



Energy Efficiency: Reduce Energy Bills, Protect the Environment

How can consumers reduce their energy bills while reducing greenhouse gases and air pollution? Through energy efficiency! While consumers can take a number of energy saving steps themselves, an increasing number of electric and gas utilities, as well as states, are offering energy efficiency programs to consumers to help them control their energy costs. To learn more about energy efficiency, how utility and state investment in energy efficiency helps consumers, and what to expect from utility or state efficiency programs, read below.

Energy Efficiency Is an Important Part of Our Energy Future

What Is Energy Efficiency?

Energy efficiency refers to products or systems using less energy to do the same or better job than conventional products or systems. In today's world, there are many efficient products, homes, and buildings. They include efficient appliances for the kitchen, heating and cooling equipment, home electronics, and other products to weatherize our homes and improve the efficiency of buildings and industrial facilities.

Energy Efficiency Benefits

Across the country, if Americans took advantage of these more efficient products and took steps to improve the efficiency of their homes and buildings, they could save 10 to 30 percent on their energy bills, cost-effectively. This is true for many businesses, governments, and households. Studies show that these efforts could help reduce the nation's total energy demand by 20 percent by 2025, cutting the expected growth in electricity demand in half and the growth in natural gas use by 50 percent or more. This adds up to hundreds of billions of dollars on saved energy costs over the next 10 to 15 years. It could help prevent or delay the need for building dozens of new power plants or other new energy infrastructure. In addition, it can help create jobs, keep energy prices reasonable, and reduce greenhouse gas emissions and air pollution.

Energy Efficiency Is Under-Utilized

Unfortunately, energy efficiency is not used as often as it could be. People at home or in business in many parts of the country are not making the energy-efficient choice for a variety of reasons. They are often not aware of the amount of money they could potentially save on their energy bill by using today's energy-efficient technologies and practices. They sometimes find it hard to locate the more efficient products. Sometimes these products cost a little more and they do not know if they will get their money back.

The Benefits of Energy Efficiency

- Reduces customer energy bills.
- Gives customers greater control over energy costs.
- Performs at a lower cost than new energy supply from new power plants in many cases.
- Reduces air pollution and greenhouse gases.
- Can create jobs and improve state economies.

They may not have easy access to qualified energy efficiency experts to help them review and take advantage of opportunities for energy efficiency investments. And many communities do not have an energy utility or other organization in charge of helping them save energy.

Utilities and other organizations that run energy efficiency programs can play a valuable role in helping consumers, businesses, and communities find energy efficient solutions and significantly reduce their energy bills.

Our Energy Future

For these reasons, more than 50 leaders from diverse organizations including utilities, their regulators, states, consumer groups, environmentalists, and others came together to prepare a "National Action Plan for Energy Efficiency" to create a sustainable, aggressive national commitment to energy efficiency through natural gas and electric utilities, state utility regulators, and partner organizations. Building upon the experiences from successful energy efficiency programs around the country, the Action Plan shows how electricity and gas utilities, state organizations, and regional energy planning organizations can help provide more energy efficiency solutions to their customers and make energy efficiency a more important part of the nation's energy future.

Energy Efficiency Reduces Electric and Gas Bills

Energy efficiency is available to help address our growing energy needs and rising energy costs. The amount of electricity and gas used in the United States is expected to rise 20 to 50 percent over the next 25 years, putting stress on current systems and driving up energy costs. Today, most Americans are paying more for electricity and natural gas than they did four years ago, with the average household utility bill now about \$1,900 each year. And recently, the cost of energy is rising more quickly than inflation, which means the cost to cook dinner is increasing more quickly than the grocery bill.

The increasing demand for electricity and natural gas requires your utility to find new supplies of energy. Most new supply options require a great deal of money up front, which increases your utility bills. At the same time, natural gas costs have been rising due to decreasing gas reserves in the United States, international trade considerations, and growing demand.

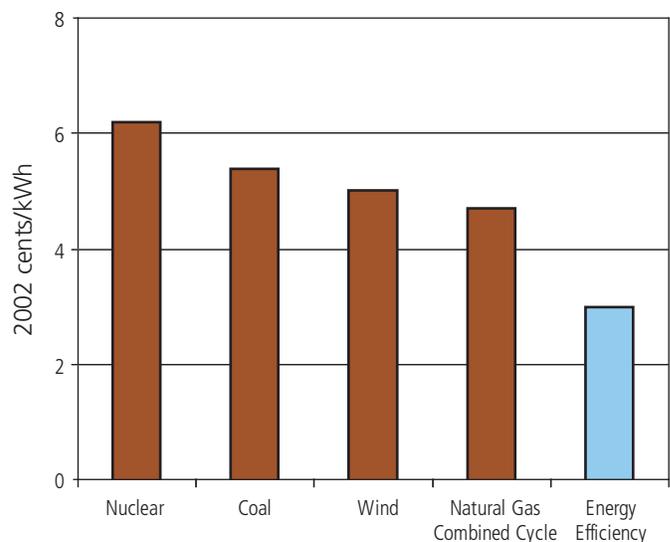
Energy efficiency programs offer an alternative to energy customers. Customers participating in many utility- or state-sponsored efficiency programs are saving 10 to 20 percent of their energy bills (\$200 to \$400 per year).

Energy efficiency offers an alternative to utilities as well. When energy providers use energy efficiency to help their customers reduce the amount of energy required, instead of investing in new energy supplies to meet the growing need for energy services, it provides many other benefits while not requiring a lot of money up front. The energy provider also benefits by reducing the costs of meeting its customers' needs. Because energy efficiency often costs less than building or buying most new supplies, this can prevent greater rates increases for the electricity and natural gas that you buy.

Your State or Utility Can Help You Reduce Your Energy Bill

Many electric and natural gas companies are turning to energy efficiency to help you reduce your energy bills. These energy efficiency programs are designed to help you use less energy to run your lights, electronics, appliances, heating, air conditioning, and other equipment, without sacrificing comfort or style. These programs help you gain greater control in reducing your energy use.

Energy Efficiency Is Competitive with New Electricity Generation Technologies



Source: EPA Clean Energy—Environment Guide to Action. 2006.

You Benefit with More Than Just Lower Bills

With energy efficiency programs, you can benefit from lower energy bills, but the benefits are not limited to just your pocketbook.

Helps local economy. Studies show that utility or state investment in energy efficiency helps the local economy. Instead of importing natural gas and electricity supply

from outside of your community, energy efficiency relies on domestic and local companies and retailers to provide energy management services and energy-saving products.

Improves comfort and value. Energy efficiency programs also provide customers with home improvements that enhance home comfort and increase property values for homeowners and businesses.

Environmental protection. You can also feel good that you are doing something for the environment by supporting energy efficiency investments. Power plants and natural gas use are currently responsible for about 50 percent of greenhouse gas emissions, which contribute to the risks of global climate change. In fact, the energy use in the typical home contributes twice the greenhouse gas emissions as a typical vehicle in a year's time. By reducing your own energy use, you can help reduce these emissions, as well as air pollution, water use, and the amount of natural resources (fossil fuels) being extracted from the earth. All of these actions help protect human health and our environment.

Improves energy security. Energy efficiency also helps protect national energy security. Using less energy protects the economy and consumers from possible price fluctuations and from energy service disruptions due to natural disasters or other causes.

What Can You Expect from Energy Efficiency Programs?

Throughout the country, electric and gas providers, states, and other authorized organizations offer energy efficiency programs to help customers lower their energy bills. Through these programs, customers are receiving:

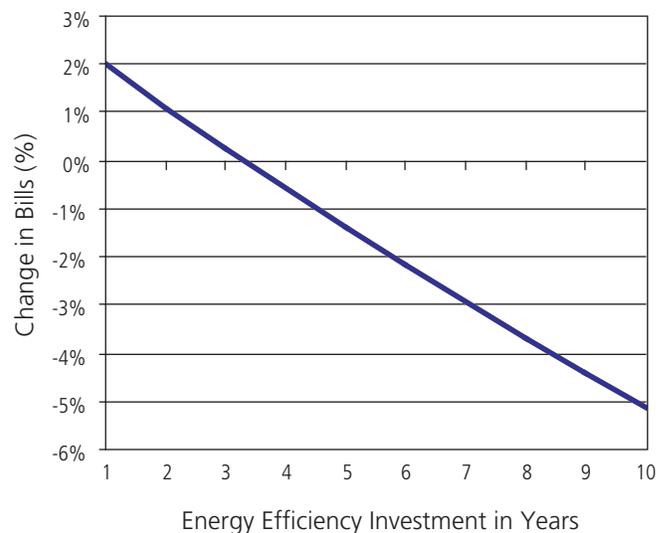
- Energy audits and suggestions for projects that save energy.
- Education on how to save energy.
- Rebates on purchases of energy-efficient products, including appliances, lighting, and HVAC equipment carrying the ENERGY STAR® logo.

- Incentives for purchasing new homes built to ENERGY STAR guidelines.
- Assistance with energy-efficient home improvements through home contractor programs such as Home Performance with ENERGY STAR.
- Access to financing for energy efficiency projects.
- Low- or no-cost energy efficiency improvements.

And the results are lower energy costs for many customers. These savings are in addition to those to be had from steps like raising or lowering the thermostat, and they stay with the customer for many years.

Customers in areas where these programs are offered may be paying slightly higher rates for their energy, which can add up to an additional two to four dollars per month, on average. However, this is more than offset by the energy savings that result from these programs. And over a 10-year period, the savings to customers and the community can be sizable.

Percent Change in Average Customer Electric Bills with Utility Energy Efficiency Investment



Source: Energy Efficiency Benefit Calculator developed for the National Action Plan for Energy Efficiency. 2006.

Ask your local electric and natural gas utility if they offer energy efficiency programs.



Many utility and state energy efficiency programs are delivering products and services certified through the government's ENERGY STAR program—providing energy bill savings of up to 30 percent to their customers. For more information, visit www.energystar.gov.

Americans, with the help of ENERGY STAR, prevented 35 million metric tons of greenhouse gas emissions in 2005 alone—equivalent to the annual emissions from 23 million vehicles—and saved about \$12 billion on their utility bills. They also saved a significant amount of energy in 2005—150 billion kilowatt hours (kWh) or 4 percent of total 2005 electricity demand. In addition, ENERGY STAR helped avoid 28,000 megawatts (MW) of peak power, equivalent to the generation capacity of more than 50 new power plants.

ENERGY STAR for Your Home

Recognized by more than 60 percent of the American public, the ENERGY STAR label has become the trusted national symbol for energy efficiency. Whether replacing

an old appliance, making home improvements, or buying a new home, consumers can use ENERGY STAR to help guide their purchasing decisions, save them money, and prevent greenhouse gas emissions.

ENERGY STAR for Your Business

Through their ENERGY STAR partnership, businesses and organizations of all sizes can benefit from energy efficiency tools and guidance provided by EPA, including standardized measurement tools and proven business and energy management strategies. Many U.S. buildings and industrial facilities can use up to 30 percent less energy through cost-effective investments in energy efficiency. ENERGY STAR helps organizations capture a significant portion of these savings and realize the economic and environmental benefits that come with superior energy management and a sustained commitment to saving energy.

"During our Home Energy Review, we learned we could save energy by adding ceiling and attic insulation and installing a high efficiency furnace. We're very happy with the results. The house is quieter and not as drafty, and our gas bill was cut almost in half."

*– Nancy Dougherty, Homeowner,
Beaverton, Oregon*

For More Information

More information on the National Action Plan for Energy Efficiency can be found at:

www.epa.gov/cleanenergy/eeactionplan.htm

This effort is facilitated by:

The U.S. Department of Energy and
The U.S. Environmental Protection Agency

To create a sustainable, aggressive national commitment to energy efficiency