

The substantiated threat of global warming has governments, corporations and individuals urgently taking action. The US Government, as well as many corporations such as Wal-Mart, BP America and General Electric have already begun to respond and many more are searching for ways to reduce energy consumption and related greenhouse gas emissions. One way public and private organizations can begin reducing energy consumption, costs and their carbon footprint is by reducing IT energy consumption.

Recently, much of the IT energy savings discussion has focused primarily on more efficient servers and computer processors, as well as recycling old equipment. While these measures are important, one source of energy consumption, networked personal computers, has been growing at alarming rates and has received limited attention.

According to the Lawrence Berkeley National Laboratories (LBNL), more than 71 million personal computers (PCs) are operating in commercial settings in the United States. Despite the fact that most PCs have the capability to shift to a low power state when not in use, the vast majority of these devices do not do so. In fact, a LBNL study found that 60% of computers and monitors were left in full power mode overnight – and only 4% of computers were EVER put in a low-power state¹. As such, addressing wasted energy in networked PCs offers a huge opportunity for public and private organizations worldwide to save energy, costs and the environment in a single step.

Verdiem Corporation is the only organization solely dedicated to PC power management. Its enterprise-level, PC power-management software, SURVEYOR™ manages, measures and reduces energy consumption on PC networks. A typical PC consumes 600 kWh of electricity a year². SURVEYOR reduces that energy consumption by over 30% or by an average of 200 kilowatt-hours (kWh) per PC annually. In a PC-intensive organization, this represents a **3-6% annual reduction in total electricity consumption**, saving an average of **\$20 per PC annually**. Additionally, by eliminating PC network energy waste, organizations also reduce associated CO₂, greenhouse gas emissions.

For example, an organization with a 10,000 PC network, can save over 2,000,000 kWh of electricity — every year. These annual savings equate to:

- \$200,000 saved each year
- Greenhouse gas reductions of 1,264 metric tons of CO₂
- 274 passenger cars not driven for one year
- 143,933 gallons of gasoline saved

From a global perspective, the Gartner Group estimates worldwide PC shipments totaled 239 million units in 2006. If each one of these PCs was using SURVEYOR, we estimate that this would save almost 48 billion kWh of electricity which would equate to nearly \$4.8 billion in cost savings and savings, over 8 million passenger cars not driven for one year or more than 4 billion gallons of gasoline saved.

Sources: ZDNet (<http://blogs.zdnet.com/ITFacts/index.php?cat=7>), US Climate Technology Cooperative web site (<http://www.usctcgateway.net/tool/>) and American Electric Power's Watts On Schools (<http://www.wattsonschools.com/calc-pollution.htm>)

SURVEYOR works by intelligently placing PCs into lower power settings when not in use. The software employs a centralized control and management approach to controlling these power settings residing within each networked computer. This maximizes energy savings without interfering with end-user productivity. SURVEYOR also features comprehensive reporting capabilities to quantify savings, is easy to implement, requires minimal maintenance, and delivers payback typically in 18 months or less.

Verdiem and its customers throughout North America and the U.K. are helping to reduce global warming and CO₂ emissions. Based on its existing customer base, annual use of Verdiem technology reduces greenhouse gas emissions at a rate equal to taking more than 8,000 passenger cars off the road for an entire year, or conserving 4,317,988 gallons of gasoline. The development of SURVEYOR was funded in part by the Northwest Energy Efficiency Alliance, and the software is approved as a conservation measure by utilities and power producers throughout North America. For more information on Verdiem, please visit www.verdiem.com.

¹ Lawrence Berkeley National Laboratories, *After-hours Power Status of Office Equipment and Inventory of Miscellaneous Plug-Load Equipment*, Report No. 53729, January 2004. <http://enduse.lbl.gov/info/LBNL-53729.pdf>

² Arthur D. Little Inc., *Energy Consumption by Office and Telecommunication Equipment*, January 2002, for U.S. Department of Energy http://www.eere.energy.gov/buildings/info/documents/pdfs/office_telecom-vol1_final.pdf