique mark that assures clients the product or service has been rigorously evaluated and demonstrated to reduce environmental impact based on real-world customer use,” said Grant.

It is aimed at resellers that develop software, hardware or services including IBM technology or services. The offerings must demonstrate customer-documented, measurable sustainability benefits.

The validation process requires products and services to help reduce the use of resources such as energy, water and paper materials.

“These requirements, established by the IBM Energy and Environment Review Board, are based on IBM’s long history of environmentally responsible practices in its own operations, as well as extensive experience in helping clients around the world address energy, environment, and sustainability issues and opportunities,” said Grant. “All submissions will be reviewed by this board and IBM’s Corporate Environmental Affairs.”

Validated partners can also join in with IBM online marketing campaigns, speaking opportunities and free technology showcases at any of IBM’s 42 Innovation Centers globally.

IBM developerWorks hosts the Green IT Report, an on-line repository for IT professionals interested in learning about adding energy efficiency to their offerings.

“Our products and services are

focused not only on improving the direct energy consumption and associated CO₂ emissions of IT itself, but applying IT to help solve energy and climate challenges,” said Grant.

A Dell representative said that it had been concentrating on developing greener, more energy-efficient and cost-effective hardware, software and services.

“That is in terms of manufacturing and packaging and servers, etc. Dell is taking a more holistic approach, rather than coming at it in terms of, say, rebates,” he said. “Dell feels quite strongly that you are either green or you are not.”

That said, he hinted that specific channel incentives could be on the cards.

Resellers and analysts may broadly agree with the vendor’s eye view on channel initiatives and incentives around selling more green IT. Yet while vendor approaches so far have been welcomed, it seems that more might be done.

Holistic help

Tashweka Anderson, manager of the sustainable IT business for corporate reseller Computacenter, said a lot of vendors are selling green IT. Although environmental issues in themselves are not new they have become central.

“Quite a few vendors are proactive. We



Marc Groetelaars

These seminars give partners an opportunity to engage with potential partners

get a lot that contact us saying they have a green product and can we evaluate it and partner them," she said. "Some are traditional IT vendors such as HP, IBM or Cisco. And some you may not have heard of before – such as Best Foot Forward (BFF)."

BFF is not an IT vendor but an environmental consultancy. Anderson confirmed that one of the biggest challenges in selling green IT is that it is not around products so much as looking at the big picture and figuring out how each company can go green.

This is multi-disciplinary and holistic – meaning one-time IT resellers now need to skill up on non-IT knowledge around such topics as architecture, air-conditioning, environmental science and hazardous waste disposal.

This not only makes the role of VAR more interesting and relevant but means help with this education process is needed from vendors and others, said Anderson.

Vendor initiatives include Cisco's EnergyWise ecosystem and its architecture on the Catalyst switching range, which is accompanied by an online calculator for savings and working out the business value of the technology.

Various datacentre assessment services and tools are available from its vendor partners.

"There are quite a few. But I think the challenge for us is really comparing offer-

ings," said Anderson. "There are so many. Rewards, incentives and so on can only help. I think it would provide quite a lot of traction."

Warning words

One area that comes to mind for Anderson is financing. Customers are wary of investing in greener IT when they fear taking a hit to the back pocket. Anything that brings forward ROI will help sales.

"They say, 'we understand that green IT in the long run will provide lower TCO', but in the current economic climate, organisations are having difficulty finding the investment," she said.

"Help around financing for VARs to entice customers [to buy green IT] would provide a big impetus. And I personally do not know of many [such initiatives]."

Existing financial assistance programmes tend to be about shifting kit rather than rewarding VARs for promoting such things as energy efficiency or waste reduction. That appears to be something of a gap in the market that vendors could seize to help the channel sell greener IT.

"I think that is part of the larger challenge, in that people see green IT as perhaps a bit esoteric," said Anderson, adding that green IT education needs to be integral in offerings, and in reseller programmes, rather than just about specific 'green' products or features or having green IT as little more than a marketing add-on.

"VARs and vendors need to get together and really demystify sustainable IT," she said. "We need awareness programmes that demystify sustainable IT for VARs and customers. And we need better articulation of the benefits and have them tied to customer pain points and challenges."

Vendors such as IBM are doing things through the Green Sigma Coalition and similar, but more such initiatives are needed, she said.

Global consultancy Ovum suggests that green IT sales may prove a long-term win, when the sales are – as they must be – focused around raising efficiencies across business cost and process.

Alexander Simkin, senior analyst and process improvement specialist in Ovum's IT services practice, said that a lot of chief financial officers (CFOs) view that process improvement and efficiency can cut costs.

"In the current economic environment, that is very appealing," he said. "What they do not realise is that becoming agile or lean requires major change management. If starting from a base of traditional processes, these approaches will not provide rapid cost reduction. The efficiency of your processes may even get worse before they get better. CFOs need to know that and it is a chief information officer's job to educate them."

This suggests that VARs too – if they want to be successful in their own consultancy and value-added solution sales around green IT – have a role in showing what can be achieved, while taking care to point out where savings can be realised.

Agile and lean process improvement methodologies can reduce waste in IT systems and software development, but the ROI can be slow. In fact, the economic tide might turn before process improvement methods – which often take long to implement and are resource-intensive – can deliver.

Those that have already got busy with process improvement via IT waste reduction have attained competitive advantage.

"Organisations that are only now seeking to improve their IT processes should consider methods that are optimum now and beyond the recession," said Simkin. "Lean Six Sigma is a good choice."

However, he added that when the economy improves, the cost-cutting agenda will wane and other priorities – such as improving the quality of processes – will become more desirable.



Investing in greener IT is good financial management and corporate responsibility

Liz Grant