

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. By incorporating strong energy efficiency policies into energy and climate legislation, the U.S. Senate can put our nation on the fast track to a clean energy economy. The result? Consumers will save billions, green businesses will flourish across the country and hundreds of thousands of Americans will find sustainable jobs weatherizing homes, retrofitting buildings and conducting energy audits—boosting our economy while reducing our carbon footprint.

Energy Efficiency Makes Economic Sense

Energy Efficiency Creates Jobs

- According to a [study](#) by the American Council for an Energy-Efficient Economy (ACEEE), energy efficiency provisions in the American Clean Energy Security Act (H.R. 2454) with enhancements like establishing a 10 percent energy efficiency resource standard and requiring one-third of the electric utility allowances to be used for energy efficiency, could create more than 569,000 jobs nationwide by 2020 – that number would jump to more than one million jobs by 2030.
- A [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.
- The [Center for American Progress finds](#) that clean-energy investments triggered by the economic stimulus program and the 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.

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.

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.

What is Energy Efficiency?

- It is a common-sense, inexpensive way to reduce overall energy usage.
- 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 to meet our clean energy goals.

- New [analysis](#) from the Consumer Federation of America shows that a 30 percent reduction in residential electricity and natural gas consumption below the levels projected by the Energy Information Administration for 2030 would lower consumer electricity bills by an average of \$345.
- According to [analysis](#) by ACEEE, the energy efficiency provisions in the American Clean Energy and Security Act, with enhancements, could save Americans nearly \$283 annually per household by 2020, and \$832 annually per household by 2030.
- According to a [report](#) from consulting firm McKinsey & Company, elevating energy efficiency to

a national priority could save American consumers \$1.2 trillion by 2020 – about the same amount as the projected 2009 federal deficit.

- 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

- A [recent report](#) conducted at Georgia Tech concludes that energy efficiency would offset the need to build any new coal-fired power plants in the South and bring energy consumption in 2020 down nine percent below projected levels.
- 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 Already 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.

The Overwhelming Majority of Americans Support Clean Energy Policies

- In a recent [Zogby poll](#) 71 percent of likely voters indicated their support for the American Clean Energy and Security Act. What's more, nearly half of likely voters feel Congress should be doing more to address global warming.
- Research conducted by the Benenson Strategy Group indicates similarly broad support for the American Clean Energy and Security Act, showing 63 percent of those polled support the bill. The poll also found that Senators who vote for the energy and climate legislation would be more likely to be re-elected than those who oppose the measure. A subsequent Benenson study showed that support grows to 75 percent among young voters.
- In a [poll](#) conducted by the Washington Post and ABC News, 57 percent of Americans indicated that they support efforts to revamp US energy policy.

Efficiency is the Fastest, Most Cost-Effective Way to Reach Our Climate and Energy Goals

American business owners, academic experts, and states agree: Energy efficiency programs are the most effective way to fast-track efforts to reduce our overall energy usage, affordably expand the use of renewable energy sources and address climate change. But the current Senate energy bill, the *American Clean Energy Leadership Act*, does nothing to help Americans tap the energy efficiency potential at their fingertips. In fact, the bill is **worse than business as usual** because it would result in *less efficient* energy usage than we would have with no federal policy in place.

The Senate must ensure any climate and energy package includes common-sense efficiency policies that are the best way to contain the costs of reaching our clean energy goals. By supporting strong efficiency provisions, including an Energy Efficiency Resource Standard (EERS) requiring utility companies to reduce their energy usage by at least 10 percent through providing incentives and assistance to help customers make their homes and businesses more energy-efficient, senators can bring big savings and job opportunities to their constituents *and* make addressing climate change much more affordable.

The time has come for the Senate to enact energy policies that bring the numerous benefits of energy efficiency to all Americans and put America on the fast track to a sustainable clean energy economy.