

Energy Efficiency Resource Standard

Green Jobs, Strong Economy, Clean Environment

Energy efficiency is here now, and it can unleash the Southeast's economic potential.

Businesses and consumers across the Southeast spend millions on energy that is wasted, but we can capture that wasted energy and do more while using less. An aggressive [national Energy Efficiency Resource Standard \(EERS\)](#) will encourage innovation, lower utility bills for consumers and businesses, create new green jobs, boost the economy, and reduce our global warming pollution.

Leading businesses, industry groups and advocates are urging Congress to enact a national EERS requiring electric and gas utilities to reduce demand by 15 and 10 percent respectively by 2020.

Implementing a strong energy efficiency resource standard in the Southeast will put tens of thousands of our region's skilled labor force back to work making our buildings and energy infrastructure more efficient.

- A national EERS would create an estimated 222,000 American jobs by 2020. For the Southeast, an EERS would create 56,350 more jobs than would be created by turning to new power plants instead.
- These new jobs will be professional, skilled and semi-skilled. The EERS will drive utilities to offer incentives and assistance to make customers' homes and businesses more energy-efficient. Job growth will respond to, for example, purchases of new appliances, sound investments in improved building methods, upgrades to electricity distribution systems, and installation of combined heat and power systems.

In addition to being a cost effective solution, energy efficiency saves us money and boosts economic growth.

- A national EERS could save \$38 billion in our region and \$169 billion nationally through 2020.
- The energy saved through a national EERS could be large enough to serve 36 percent of national residential energy demand in 2020, representing almost 48 million U.S. and 14 million Southeast households.
- For every dollar invested in efficiency, consumers save \$4 – savings that can be reinvested in other areas of the economy.

“In a Rocky Mountain Institute ranking of states . . . six Southeastern states ranked among the top ten states with the most apparent waste of energy.”

Benefits from a Federal EERS in Southeast States (2011-2020)

State	Annual Electricity Savings (GWh)	Peak Demand Savings (MW)	Peak Demand Savings (Equivalent Power Plants)	Annual Direct Gas Savings (TBtu) [†]	Household Energy Needs Met (equivalent number ^{††})	Energy Savings (\$ millions)	Net Jobs Created	CO ₂ Emission Savings (MMT)
Alabama	12,440	4,001	13	5.8	1,426,166	3,641	5,202	9.8
Florida	33,553	10,791	36	5.8	3,742,348	14,007	19,754	20.6
Georgia	18,972	6,102	20	15.5	2,245,134	6,326	8,894	15.2
Mississippi	5,854	1,883	6	5.0	694,523	1,935	2,731	4.1
N Carolina*	13,840	4,451	15	10.3	1,627,183	3,017	6,426	11.5
S Carolina	11,662	3,751	12	4.7	1,328,925	3,102	4,495	9.5
Tennessee	13,026	4,189	14	8.6	1,519,999	3,505	5,104	12.3
Virginia*	8,473	2,725	9	14.3	1,080,348	2,342	3,744	7.5
8 SE states	117,820	37,893	126	70.0	13,664,626	37,875	56,350	90.5
National	364,100	117,091	390	794	47,677,152	168,600	222,100	262

Source: American Council for an Energy-Efficient Economy.

Notes: * State with an EERS. [†] State natural gas savings targets not considered. ^{††} Derived by dividing total state energy savings (for residential, commercial and industrial customers) in a state by energy use of an average U.S. household.

Enhanced energy efficiency in factories, assembly lines and commercial and retail buildings improves businesses' bottom line and gives workers an edge in an increasingly competitive national and global marketplace.



- Dow Chemical has saved \$8.6 billion through a \$1 billion investment in energy efficiency improvements since 1994.
- When Alcoa invested \$305,000 in upgrades to heating, air compression and other systems at two facilities in Elizabethton, Tennessee and Plant City, Florida, the company reduced its annual operation expenditures by \$310,000. Alcoa plans call for annual savings of \$100 million (and 1.3 million metric tons of CO₂) through energy efficiency and environmental management.
- Daylight harvesting systems are now included in more than 95 percent of new Wal-Mart Supercenters and Sam's Clubs. Each store's daylight harvesting system 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.
- Over the past 30 years, Mosaic, a leading fertilizer company with substantial operations in Florida, has invested in heat recovery and electrical generation systems at its manufacturing plants in the United States, reducing electricity purchases by approximately 90 percent.

Energy efficiency standards are the most cost-effective way to reduce harmful greenhouse gas emissions that contribute to climate change.

- Carbon dioxide emissions will be reduced as existing power plants are able to meet demand without increasing production. The proposed national EERS would reduce CO₂ emissions by 262 million metric tons in 2020 – the equivalent of taking 48 million cars off the road for that year.
- A national EERS will eliminate the need to build 390 expensive new coal-fired power plants. In the Southeast, we can avoid the need for up to 126 additional conventional power plants.

The time has come for Congress to move quickly to enact national EERS legislation. Although 19 states have adopted individual EERS programs, Americans cannot realize the full potential for energy efficiency without adoption of a national program to expand and enhance states' efforts.

- Efficiency Vermont, an independent state efficiency utility, met seven percent of the state's energy needs with measures installed since its inception in 2000 through 2007. Efficiency Vermont has helped reduce annual energy costs for businesses and residential customers by more than \$31 million since 2000 – an amount far exceeding the program's budget.
- In a Rocky Mountain Institute ranking of states based on opportunities to enhance energy efficiency—six Southeastern states ranked among the top ten states with the most apparent waste of energy.

Nearly identical versions of a proposed national EERS are presented in the "Save American Energy Act" (H.R. 889 in the House; S. 548 in the Senate) and "American Clean Energy and Security Act of 2009" by Representatives Waxman and Markey (no bill number yet). These bills would create a national EERS that will lead utilities and states across the country, including the Southeast, to reduce electricity usage by 15 percent and natural gas usage by 10 percent by 2020.

Urge Congress to pass a national EERS that will create jobs, lower bills and help America become a leader in energy efficiency.

Sources: American Council for an Energy-Efficient Economy (ACEEE), *Laying the Foundation: Implementing a Federal Energy Efficiency Resource Standard* (March 2009); Environment Northeast, *Energy Efficiency*; DOE, *Best Practices: Alcoa Teams with DOE to Reduce Energy Consumption—Corporate Energy Mgmt. Case Study*; Testimony before U.S. House Subcommittee on Energy and the Environment (February 2009); Wal-Mart Stores, *Sustainable Buildings Network Fact Sheet*; RMI, *Assessing the Electric Productivity Gap and the U.S. Efficiency Opportunity* (January 2009).