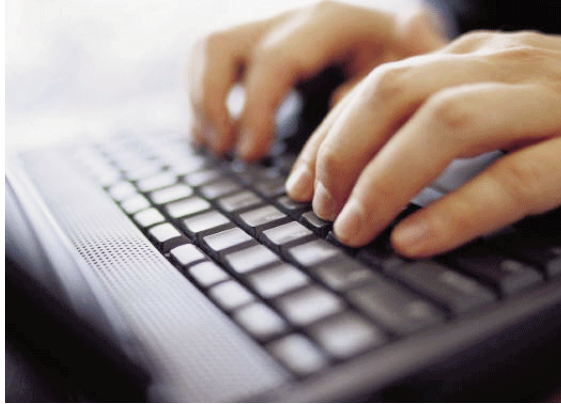


Take a Byte Out of Energy Costs

Save energy and money with Focus on Energy's "Green IT" plan

FACT SHEET



CUSTOMIZED INCENTIVES FOR ENERGY EFFICIENT COMPUTING

Focus on Energy provides grants and financial incentives for data center and information systems projects to help offset the costs of energy efficiency upgrades.

Many solutions are available to improve energy efficiency and your bottom line while maintaining or improving system reliability. Here are just a few examples:

Server Virtualization

Virtualization is a software solution that allows multiple physical servers to be "transformed" into software. Instead of using a separate physical server for each application—each with its own power-hungry CPU, RAM, hard disk and network controller—multiple machines can be linked together so that one server does the work of many.



This way, numerous servers which are each underutilized can be reduced to a much smaller number of fully utilized machines. Since a single underutilized server uses almost as much electricity as a server running many virtual machines, energy use can be substantially reduced.

For more information
call **800.762.7077** or
visit focusonenergy.com

As energy prices rise, more and more Wisconsin technology companies are looking for ways to curb runaway energy consumption in data centers and information technology departments.

That's why Focus on Energy, Wisconsin's energy efficiency and renewable energy initiative, has joined forces with leading IT experts to help save energy and money in these areas, even as their energy needs soar to new levels.

LET FOCUS SERVE YOUR SERVERS

Focus on Energy's "Green IT" initiative is a comprehensive approach that combines energy-efficient equipment, smart energy-management software, enhanced system design, and cost-effective cooling systems within the equipment and the facilities in which they're located.

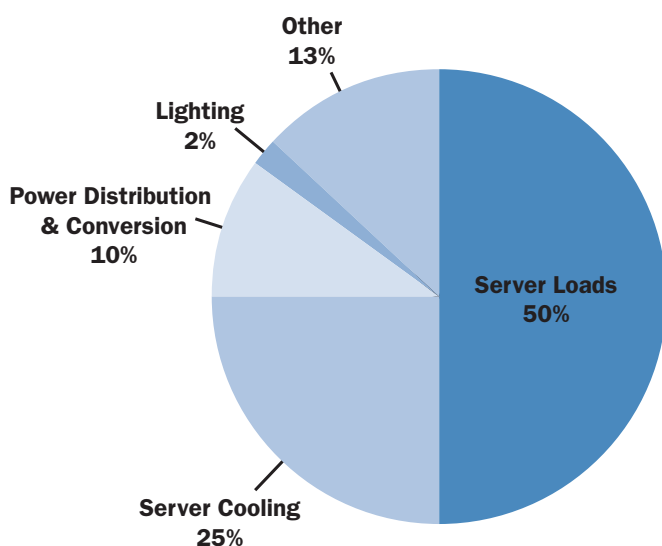
Our team of experienced energy advisors can visit your site and assess your facility's energy use, find inefficiencies and recommend solutions. This includes an evaluation of your information technology infrastructure and data-processing equipment.

You'll receive valuable insight and advice to help you maximize efficiency and savings through planning, design and best practices from a trusted third-party resource.

ENERGY STAR® Qualified Enterprise Servers

The Environmental Protection Agency is currently developing new product specifications for enterprise servers. The new qualification will allow consumers to easily differentiate energy efficient equipment. For the latest information on the new specifications, visit www.energystar.gov. Focus on Energy can help you choose between standard servers and ENERGY STAR qualified servers.

Typical Load in Data Centers



Cooling Systems

Chillers and computer-room air conditioners (CRAC units) often represent more than 25 percent of a data center's electric load. After first reducing your electric load by one or more of the energy efficiency measures described here, your facility's cooling needs may be substantially less, enabling the shutdown of one or more cooling units. Focus offers incentives for high-efficiency air-cooled and water-cooled chillers, and unitary and split-system air conditioners.

PC Network Energy Management

These software-based energy management products allow a PC network administrator to remotely set the power management features and turn off computers and monitors when they are not needed. Focus on Energy pays cash for each computer controlled, up to 50 percent of the project cost.

Power Distribution

Supplying a highly reliable source of electricity to data-center equipment itself consumes substantial amounts of energy. Uninterruptible power supplies (UPSs), transformers, inverters, and other power-distribution equipment often consume over 10 percent of a data center's total energy needs. Energy efficient UPS devices, converting to DC power delivery, and other measures, can substantially improve efficiency.

Efficient Electronic Data Storage Systems

Since data storage is cumulative, electrical load dedicated to electronic data storage is rapidly expanding. Save electricity and improve storage through a massive array of idle disks (MAID). MAID is a storage system that allows long-term storage to be taken off spinning disk drives by systematically powering them down individually or in groups when not needed. Depending on projected energy savings compared to standard data storage options, Focus on Energy may be able to help your business invest in more efficient data storage systems.

Bring your solution to fruition

Have other ideas you don't see here? For custom projects, work with an energy advisor early in your project planning process to get started. Call Focus on Energy at **800.762.7077** for more information. Or consider these options to take your savings to the next level.

- Air management
- Air-side economizer
- Centralized air handling
- Cooling plant optimization
- Direct liquid or gas cooling
- Free cooling via water-side economizer
- Heat recovery for use in other parts of a facility
- Humidification controls
- Lighting upgrades and occupancy sensors

SAVINGS FOR THE 21st CENTURY

To learn more about Focus on Energy's "Green IT" plan and how we can help your data center or IT department save energy and money, call **800.767.7077** or visit focusonenergy.com.