

# Energy Efficiency Facts

## What is Efficiency?

*Energy efficiency* refers to technologies, processes, and equipment that allow us to do the same activities (or more) with less energy. It means getting better use out of the energy we consume. In practical terms, this could mean installing better insulation, buying ENERGY STAR appliances, or using a programmable thermostat.

Efficiency differs from *conservation*, which means changing behaviors to reduce energy use.

## Efficiency: A Cornerstone of the New Energy Economy

- Investments in efficiency directly create long-term jobs in the building trades and in many other sectors. Nationwide, efficiency programs yielded 3.5 million new jobs that added nearly **\$1 billion of revenue** into the economy in 2006.
- A new report by the Center for American Progress and the Political Economy Research Institute found that a 2-year, \$100 billion investment program focused on clean energy could create **2 million new domestic jobs**. Such a plan would generate 4 times as many jobs as the same amount spent within the oil industry.
- In California, a state with 3 decades of experience running efficiency programs, **every dollar invested in energy efficiency has generated \$2 of economic benefits**.

## A Cleaner, Faster, and Cheaper Way to Meet Demand

- Demand for electricity will continue to grow. **The EIA forecasts that the US will need to supply nearly 30% more electricity in 2030 than we do today.** According to The Brattle Group, this translates into a need to deliver 150,000 new megawatts at a cost of \$1.5 trillion to meet domestic electricity needs through 2030.
- There are two ways to meet electricity demand: build new power plants or invest in energy efficiency. Based on existing programs, energy efficiency delivers energy services at a cost that is **2 to 3 times less than building new plants**.
- The McKinsey Global Institute concluded that making profitable investments in energy efficiency that return 10% or more could **cap domestic demand and greenhouse gas emissions at current levels through 2020**.

## Resources

### For More Information

**Wasted Energy: How the US Can Reach its Energy Productivity**

**Potential** – This July 2007 report from the McKinsey Global Institute concludes that investing in existing energy efficiency technology that yield returns of 10 percent or more would cap our energy demand and GHG emissions at 2003 levels through 2020.

[http://www.mckinsey.com/mgi/publications/wasted\\_energy/index.asp](http://www.mckinsey.com/mgi/publications/wasted_energy/index.asp)

**Energy Future: Think Efficiency** - A panel of distinguished experts brought together by The American Physical Society concludes that investments in sensible energy efficiency are critical to reducing our dependence on foreign oil, strengthening our economy, and reducing global warming. The report lays out several programs to achieve the investments necessary to achieve these important national goals.

<http://www.aps.org/energyefficiencyreport/>

**Green Recovery** - A new report by the Center for American Progress and the Political Economy Research Institute found that a 2-year, \$100 billion investment program focused on clean energy could create 2 million new domestic jobs. Such a plan would generate 4 times as many jobs as the same amount spent within the oil industry.

[www.americanprogress.org/issues/2008/09/pdf/green\\_recovery.pdf](http://www.americanprogress.org/issues/2008/09/pdf/green_recovery.pdf)

**Compendium of Champions: Chronicling Exemplary Energy Efficiency Programs from Across the U.S.** – Released in February 2008, this report by the American Council for an Energy-Efficient Economy (ACEEE) evaluates the best existing efficiency policies in each sector and sub-sector.

<http://www.aceee.org/pubs/u081.htm>

**State Energy Efficiency Policies and Lessons Learned** – In September 2008, The Alliance to Save Energy launched a 12-part series on efficiency policy options at the state level; the first installment covered funding mechanisms for energy efficiency.

<http://ase.org/section/audience/policy/statepolicies>