

# Data Centers: Looking for Energy Solutions



## Turn to an ENERGY STAR® Service and Product Provider Partner

ENERGY STAR Service and Product Providers (SPPs) have the experience and tools to implement energy-efficient strategies that are right for you. Following the U.S. Environmental Protection Agency's (EPA) Guidelines for Energy Management, a proven strategy developed from ENERGY STAR partner successes, SPPs can help your organization gain control of energy consumption and costs.

ENERGY STAR SPPs can help data center owners and operators reap the financial and environmental benefits of superior energy efficiency. In its 2007 *Report to Congress on Server and Data Center Energy Efficiency Opportunities*, EPA estimated that the nation's servers and data centers consumed about 61 billion kilowatt-hours (kWh) in 2006 – or 1.5 percent of total U.S. electricity consumption – for a total cost of about \$4.5 billion. As one of the fastest growing sectors, there is significant potential for energy efficiency improvements in data centers.

Look to the expertise of ENERGY STAR SPPs to help your organization:

- > Reduce energy costs and operating expenses.
- > Reduce peak load, thereby limiting chances for power failures and lowering peak demand costs.
- > Install a meter at the output of each uninterruptible power supply to help track energy consumption.
- > Meet local and state benchmarking requirements.
- > Demonstrate environmental leadership by reducing greenhouse gas emissions that contribute to climate change.

**Most Active Service and Product Providers** • [www.energystar.gov/spp](http://www.energystar.gov/spp)

ENERGY STAR SPPs can help you identify, prioritize, and implement quality projects that will improve your total energy management. Use the list of Most Active Service and Product Providers to find companies with demonstrated experience in providing services and products that will help you lower operating costs, benchmark energy performance, and demonstrate environmental stewardship.

## The Advantages of Energy Efficiency

With the prevalence of data centers throughout our economy, and their considerable energy requirements, many organizations are integrating energy efficiency into their information technology (IT) planning. Approximately 50 percent of the energy consumed by a data center is used to support the operation of IT equipment. Therefore, data centers have significant opportunities to reduce energy consumption. Energy efficiency improvements can deliver energy and cost savings, which can be valuable since data centers often consume a high portion of an organization's total energy use.

ENERGY STAR provides several resources to help data center operators manage energy usage, including a 1-100 energy performance score, strategies for reducing energy consumption, and a low carbon IT program. By benchmarking energy performance using the 1-100 ENERGY STAR score, you can track improvements to identify successful energy management strategies, and easily communicate the score to the IT department, facilities group, and other financial decision-makers.

ENERGY STAR® is a U.S. Environmental Protection Agency program helping businesses and individuals fight global warming through superior energy efficiency. Learn more at [energystar.gov](http://energystar.gov).



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## Work with ENERGY STAR Service and Product Providers to:

- > **Become an ENERGY STAR Partner.** Make a commitment to energy excellence by becoming an ENERGY STAR partner.
- > **Assess Portfolio Energy Performance.** Using Portfolio Manager, EPA's ENERGY STAR measurement and tracking tool, SPPs will work with you to evaluate your data center's efficiency relative to similar data centers nationwide, and relative to data centers in your portfolio. SPPs can help you to receive a 1-100 Energy Performance Score for eligible commercial building types, and an energy use intensity metric for all commercial building types.
- > **Set Energy Performance Goals.** SPPs can help you set meaningful, achievable goals for new and existing buildings.
- > **Create and Implement an Action Plan.** SPPs use the guidance provided in the ENERGY STAR Building Upgrade Manual to identify projects, prioritize opportunities, and establish energy efficiency plans. Recommendations begin with no- and low-cost improvements, and also take advantage of capital investments and longer-term strategies that make financial sense.
- > **Calculate Financial Value.** To help you quantify and communicate the value of improved energy efficiency, SPPs can help compute the potential financial impact of energy performance improvements using ENERGY STAR's Financial Value Calculator.
- > **Evaluate Your Progress.** Once a project is underway, SPPs can work with you to track energy use and financial savings, and compare improved energy performance against your goals through the energy use intensity metric.
- > **Get Recognition for Your Achievements.** As an ENERGY STAR partner, you can gain recognition through leadership awards, publicized case studies, and more. SPPs can help you pursue these recognition opportunities.

### Featured Service and Product Provider Success Stories • [www.energystar.gov/sppresources](http://www.energystar.gov/sppresources)

Success stories illustrate best practices, lessons learned, and energy performance achievements through successful relationships between facility owners and operators and SPPs working in the Commercial and Industrial markets. Read these stories to learn more about project scope, costs, energy savings, financial returns, and other benefits. Work with an ENERGY STAR SPP partner to improve your energy performance and share your success with others.

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