

## FACT-MYTH ENERGY EFFICIENCY APPLIANCE AND EQUIPMENT STANDARDS

- **Myth: Energy-Efficiency Regulations Reduce Consumer Choices**
- **Fact: Efficiency standards set a performance floor for certain appliances, driving innovation that leads to more choices for consumers**

Light bulbs are perhaps the most familiar example of how standards have stimulated innovation resulting in improved consumer choice in wattage, color, warmth, and other factors. Anyone who has browsed the light bulb aisle at the hardware store lately knows that consumers can now choose between halogen incandescent bulbs, compact fluorescent lamps (CFLs), or light-emitting diodes (LEDs)—and save 25% to over 75% on utility bills.<sup>1</sup>



<http://energy.gov/energysaver/how-energy-efficient-light-bulbs-compare-traditional-incandescents>

- **Myth: Efficiency Regulations Are Less About Reducing Emissions, More About Controlling People's Choices**
- **Fact: Efficiency standards do it all: encourage innovation and improved consumer choices, drive efficiency, boost productivity, and reduce carbon emissions**

Emissions reductions, efficiency standards and consumer choice go hand in hand. The [most recent standard](#) for commercial air conditioners and furnaces alone, for example, would create net savings of almost \$50 billion and avoid 815 million metric tons of carbon pollution over the life of the rule. That's the carbon emissions equivalent of not burning nearly 2 billion barrels of oil. Of all the options for reducing pollution, improving efficiency is the single most effective and economical choice.

- **Myth: Savings from Efficiency Standards Are Paid for by Low-Income Consumers**
- **Fact: Standards save all consumers money. By establishing a performance floor, standards ensure that all appliances—even those used by renters—help consumers manage consumption and lower bills**

The lifetime savings from new standards outweigh the incremental upfront costs by a ratio of 4 to 1. A typical household saves about \$320 per year as a result of standards, and as people invest in newer, affordable models, they can expect to save nearly \$460 annually by 2030. Further, even as we've significantly raised efficiency standards in recent decades, actual retail prices have fallen. The inflation-adjusted retail price of refrigerators, for example, decreased by about 35% between 1987 and 2010, along with clothes washers (by 45%) and dishwashers (by 30%).

Efficiency standards benefit all consumers, and specifically ensure a minimum level of efficiency for low-income renters who often do not purchase appliances. That's why leading low-income housing groups strongly support improved standards.

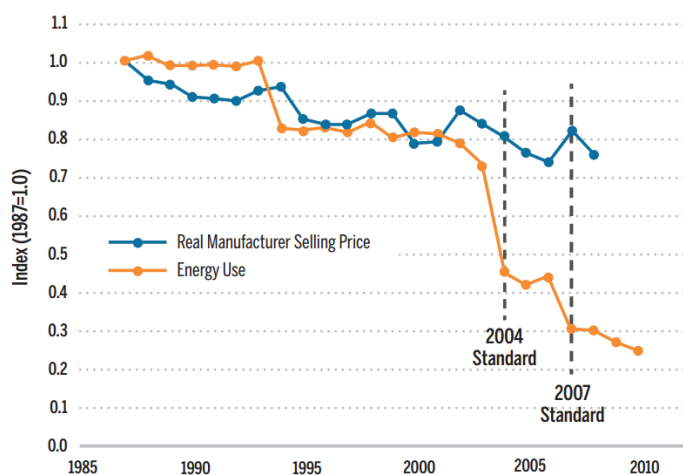
- **Myth: Mandates Hinder the Creative Process of Efficiency Innovation**
- **Fact: Just the opposite, standards drive innovation to new heights**

Take a look in your laundry room or kitchen and think about the explosion in appliance innovation recently. Clothes washers use less water and less energy today while featuring multiple cycle options for every kind of fabric with precise temperature settings and timers that suit every schedule. Today's refrigerators have 20 percent more storage capacity on average and allow you to store food at precisely the desired temperature with more advanced storage and water filtration systems. That's even as today's refrigerators use 25 percent less energy than the typical 1973 model and cost half as much.

<sup>1</sup> "Lighting Choices to Save You Money," U.S. DOE, <http://energy.gov/energysaver/lighting-choices-save-you-money>.

- **Myth: Estimated Savings Are Misleading**
- **Fact: Benefits and savings from standards are far greater than costs**

Estimated appliance price increases resulting from new standards have consistently not come to pass. In fact, the actual price changes show that these projections were overestimated on average by a factor of 10. Since 2009, U.S. DOE has issued 40 new or updated appliance standards across more than 45 products. These standards alone will generate savings worth \$447 billion. Add to this the enormous environmental and public health benefits of avoiding nearly 4.5 trillion kilowatt-hours of power generation and the case for standards is clear.



Price and energy trends for clothes washers in the USA. "Achievements of appliance energy efficiency standards and labelling programs – A global assessment". International Energy Agency, [https://www.iea.org/publications/freepublications/publication/4E\\_S\\_L\\_Report\\_180915.pdf](https://www.iea.org/publications/freepublications/publication/4E_S_L_Report_180915.pdf)

- **Myth: Energy-Efficiency Initiatives Are a Form of Corporate Welfare**
- **Fact: Efficiency standards are supported by industry because manufacturers want a level playing field, clear rules, and protection from unscrupulous foreign competitors.** National efficiency standards were authorized by Congress for specific reasons, including manufacturers' desire to replace inconsistent state requirements. Innovation from companies, including many Alliance to Save Energy Associate Members, proves that there are boundless opportunities in the market, regardless of a company's size. Because efficiency standards have driven innovation and expanded existing markets, it is estimated that they were responsible for the creation of 340,000 full-time equivalent jobs by 2010.

#### Individual level Co-benefits

(individuals, households, enterprises)

- ▶ Health and well-being impacts;
- ▶ Poverty alleviation: Energy affordability and access;
- ▶ Increased disposable income.

#### Sectoral level Co-benefits

(industrial, transport, residential, commercial)

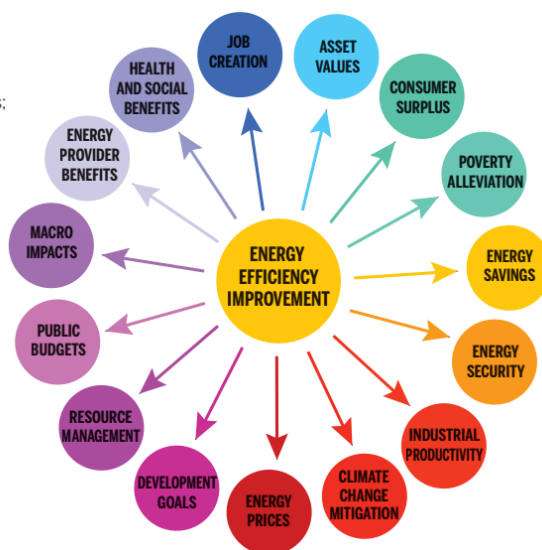
- ▶ Industrial productivity and competitiveness;
- ▶ Energy provider and infrastructure benefits;
- ▶ Increased asset values.

#### National level Co-benefits

- ▶ Job creation;
- ▶ Reduced energy-related public expenditures;
- ▶ Energy security;
- ▶ Macroeconomic effects.

#### International level Co-benefits

- ▶ Moderating energy prices;
- ▶ Natural resource management;
- ▶ Achievement of Development goals.



Range of co-benefits associated with EES&L programs. "Achievements of appliance energy efficiency standards and labelling programs – A global assessment". International Energy Agency, [https://www.iea.org/publications/freepublications/publication/4E\\_S\\_L\\_Report\\_180915.pdf](https://www.iea.org/publications/freepublications/publication/4E_S_L_Report_180915.pdf)