

## How a VAR or reseller can take part in the discussion

By Heather Clancy, [VP of Strategic Communications, SWOT Management Group](#)

Much of the ongoing coverage about green technology issues, including my own GreenTech Pastures blog at [blogs.zdnet.com/green](http://blogs.zdnet.com/green), is focused on energy efficiency and environmental responsibility for the data center. Certainly, this is a worthy focus, but there's also plenty that can be done by VARs and resellers to address the client side of the equation.

Did you know, for example, that client-side technology such as desktops, monitors, notebooks and "thin" computers accounts for at least 15 percent of the energy use at the average mid-size company, according to market research firm The 451 Group?

Or that the average desktop consumes anywhere from 150 to 350 watts of energy, half of which often is wasted before it even reaches the CPU?

Or that some research figures from power management software vendor 1E show that the simple act of switching a desktop computer off at night can quickly save at least \$40 per year, per computer. For the big-bang number, that's about \$1.72 billion in electricity cost savings and almost 15 million tons of carbon dioxide diverted from the atmosphere.

So, what's a VAR to do about all this?

In my mind, there are five viable approaches a reseller can take to provide a greener client-side technology experience for their customers. Even adopting one of them can make a difference; being able to discuss them all will be a true differentiator, at least until some of the bigger high-tech vendors can better address how to include their channel partners in evangelizing their broad green technology messaging.

### 1. Embrace Power Management

I've already mentioned the impact that power management software can have at the desktop

level. Here's some more fuel for the debate: The Alliance to Save Energy projects that out of the roughly 104 million office PCs that are in use across the United States, at least 31.2 million are left on all night. The Environmental Protection is even more aggressive, estimating that about 60 percent of desktops are left on when they're not in use.

If you're not ready to recommend that your customer replace their existing desktops with something greener, you can have an immediate impact by introducing power management policies that you can administer through managed services. Not surprisingly, some tools that have popped up in this area – 1E, BigFix, Faronics, Veridium to name a few – got their start in the patch management world, allowing businesses to automate start-ups in order to apply security policies and other updates in the middle of the night. Microsoft has addressed power management with Vista and Windows Server 2008 and Intel is helping with vPro. The challenge, of course, will be talking about the return on investment, which often can't be seen for between 12 and 18 months. But this is a good place to start.

Here are some links to help bolster your argument. (I don't necessarily endorse 1E's technology, but they have some good resources):

[Energy Star Power Management Information](http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_management)

([http://www.energystar.gov/index.cfm?c=power\\_mgt.pr\\_power\\_management](http://www.energystar.gov/index.cfm?c=power_mgt.pr_power_management))

[1E Power Management Awareness Campaign](http://www.1e.com/energycampaign/index.aspx)

<http://www.1e.com/energycampaign/index.aspx>

[Power Management Calculator](http://www.1e.com/energycampaign/Calculation.aspx)

<http://www.1e.com/energycampaign/Calculation.aspx>

## **2. Monitor Your Monitor**

Most of you are well aware of the Energy Star program's work in this area: Simply put, Energy Star-rated monitors use 25 percent to 60 percent less power than those that are not rated under the program, depending on how they are being used.

Here are some more facts and figures for you to digest and use in your sales messaging. First off, Intel has some great figures that it uses to talk about the impact of its various chips on power consumption. Those data illustrate that an unmanaged Dual Processor 945 with a CRT monitor consumes 1015 kilowatt hours of electricity per year, vs. 938 for the same system with an LCD monitor. So, right out of the gate, switching to LCD technology gets you a bump.

One thing to keep an eye on is the progress of LED display options for notebooks. Not only are LEDs more energy-efficient, helping to extend battery life, but they also are touted as brighter. You can find LED notebook models from all the usual Tier 1 suspects.

### **3. Recommend a “Greener” Desktop**

The good news is that this is a whole lot easier to do now, compared with just 12 months ago. The easiest way to get a handle on the desktop models (and monitors for that matter) that are most energy-efficient is to visit the Web site for the Electronic Produce Environmental Assessment Tool, or EPEAT, at [www.epeat.net](http://www.epeat.net). Originally developed to help government procurement types find and acquired technology products that comply with energy efficiency and green materials specifications, EPEAT has taken on a broader role across the IT community. Products are rated on a Bronze, Silver and Gold level and have to meet a minimum of 23 different criteria that focus on the following: reduction of environmentally hazardous substances, the use of recycled materials when possible, design for the end of life, product longevity, end of life management and corporate performance. EPEAT and Energy Star are highly cooperative, so you will see specifications shared across the organization.

I also strongly suggest that you pay more attention to the power supplies that your customers' systems are using. If the computers are older, they may be using power supplies that are wasting an enormous amount of energy converting the high-voltage alternating current into the low-voltage direct current that is used by most office technology. The Electric Power Research Institute (EPRI) estimates that these power supplies eat up to 2 percent of U.S. electricity production (and that's before they even do any work). Swapping out these supplies for those with a more efficiency design could cut that in half, saving \$3 billion per year, according to EPRI. One development to keep track of is the work being done by [80 Plus](#), which is pushing the envelope in terms of power supply efficiency. The bonus is that 80 Plus is working with utility companies to put in place incentives for buying 80 Plus-rated power supplies.

Will your customers have to pay more for these products? Dell, for one, has vowed that customers shouldn't have to pay more. But in the sense that these green models are being touted at the premium end of vendors' lines, absolutely they will cost more. Right now, the systems are trying to shrug that off, pointing to energy costs saved and disposal costs reduced.

This, truly, is a total cost of ownership argument, where ownership is reconsidered slightly. Eventually, just like with everything else technology related, the more eco-efficient designs should trickle down to lower-priced systems.

#### **4. Go Mobile**

Did you know that an unmanaged Pentium Dual Processor with a CRT monitor uses oodles more electricity than a managed Core 2 Duo Processor T7700 mobile platform? According to Intel, the first uses roughly 1015 kilowatt hours per year versus 59 kilowatt hours per year.

Then there's the gas factor: according to a report out of Europe from the Fraunhofer Institute, over a five-year period, notebooks produce almost five times less greenhouse gases than a desktop PC.

To me, it makes sense that notebooks were designed greener: After all, energy consumption metrics are one of the key buying behavior influencers for mobile devices of all types. But if one of your customers is vacillating between the two formats, this might provide a nudge.

#### **5. Get Thin, Where It Makes Sense**

For some VARs, thin is definitely in. Several recent research reports make the case for offering thin client environments as an alternative to desktops. Forrester Research has released a report specifically tying thin computing and desktop virtualization technology to the green movement.

When comparing thin clients to desktops, Forrester estimates they use between five and 60 watts of electricity per device compared with the 150 to 350 watts typically used by a PC. The possible power conservation by opting for thin clients could be 24 percent over the course of the year, Forrester figures. The research firm also points out that thin clients last approximately seven years, compared with the three to four years for a desktop or a notebook.

If you're concerned with the carbon dioxide bit, the Fraunhofer Institute reports that greenhouse gas emissions can be reduced by up to 44 percent by replacing a desktop with a thin client.

You can keep abreast of green technology issues by reading my [GreenTech Pastures blog](http://blogs.zdnet.com/green) at [blogs.zdnet.com/green](http://blogs.zdnet.com/green)

Aside from the resources above, here are several other valuable green technology blogs you might want to bookmark.

[Sustainable IT \(from InfoWorld\)](#)

<http://weblog.infoworld.com/sustainableit/?source=rss>

[Environmental Capital \(from the Wall Street Journal\)](#)

<http://blogs.wsj.com/environmentalcapital/>

[Green Wombat \(from Fortune magazine\)](#)

<http://greenwombat.blogs.fortune.cnn.com/>