

Energy Efficiency: The *Smart Way* to Save Money & Create Jobs

Energy efficiency is the cheapest, cleanest, smartest and most readily available source of American energy.

Businesses and consumers spend millions every day on wasted energy that pollutes our environment and costs Americans too much money. *By being smarter about how we use our energy, Americans will be able to do more while using – and paying for – less energy.* Consumers will save thousands of dollars, hundreds of green businesses will flourish across the country and hundreds of thousands of American workers will find sustainable jobs in growth industries.

Energy Efficiency Makes Economic Sense

Energy Efficiency Creates Jobs

- Strong energy efficiency policies will put hundreds of thousands of Americans to work immediately weatherizing homes, retrofitting buildings and conducting energy audits.
- ACEEE [estimates](#) that approximately 250,000 jobs will be created by 2020 through the energy efficiency provisions in the American Clean Energy and Security Act (H.R. 2454), with 650,000 total jobs generated by 2030.
- A recent [study](#) by The Pew Charitable Trusts shows that the "clean-energy economy," including energy efficiency jobs grew 9.1 percent, to 770,000 jobs, between 1998 and 2007 – compared to a 3.7 percent increase in traditional jobs.
- In Ohio, for instance, clean energy jobs grew 7.3 percent in the ten-year period, while overall jobs in the state declined 2.2 percent. In New Mexico, clean energy jobs grew 50.1 percent, compared to 1.9 percent overall job growth, and North Carolina saw a 15.3 percent increase in green jobs, compared to 6.4 percent job growth across the board. ([The Pew Charitable Trusts](#))
- The [Center for American Progress finds](#) that clean-energy investments triggered by the economic stimulus program and the forthcoming American Clean Energy and Security Act can generate a net increase of about 1.7 million jobs – enough to reduce the unemployment rate in today's economy by about one full percentage point, to 8.4 percent from the current 9.4 percent – even after taking into full account the inevitable job losses in conventional fossil fuel sectors of the U.S. economy.

What is Energy Efficiency?

- It is a common-sense, inexpensive way to reduce overall energy usage by repurposing energy **currently going to waste**.
- It helps businesses, churches, schools and homeowners save billions through utility programs that help them buy energy-efficient lighting and improve heating and cooling systems.
- It can create hundreds of thousands of jobs and give American workers the 21st-century skills they need to be competitive.
- It is a "no-brainer" for elected officials looking to save constituents money while helping us meet our clean energy goals.

Efficiency Has American Companies

Seeing Green

- **Dow Chemical** has saved \$8.6 billion since 1994 by becoming more efficient.
- **Wal-Mart** has made 95 percent of its Supercenters more efficient—reducing energy usage by up to three-quarters per store.
- **Johnson Controls** employs more than one third of its 140,000 employees in building efficiency sector.

Energy Efficiency Saves Consumers Money

- Energy efficiency measures – such as weatherizing homes and improving appliance efficiency – help consumers to take advantage of existing technologies, while using less energy and lowering their utility bills.
- According to [analysis](#) by the American Council for an Energy-Efficient Economy (ACEEE), the energy efficiency provisions in the American Clean Energy and Security Act could save Americans nearly \$750 per household by 2020 and \$3,900 per household by 2030.
- For every dollar invested in efficiency, consumers save \$4 – money that can be spent in other areas of the economy. (Environment Northeast, [Energy Efficiency](#))

Energy Efficiency is the Smart Way to Ease the Transition to a Cap and Trade System

- Energy efficiency investments can help *lower* the cost of electricity under a nationwide cap on carbon emissions, saving consumers real money. [ACEEE analysis](#) shows that electricity prices under cap and trade legislation would be *15 percent less* if a strong EERS and renewable electricity standard (RES) are also in place.
- By reducing overall energy demand as well as the need for expensive new power plants, energy efficiency investments reduce the cost of generating power, saving money on utility bills and cutting greenhouse gas emissions as we transition to a cap and trade system. ([Three Pillars: A Comprehensive Approach to Setting Clean Energy Standards for the Electricity Sector.](#))
- According to the Consumer Federation of America, American consumers would [save \\$200 billion per year by 2030](#), if a strong EERS and RES are adopted in tandem with cap and trade policies.

Energy Efficiency Gives American Businesses an Edge

- **Dow Chemical** has saved \$8.6 billion through a \$1 billion investment in energy efficiency improvements since 1994. ([Testimony](#) before U.S. House Subcommittee on Energy and the Environment, 2/24/09)
- Ninety-five percent of **Wal-Mart Supercenters and Sam's Clubs** now include daylight harvesting systems, which can reduce up to 75 percent of the electric lighting energy used during daylight hours, saving enough energy to power 73 single-family homes for an entire year. (Wal-Mart Stores, [Sustainable Buildings Network Fact Sheet](#))
- **Johnson Controls**, a Fortune 500 manufacturer in Milwaukee, has seen explosive growth in the building efficiency sector, which now accounts for more than one third of the company's 140,000 employees and \$38 billion in sales in 2008. ([The Pew Environment Group](#))
- **Mosaic**, a leading fertilizer company, has invested over the past 30 years in heat recovery and electrical generation systems at its manufacturing plants in the United States, enabling their plants to reduce electricity purchases by approximately 90 percent. ([Mosaic Co](#))
- New Jersey's **Honeywell International** has a \$38 billion portfolio, nearly half of which is tied to energy efficiency products and services. A typical \$10 million contract can create or sustain 95 jobs, for Honeywell engineers, local subcontractors and manufacturing workers in suppliers, auditing buildings for energy efficiency improvements and overseeing comprehensive retrofits. ([The Pew Environment Group](#))
- A combined heat and power (CHP) system at an **Ethan Allen** furniture factory in Vermont reduced energy costs by 10 percent, enabling it to continue operations and save 550 jobs. (U.S. DOE, *Combined Heat and Power: Effective Energy Solutions for a Sustainable Future*, 2008)
- The CHP system at **Qualcomm**'s San Diego corporate campus has been saving more than \$700,000 per year since its installation in 1995. Success with this system motivated the company to install an even larger system nearby at a new data, engineering and test facility in 2007, which meets 85 percent of the campus's energy needs. (EPA CHP Partnership, *CHP – Energy Savings and Energy Reliability for Data Centers*, 2008.)
- A project to recycle waste heat at the **ArcelorMittal Steel Mill** in East Chicago, IN generates 220 megawatts of electricity and 400 megawatts of thermal energy – saving the plant \$100 million annually and generating more clean energy than all the world's grid-connected solar collectors and more than all the wind turbines in Indiana and Illinois combined. ([Recycled Energy Development](#))

Energy Efficiency Measures are Working in States

A wide range of energy efficiency programs have been implemented successfully at the state level, including energy efficiency resource standards in 19 states. According to ACEEE's [Success with Energy Efficiency Resource Standards](#), some of these successes include:

- **Efficiency Vermont**, an “efficiency utility” created in 2000, cumulatively met more than 7 percent of Vermont's electricity needs through efficiency measures through the end of 2007. Efficiency Vermont helped reduce

annual energy costs for businesses and residential customers by more than \$31 million between 2000 and 2007 - an amount exceeding the program's annual budget.

- In 1999, **Texas** was the first state to establish an EERS and successfully met annual goals of reducing load growth by 10 percent. By 2007, the state legislature increased the standard to 15 percent by 2009 and 20 percent by 2010.
- In recent years, utilities in **Hawaii and Nevada** have used energy efficiency measures to achieve annual energy savings of about 0.6 percent. In 2006, this translated into consumer savings of about \$12 million in Hawaii and \$14 million in Nevada.
- **Connecticut** requires that all cost-effective energy efficiency measures are put into place before turning to other resources; in recent years, the state has been achieving energy savings of more than one percent annually. Connecticut consumers saved almost \$39 million through energy efficiency in 2006.

Energy Efficiency in the American Clean Energy and Security Act of 2009

Energy efficiency programs in the American Clean Energy and Security Act of 2009 (H.R. 2454) will help put America on the fast track to a clean energy economy, complement efforts to expand use of renewable energy sources like wind, solar and biomass, and address climate change by implementing a nationwide cap on carbon emissions.

Efficiency elements in the bill include:

1. An energy efficiency resource standard (EERS) requiring utility companies to reduce their energy usage by 5-8 percent through efficiency measures. In order to meet this standard (versions of which are already used in 19 states), utilities would provide incentives and assistance to help customers make their homes and businesses more energy-efficient;
2. Codes and standards for buildings and appliances; and
3. Allowances given to utility companies to ease the initial impact of cap and trade that are allocated specifically to energy efficiency provisions,

The time has come for Congress to move quickly to enact the *American Clean Energy and Security Act*, an important first step in bringing the numerous benefits of energy efficiency to all Americans and putting America on the path to a more efficient, clean energy economy.