American Conservation Coalition

Energy Efficiency 101

Saving Money and Improving the Environment



Investments in energy efficiency can save families and businesses money, while using fewer resources and reducing emissions. Energy efficiency relies on innovative technologies and materials to conserve energy, water, and heat.

Buildings contribute <u>nearly 40%</u> of global emissions. Making residential and commercial buildings more energy efficient will thus be important in reducing energy-related emissions and costs. Through effective tax policy and private sector investments, we can improve energy efficiency in the United States and across the globe.

Facts vs Myths

- Fact: Energy efficiency lowers utility costs for families and businesses.
- Myth: Energy efficiency improvements are ineffective.
 - According to the American Council for an Energy Efficient Economy, <u>improving</u> <u>energy efficiency</u> is "one of the most cost effective ways" to address high energy prices and global climate change.
- Fact: The United States has improved energy efficiency while growing our economy.
 - Since 1949, energy use per dollar of real GDP has <u>declined</u> in the United States.

The Benefits of Energy Efficiency:

- Energy efficiency is environmentally beneficial.
 - Energy efficiency upgrades are responsible for <u>half the carbon emissions</u> reductions in the building sector since 2005.
 - Since 1992, the voluntary ENERGY STAR program run through the Department of Energy has helped reduce emissions by <u>4 billion tons</u>.
- Energy efficiency is economically beneficial.
 - Energy efficiency can <u>save consumers</u> \$105 to \$627 yearly in energy costs.
 - The sector supports 2.3 million jobs and 40% of our energy workforce.
- Energy efficiency increases grid reliability.
 - By conserving energy through demand-response technologies, energy efficiency increases the reserve margin of the grid and offsets additional generation that would have otherwise been needed.

Markets vs Mandates

- The private sector is taking energy efficiency seriously.
 - Since its enactment in 1992, more than 2.2 million ENERGY STAR-certified homes and apartment buildings have been built.
 - 33 different industrial sectors work with ENERGY STAR to make their facilities more energy efficient.
 - By prioritizing energy efficiency, Caterpillar has begun to <u>reduce total energy</u> output for operations.

- HVAC company Emerson's <u>Copeland Scroll Air Compressor</u> can reduce energy consumption by up to 50-60% thanks to its technology.
- Since 2000, Ford has <u>improved energy efficiency</u> in its U.S. plants by 4.5%.
- Federal spending on energy efficiency is duplicative of state programs and overrides consumer preferences.

How to accelerate energy efficiency

- Enact and finalize tax policies that encourage private sector investment in clean technologies.
 - Immediate expensing, enacted under the tax reforms of 2017, has led to an 11.4% increase in private sector RD&D for environmental projects.
 - Decreasing regulatory burdens <u>benefits the environment</u> by leading to increases in investments in innovative technologies.
- Allow the free market to innovate.
 - <u>Companies</u> around the world are investing substantially in energy efficiency upgrades and innovations.
 - Free economies that allow businesses to innovate tend to be more environmentally friendly economies.
- Trust in people to make energy efficient upgrades.
 - A majority of American consumers are <u>in favor of buying energy efficient</u> <u>appliances</u> for energy cost reduction and environmental benefits.
 - Consumers will make energy efficiency upgrades if the costs make sense for them. Government mandates that force or subsidize energy efficiency override the preferences of consumers and businesses.
- Understand the private sector's role versus the government's role.
 - The federal government can play an important role by communicating information through programs such as ENERGY STAR without subsidies and improving energy efficiency within the federal government.
 - Excessive spending through targeted tax credits, grants or mandates distorts consumer choice and redistributes taxpayer money to homeowners.

Summary

- Energy efficiency is a cost-effective way to reduce emissions and lower energy bills.
- Businesses and individuals invest in energy efficiency because it saves them money.
- Through free enterprise, targeted investment, and innovation, we can increase energy efficiency in buildings, appliances, and vehicles.