

BURNING COAL, BURNING CASH

South Carolina's Dependence on Imported Coal

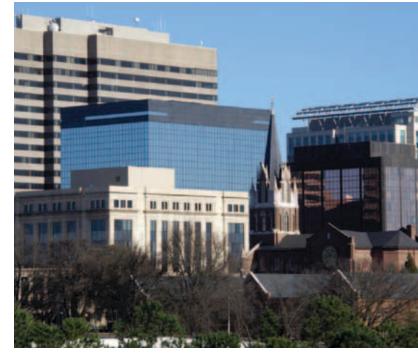


he cost of importing coal is a major drain on the economies of many states that rely heavily on coal-fired power. Thirty-eight states were net importers of coal in 2008, from other states and, increasingly, other nations. *Burning Coal, Burning Cash* ranks the states that are the most dependent on imported coal. This fact sheet shows the scale of this annual drain on South Carolina's ratepayers, and discusses ways to keep more of that money in-state through investments in energy efficiency and homegrown renewable energy.

South Carolina imported all the coal its power plants burned in 2008—some from as far away as South America. To pay for those imports, South Carolina sent *\$1.1 billion* out of state.

Santee Cooper, a state-owned electric utility and South Carolina's largest power producer, purchased \$453 million in coal imports—about 40 percent of the state's total, and more than any other power producer in the state. The utility's Cross generating station, near Pineville, is the most import-dependent power facility in South Carolina, having spent \$276 million in 2008. The plant is also the thirty-sixth-largest source of carbon dioxide emissions (the main cause of global warming) among hundreds of coal plants nationwide.

Power exports may shift some of the financial costs of the state's coal imports to electricity consumers in other states. If that occurs, South Carolina would bear the environmental costs of burning the imported coal (such as air emissions, water use, and ash disposal) without benefiting from the resulting power.



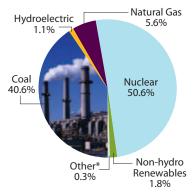
Columbia, South Carolina. The cost of importing coal is a drain on South Carolina's economy, which relies heavily on coal-fired power. Investments in energy efficiency and homegrown renewable energy can help stimulate the economy by redirecting funds into local economic development—funds that would otherwise leave the state.

Compared with other states, South Carolina:

- Spent the 2nd most on net imports relative to gross state product: 0.70 percent
- Spent the 4th most on net imports per person: \$245
- Spent the 11th most on total net imports: \$1.1 billion

Note: Not all these funds will necessarily land in the state or nation where the mining occurs. Mine owners may divert the profits to parent companies in other locations, for example. Amounts also include the cost of transportation.

South Carolina's Mix of Electricity Sources (2008)



Despite having no in-state coal supplies, South Carolina relies on coal for 40 percent of its in-state electricity generation. The state produces 25 percent more electricity than its retail customers buy. That suggests in-state coal plants may export some of their power.

* "Other" includes oil, municipal solid waste, tires, propane, or other manufactured and waste gases from fossil fuel.

> Investing in energy efficiency is one of the quickest and most affordable ways for **South Carolina to reduce its** dependence on imported coal while boosting the local economy. For example, a blower door test (shown here) finds leaks that can be sealed, creating an airtight building with minimal heat and airconditioning loss. South Carolina spent about 120 times less on ratepayerfunded electricity efficiency programs in 2007 than it spent on imported coal.

Photos (top to bottom): Photodisc; NREL

Clean Energy Solutions Can Boost South Carolina's Energy Independence

Investing in energy efficiency is one of the quickest and most affordable ways to replace coal-fired power while boosting the local economy. Yet South Carolina spent about two dollars per person on ratepayer-funded electricity efficiency programs in 2007—120 times less than it spent per capita on imported coal.

Reducing the state's electricity use by 1 percent annually could save consumers \$39 million, and avoid the need to send as much as \$21 million out of state in the first year alone. South Carolina could save that much power or more by adopting an energy efficiency resource standard. Twenty-three states have adopted such a standard, most of which require utilities to achieve annual electricity savings of at least 1 percent (a target some states are already achieving). Leading states require annual cuts of 2 percent or more.

South Carolina can also reduce its dependence on imported coal by tapping its wealth of renewable energy resources, which could technically supply more than 2.5 times the state's 2008 power demand. Though economic and physical barriers may curb some of that potential, by-products from South Carolina's forestry industry can be harvested in a sustainable manner for use in stand-alone power facilities, or co-fired in power plants that now burn only coal, replacing imported coal.



The state also has strong potential for developing offshore wind power, solar power, and small-scale hydropower. South Carolina is already becoming a manufacturing hub for wind power technology. GE Energy has been turning out wind turbines along with natural gas turbines at its plant in Greenville for several years. Several companies, including Timken, in Union, and Kaydon, in Sumter, manufacture bearings for wind turbine applications. Most recently, IMO Group, a German-based company that makes slewing rings and slew drives used in wind turbines, announced that it would site its first U.S. manufacturing facility in Dorchester County, creating 190 jobs in the process.

South Carolina can spur in-state deployment of renewable energy by adopting a renewable electricity standard, requiring utilities to gradually expand their use of renewable resources. Twenty-nine states and the District of Columbia have already adopted this proven policy.



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This fact sheet is based on the findings of *Burning Coal, Burning Cash: Ranking the States That Import the Most Coal*, a report by the Union of Concerned Scientists. The fully referenced report, along with other state profiles, is available on the UCS website at *www.ucsusa.org/burningcoalburningcash*.

The Union of Concerned Scientists is the leading science-based nonprofit working for a healthy environment and safer world.

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