



## Starting an Energy Efficiency Program for Your Utility and Community

# Why Energy Efficiency Is Important

Utilities continue to seek ways to meet growing electricity demand and manage increasing energy costs while reducing the impact of electricity generation on the environment. Increasingly, energy efficiency is viewed not as a social program, but as a resource that should be incorporated into utility resource planning. It can provide both capacity and energy savings, lower fuel costs, defer generation investment, and reduce required reserves. Given the high cost of building new generation, it can be much less expensive to save kilowatt-hours by using power more efficiently than it is to build a new power plant to provide additional kilowatt-hours.

Energy efficiency:

- Helps a utility manage increasing energy costs
- Provides customers with tools to save energy and have more control over their energy bills
- Helps meet the continued growth in electricity demand from rising population and the increased use of larger and more sophisticated electronic products (computers, HDTV, etc.)
- May help avoid or delay construction of costly new generation
- May boost support for building generation once a utility demonstrates a commitment to efficiency
- Demonstrates environmental stewardship by reducing SO<sub>2</sub>, NO<sub>x</sub> and greenhouse gas emissions
- Improves a utility's ability to respond to climate change laws or regulations
- Aligns well with public power's mission to provide reliable service at the lowest possible price
- Provides a utility with opportunities to help commercial and industrial customers increase their efficiency and profitability
- Helps the local economy by keeping commercial and industrial customers profitable and in business and may assist with economic development efforts



**"Efficiency Long Island [the Long Island Power Authority's energy efficiency program] postpones the need to build additional generating facilities and it also provides tools our customers can utilize to control their own energy consumption, thereby lowering their monthly bills," said LIPA President and CEO Kevin S. Law. "It's the cheapest, cleanest and fastest way to meet Long Island's energy needs while reducing global warming pollution."**



**Gainesville Regional Utilities in Florida provides electric, natural gas, water, wastewater and telecommunications services to metropolitan Gainesville. This gives the city a unique advantage in crafting a comprehensive and progressive local greenhouse gas reduction strategy,” said Gainesville Mayor Pegeen Hanrahan**

## **Energy Efficiency Is Uniquely Suited to Public Power**

Energy efficiency aligns well with public power’s mission of acting in the best interest of the community and serving customers at the lowest cost. Energy efficiency helps residential customers keep bills as low as possible by reducing use. Increased efficiency can also help commercial and industrial customers remain profitable and in business, keep the local economy strong, create jobs for the community, and assist with economic development efforts.

Customers, as owners of their public power utilities can directly participate in planning their electric power future. In 1990, citizens in Burlington, Vt., voted to issue an \$11.3 million energy conservation bond. That vote gave new direction to Burlington’s future. Since it began operation in 1983, Emerald People’s Utility District in Oregon has had a resource planning citizens advisory committee to help plan the future power supply resources for the utility, with energy conservation being a key part.



**“As one of the fastest growing counties in the state, Snohomish County’s electricity demand is expected to grow significantly in the coming years,” said PUD General Manager Steve Klein. “We plan to address growth first and foremost by working with customers to achieve all cost-effective conservation.”**

# Steps to Starting an Energy Efficiency Program

**1 Incorporate energy efficiency into the utility's integrated resource plan.** Assess the utility's long-term resource mix and determine the extent to which energy efficiency can serve as a resource. The assessment should be a detailed survey of the potential resources available over several years and identify by customer class and end-use measure where the resource potential would be available. To be successful, a community must have a strong, long-term commitment to cost-effective energy efficiency as a resource.

**2 Develop targeted goals for the program.** Develop energy savings and peak reduction goals consistent with the cost-effective potential for each customer segment and each individual program based on the utility's overall goals. Targeted goals allow the utility to measure the success of the individual and comprehensive programs.

**3 Assess existing programs.** Identify opportunities to improve the effectiveness of current programs or better align programs to the resource potential identified in the utility's resource plan. Identify ways to expand or enhance programs to reach more participants or increase savings opportunities. Look at applicable city ordinances, administrative guidelines, and current business practices that may need to be modified.

**4 Develop the program design.** Involve internal and external stakeholders, including other city departments, in program design to get buy-in and ensure that the utility is offering programs that best fit the community's needs. Segment targeted customers and identify new programs that best meet the utility's goals. For example, a utility may offer an array of programs to all customer segments so broad access to programs is available but may focus marketing and promotion of programs to those segments that are most cost-effective. Regardless of the strategy, make sure the program is set up to meet the utility's goals and is in line with the utility's economic stability. Look to other utilities for examples of effective program design.

**5 Conduct an economic analysis.** The analysis should assess how proposed programs compare to the expected cost of future wholesale power and whether they provide a cost benefit to the utility and community. Take into account the costs of implementing new and existing programs, including the cost of incentives and rebates paid to customers, and the labor and administrative costs associated with program implementation. Consider short- and long-term costs and benefits to the utility, customers, and the community. Also consider the environmental and social benefits of each option.



**“Energy efficiency is an important part of our overall strategy because it will slow the growth of energy use and minimize the environmental impact associated with our members’ electric demand. These programs will also lower customer bills in member communities, improving affordability and business competitiveness,” said American Municipal Power-Ohio President/CEO Marc Gerken.**

**6** **Develop a plan to implement the program within the utility and community.** The plan should include targets, budgets, and program strategies on a sector-by-sector basis. A community-wide effort is necessary to achieve the greatest impacts. Develop an approach that maximizes the program results at the lowest cost (contractor implemented, direct-install, utility implemented, or a combination of these methods).

**7** **Develop a methodology for funding the program.** This may include allocating a percentage of revenue or identifying other sources of revenue that could be used to fund the programs. Find ways to motivate customers to take advantage of programs. Offer incentives and motivate customers in a way consistent with the utility’s good business and economic practices. Promote the short-term and long-term savings achievable and other opportunities for energy efficiency.

**8** **Monitor and evaluate the program.** Measurement and verification are an important component of an effective program and should be incorporated into the plan. Set targets and monitor them to determine whether resources spent on the programs are being used to reach targeted goals. Maintain the flexibility to change program offerings as necessary to ensure the best use of utility resources. Regularly update the utility’s integrated resource plan, taking into account the results of the energy efficiency program.

# Energy Efficiency Resources from APPA



## Energy Efficiency Resource Central

APPA has made energy efficiency one of its top priorities and has developed many new resources in this area, including Energy Efficiency Resource Central, public power's national information resource for energy efficiency programs and assistance. The following are five quick steps you can take to assist with your energy efficiency efforts.

**1. Visit Energy Efficiency Resource Central ([www.EERCnet.org](http://www.EERCnet.org)).** This Web site provides a wide variety of education, policy and advocacy resources and services to help utilities promote energy efficiency.

**2. Search APPA's database of energy efficiency programs** offered by public power utilities across the country and add your programs to the database at [www.EERCnet.org](http://www.EERCnet.org).

**3. Sign up for APPA's energy services list server.** This electronic forum is a popular way for APPA members to discuss policy and operational issues on energy services, energy efficiency and similar issues. Sign up at [www.EERCnet.org](http://www.EERCnet.org) under Discussion Forums.

**4. Find out about new publications.** APPA has a variety of publications for customers and utility personnel that can be purchased from the APPA Product Store located at [www.EERCnet.org](http://www.EERCnet.org). Several new energy efficiency publications, including a new publication "A New View on Energy Efficiency,"

aimed at elected officials and utility CEO's which will cover how updated energy efficiency programs can help local utilities control costs, risk and achieve other utility and customer goals will be available in mid 2009.

**5. Attend APPA meetings focused on energy efficiency.** APPA's National Conference in Salt Lake City, Utah, June 13–17 will feature many sessions focused on energy efficiency including:

- Starting an Energy Efficiency Program That is Right for Your Utility
- Utility Tools and Programs that Encourage Energy Efficiency
- Rate and Revenue Considerations When Starting an Energy Efficiency Program
- Measuring the Effectiveness of Your Energy Efficiency Efforts

For more information on the energy efficiency resources available from APPA visit [www.EERCnet.org](http://www.EERCnet.org).

# Additional Energy Efficiency Resources

## **Alliance to Save Energy: [www.ase.org](http://www.ase.org)**

The Alliance to Save Energy promotes energy efficiency worldwide to achieve a healthier economy, a cleaner environment, and greater energy security. The Alliance offers a variety of programs, brochures, public service announcements, energy audit materials, interactive and educational tools and much more—many items at low cost or no cost!

## **American Council for an Energy-Efficient Economy: [www.aceee.org](http://www.aceee.org)**

Nonprofit organization dedicated to the advancement of energy efficient programs and technologies with the goal of promoting economic prosperity, energy security, and environmental protection. ACEEE has a new Web resource for state policymakers and energy efficiency advocates. It serves as an online database of energy efficiency policies in the states, searchable by state or by policy. The database covers: appliance standards, building codes, clean distributed generation policies, tax incentives, vehicle policies and a host of utility-related energy efficiency information.

## **Best Practices for Energy Efficiency Benchmarking: [www.eebestpractices.com](http://www.eebestpractices.com)**

Numerous case studies and information about “best practices” programs.

## **Building Energy Codes Program: [www.energycodes.gov/](http://www.energycodes.gov/)**

The Department of Energy’s Program is an information resource on national model energy codes. They work with other government agencies, state and local jurisdictions, national code organizations, and industry to promote stronger building energy codes and help states adopt, implement, and enforce those codes.

## **A Consumer’s Guide to Energy Efficiency and Renewable Energy:**

**[www.eere.energy.gov/consumer](http://www.eere.energy.gov/consumer)**

Produced by the Department of Energy: Energy Efficiency and Renewable Energy, this is an informational hub for tips on saving energy and using renewable energy at home, at work, in your community.

## **Consortium for Energy Efficiency: [www.cee1.org](http://www.cee1.org)**

A North American nonprofit organization that works with its members to promote energy-efficient products, technologies and services.

## **Electric Power Research Institute: [www.epri.com](http://www.epri.com)**

As a nonprofit organization, the Electric Power Research Institute (EPRI) conducts research and development on technology, operations and the environment for the global electric power sector.

## **EnergyIdeas Clearinghouse: [www.energyideas.org](http://www.energyideas.org)**

Comprehensive database and general resource for businesses, industries, government and utilities to collect information regarding energy technologies and practices.

## **Energy Kid’s Page: [www.eia.doe.gov/kids](http://www.eia.doe.gov/kids)**

Source created by the Department of Energy Energy Information Administration for games, puzzles, classroom activities, glossary and energy history for kids.

## Additional Energy Efficiency Resources

### **Energy Savers: [www.energysavers.gov](http://www.energysavers.gov)**

Created by the Department of Energy, Department of Housing and Urban Development, Environmental Protection Agency, this site provides information on saving energy in the home, business, and industry. Offers many practical energy-saving tips, energy calculators and software, information on financing home energy efficiency improvements and much more!

### **ENERGY STAR: [www.energystar.gov](http://www.energystar.gov)**

ENERGY STAR is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping consumers save money and protect the environment through energy efficient products and practices. There is information on buying energy efficient appliances and homes, green building practices and efficient commercial building design.

### **Industrial Technologies Program:**

**[www1.eere.energy.gov/industry/saveenergynow](http://www1.eere.energy.gov/industry/saveenergynow)**

The Department of Energy's Program helps industrial plants operate more efficiently and profitably by identifying ways to reduce energy use in key industrial process systems.

### **Kids Saving Energy:**

**[www.eere.energy.gov/kids](http://www.eere.energy.gov/kids)**

Provides classroom lesson plans, games and activities for kids. Created by the Department of Energy Energy Efficiency and Renewable Energy group.

### **National Action Plan for Energy**

**Efficiency: [www.epa.gov/eeactionplan](http://www.epa.gov/eeactionplan)**

The National Action Plan for Energy Efficiency is a private-public initiative begun in the fall of 2005 to create a sustainable, aggressive national commitment to energy efficiency through the collaborative efforts of gas and electric utilities, utility regulators, and other partner organizations. The program offers many free publications for utility planning including Guide to Resource Planning, Conducting Energy Efficiency Potential Studies and Model Energy Efficiency Program Evaluation.

### **The U.S. Green Building**

**Council: [www.usgbc.org](http://www.usgbc.org)**

The U.S. Green Building Council is committed to expanding sustainable building design and construction. USGBC developed the LEED (Leadership in Energy and Environmental Design) building rating system. Utilities' Regional Partnerships for Utilities Flex Your Power ([www.fypower.org](http://www.fypower.org))

### **Midwest Energy Efficiency Alliance**

**([www.mwalliance.org](http://www.mwalliance.org))**

### **Northeast Energy Efficiency Partnerships**

**([www.neep.org](http://www.neep.org))**

### **Northwest Energy Efficiency**

**([www.nwalliance.org](http://www.nwalliance.org))**

### **Southwest Energy Efficiency Partnerships**

**([www.swenergy.org](http://www.swenergy.org))**

For additional copies of this brochure or for more information, contact Ursula Schryver at [USchryver@APPAnet.org](mailto:USchryver@APPAnet.org) or (202) 467-2980.



**American  
Public Power  
Association**

1875 Connecticut Avenue, NW  
Suite 1200  
Washington, DC 20009-5715