

Dell says its energy-saving initiatives have cut costs by \$5.8 million per year

From Green Right Now Reports

For those who view corporate green initiatives as being more about building image than building profits, Dell has a reminder that “green” is also the color of money.

The Round Rock, Texas, company says it expects to save an estimated \$5.8 million a year as a result of power-saving projects and building upgrades in its facilities worldwide. The company, which sources more than 25 percent of its global energy needs from renewable sources, is also piloting solar projects on select campuses to incorporate even more renewable energy in its operations.

Dell says that by the end of 2009, it expects to cut its global power use by around 48 million kilowatt hours per year — enough energy to power more than 4,000 average American homes for one year. It will accomplish this through a combination of building upgrades, power management strategies and IT solutions, including:

PC power-down: Dell installed 1E NightWatchman and SMSWakeUp software on 50,000 of its desktop and notebook computers. NightWatchman helps reduce energy waste by turning off computers overnight, and SMSWakeUp repowers machines from a centralized command the next morning. As a result, Dell realizes an estimated 40 percent reduction in energy costs each year, which translates to around \$1.8 million in annual cost savings.

Lighting: In office and manufacturing areas, Dell’s facilities team has replaced three-bulb T8 fluorescent lights and incandescent bulbs with two-bulb T5 fluorescents, which offer longer lamp life and provide better output per watt than standard fluorescent tubes. Parking lots now use pulse-start ballasts on the lights, which use less electricity to power the lights on and help them use less energy overall. They’re also piloting the use of energy-efficient light-emitting diode (LED) lights in elevators.

Heating, ventilation and air conditioning (HVAC): In addition to installing solar window films and improving insulation to keep buildings cooler, Dell says it has made other HVAC improvements such as installing variable frequency drives – devices for controlling the rotational speed of electric motors by controlling the electrical power supplied to them – on pumps and fans in its ventilation systems.

Building automation: Dell expects to achieve around \$1.5 million in annual energy savings by automatically turning off lighting and air conditioning systems during non-peak operational hours, and by fine tuning the settings on water heaters, air conditioner chillers and building thermostats.

Global criteria for building design: The company has established sustainability design standards to be integrated into any future Dell-owned facility, anywhere in the world. These standards include clear mandates for site planning, water management, energy and atmosphere, materials and indoor air quality.

Simplifying IT: As a result of virtualization, server consolidation and improved hardware and data center design, Dell is realizing more computing output in a smaller power envelope. By the end of 2009, Dell's internal IT organization anticipates saving enough electricity annually to power roughly 2,000 average American homes for one year, which translates to as much as 17,000 tons of CO2 emissions saved each year.

Dell also is launching solar pilot projects around the world to determine new, innovative ways it can incorporate more renewable energy into its operations. The company is building a parking cover topped with solar arrays at its headquarters. The structure, designed by Envision Solar and McBride Electric, Inc. using solar arrays from BP Solar, is designed to produce 131,051 watts of solar power and reduce 221,000 lbs of GHG emissions each year, roughly equivalent to planting 23 acres of pine forest every year. The structure will cover 50 parking spaces and include two charging stations for plug-in, electric vehicles.

The company also is participating in Oncor's "Take A Load Off, Texas" solar photovoltaic program, which pays incentives to homeowners, businesses and governments to install solar panels.