ACEEE
American Council for an Energy-Efficient Economy

Saving Energy Helps American Families

Energy efficiency helps families use less energy to meet their energy needs, such as heating and cooling their homes, washing clothes, and watching television. We also use energy in transportation, as when we drive to a store or a doctor's office, and efficiency can help us waste less gasoline. Investing in efficiency saves money in utility bills and at the gas pump while providing families with many other benefits.

EFFICIENCY SAVES MONEY

Today a family with new appliances and a new air conditioner and heating system saves about $500 each year in utility bills compared with a family using appliances from 30 years ago.

The average family spent $2,075 on home energy bills and another $2,468 for gasoline in 2014. Much of that energy is wasted by inefficient appliances and vehicles. Smart home design, ENERGY STAR® appliances, home energy upgrades, and advanced cars all can help families slash their energy costs. National appliance efficiency standards in place today will save consumers more than $1 trillion. Recent vehicle fuel economy standards will save almost $2 trillion more.

EFFICIENCY INCREASES CHOICE AND IMPROVES COMFORT

Many families invest in efficiency not only to save money but also to enjoy other benefits. A more efficient home generally is a more comfortable home and a healthier home: sealing air leaks reduces drafts, good windows improve temperature control, and good ventilation delivers better indoor air quality. Smart thermostats and appliances give families greater control over how and when they use energy. Buses, trains, and bike lanes provide greater choice in how to get around and reduce traffic on the roads.

SMART TECHNOLOGIES MEAN SMARTER ENERGY USE

Refrigerators today use about one-quarter of the energy they did in the 1970s. LED lights use just one-sixth as much electricity as the old incandescent lights. New cars and light trucks can go almost twice as far on a gallon of gas as in 1975. And all of them work better.

New technologies have dramatically cut energy use for many kinds of equipment, electronics, and vehicles. Smart homes—with appliances connected to the grid, thermostats that adapt to families' schedules, and windows that block

HELP MY HOUSE: TERI AND JOHN

Teri and John Norsworthy live in a three-bedroom home in the little town of Summerton, South Carolina, near Lake Marion. The couple offer health and wellness coaching to the local community.

As retirees, Teri and John live on a fixed income. However they routinely paid around $400 per month in electric bills, and one month the bill rose to $500. That's when Teri decided something needed to be done. Although their home was convenient, the heating and cooling system was no longer working effectively. Because the couple understood the importance of actively maintaining their health, it was easy to apply the same sensibility to the health of their home.

When their local electric cooperative offered low-interest loans for energy efficiency, the Norsworthys seized the opportunity. Through Santee Electric's Help My House pilot program, their home received a new heat pump, insulation, and sealing of the home shell and ducts. The upgrades slashed their electric bills by $150 to $200 a month. In November 2015, the couple paid just $122 in electric bills and $84 in loan repayment. They make the monthly repayments on the $6,540 loan using the savings from their bills. Moreover, if they sell the home, the loan can be transferred to the new owners.

Teri and John will continue to save on their electric bills long after they pay off their loan. "It's wonderful!" says Teri. "Our home stays at the temperature we set the thermostat on, and the entire home is very comfortable."

sunlight that is too bright—promise further savings and more control for homeowners.

BETTER INFORMATION MEANS BETTER CONSUMERS

Researchers have found that families who live in energy-efficient homes are 32% less likely to default on their mortgages.

Energy-efficient homes are more affordable to run due to lower utility bills, and home buyers are willing to pay more for these homes. But buyers can't see energy efficiency. Home ratings and easy access to energy use information can help homeowners, prospective buyers, appraisers, and lenders understand the efficiency of a home.

HOME ENERGY UPGRADES SAVE MONEY

More than half of the homes in which we will be living in 2050 have already been built today. Most of these homes leak energy. Local programs work with ENERGY STAR® to help more than 90,000 families a year make home improvements that reduce their energy use by an average of more than 25%.

PROGRAMS HELP FAMILIES REDUCE ENERGY WASTE

Arizona's largest utility, Arizona Public Service, helped its residential customers save more than $100 million on their electric bills in 2014, an average of more than $100 per family.

Energy efficiency programs run by utilities and states invest $8 billion a year to help millions of families and companies save electricity, natural gas, and money. There is a huge variety of programs, from discounts on lightbulbs to rebates for building improvements to assistance for industry and farms.

SAVING ENERGY HELPS FAMILIES ON LIMITED BUDGETS

The average energy upgrade for a low-income home in 2010 is expected to result in $3,700 in saved energy costs and $14,100 in health benefits.

Saving energy is especially important for seniors and other low-income families in our country: Among families with incomes under $30,000, 18% of their income pays for energy used in their homes and for gasoline for their cars, compared with 7% for higher-income families. Yet these families can least afford the up-front cost of many needed efficiency measures. Low-income families need affordable options and assistance to invest in efficiency.

A FEW POLICIES THAT HELP FAMILIES SAVE ENERGY AND MONEY

- Twenty-five states have set energy-saving targets for their utilities, resulting in rebates, technical assistance, and other programs that help utility customers achieve savings.
- Fuel economy standards for cars, appliance efficiency standards, and energy codes for buildings all protect consumers and drive innovation by preventing energy waste.
- The bipartisan SAVE Act would allow larger mortgages for efficient homes because those homes are less costly to run and more valuable.

For more information, please see aceee.org/portal/national-policy or contact Suzanne Watson at (202) 507-4006 or swatson@aceee.org

FAITH IN ACTION: FIRST LUTHERAN CHURCH OF DECORAH, IOWA

In 2012, Forbes magazine named the little town of Decorah, Iowa, one of the prettiest towns in the United States. The First Lutheran Church, dating from 1876, adds to the beauty, but the building leaked energy and money.

In 2009 church members organized a professional energy audit that discovered significant energy-saving opportunities. Aided by a matching grant from a municipal program, the church replaced its very inefficient steam boiler. They also installed 48 efficient windows, added insulation, installed motion sensors, updated thermostats, and put in an energy management system to monitor and control energy use. In the first year, the church saw its energy bill drop by $7,937. Consecutive years brought further drops of $1,175 and $1,588. The savings have helped provide more funds for services such as a free health clinic and free meals. First Lutheran Church received the EPA ENERGY STAR Congregation award.

Energy efficiency is becoming a habit in Decorah. Beginning in 2004, Luther College, the largest local employer, invested more than $1.5 million in energy efficiency, all of which was recovered by 2011. A local nonprofit, the Winneshiek Energy District, aims to tackle the $50 million to $75 million that leaves the community every year in the form of energy costs. It has achieved $3 million in energy efficiency savings so far, creating and supporting dozens of local jobs. Along with the residents of Decorah, the Winneshiek Energy District is showing that older buildings can be made as efficient as they are beautiful.