

# Alabama's Dependence on Imported Coal

The cost of importing coal is a drain on the economies of many states that rely heavily on coal-fired power. Thirty-seven states were net importers of coal from other states and nations in 2012. The scale of Alabama's annual coal import dependence is discussed here, along with ways to keep more of that money in-state through investments in energy efficiency and homegrown renewable energy.<sup>1</sup>

Alabama imported 18.5 million tons of coal from six states and Colombia in 2012, 75 percent of the coal its power plants used. To pay for those imports, Alabama sent more than **\$1 billion** out of state. In-state mines supplied the rest of Alabama's coal. As a result, Alabama ranks eighth nationally for money spent on net coal imports and first for expenditures on international imports.

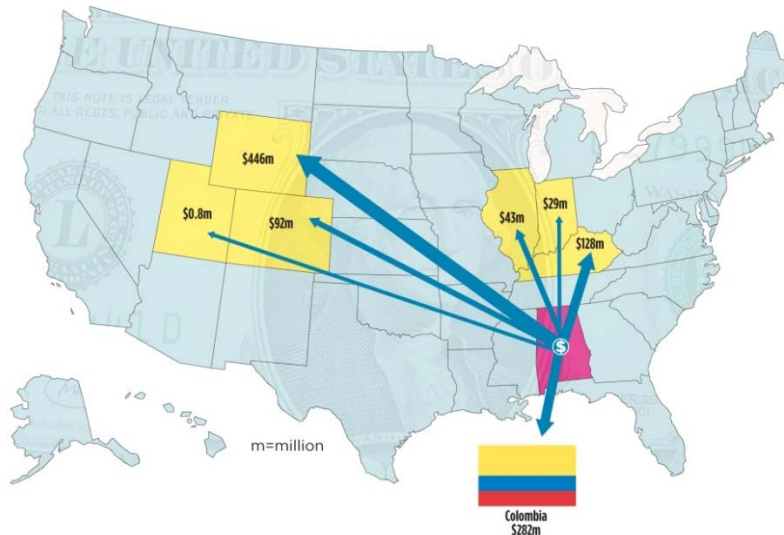
Alabama Power, the state's largest power provider, sent \$710 million out of Alabama to purchase coal in 2012—70 percent of the state's total. Alabama Power's parent company, Southern Company, ranks first among all U.S. power providers for coal import dependency in 2012, having spent more than \$2.2 billion on out-of-state coal across its major subsidiaries in

four southeast states.

Alabama's dependence on coal generation and coal imports has been declining primarily as a result of a large-scale shift toward generation from lower-cost natural gas. From 2008 to 2012, coal generation in Alabama declined from 51 percent to 30 percent while natural gas generation more than doubled from 15 percent to 36 percent (EIA 2013). During that time, expenditures on net coal imports declined by 26 percent. In addition, the Tennessee Valley Authority has made recent decisions to either already retire or announce for retirement 2,743 megawatts of its old and inefficient coal generators in the state (SNL Financial 2013).

While switching from coal to natural gas offers some near-term air quality and cost benefits, there is growing evidence that an overreliance on natural gas poses significant and complex risks to consumers, the economy, public health and safety, land and water resources, and the climate (Fleischman, Sattler, and Clemmer 2013). A better solution for consumers and the environment would be to replace more coal generation with renewable energy and energy efficiency.

**FIGURE 1. More than \$1 Billion Annually Leaving Alabama to Pay for Imported Coal**



*The more than \$1 billion spent to import coal is a drain on Alabama's economy, which relies on coal for 30 percent of its power generation. Investments in homegrown renewable energy and energy efficiency can affordably help redirect funds into local economic development — funds that would otherwise leave the state.*

Note: Based on 2012 data. Not all these funds will necessarily land in the state 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.

## Clean Energy Can Boost Alabama's Energy Independence

Energy efficiency is one of the quickest and most affordable ways to cut coal-fired power while boosting the local economy. Yet Alabama's energy efficiency potential remains largely untapped. The state achieved electricity efficiency savings of just 0.08 percent in 2011, ranking Alabama forty-sixth among all states (Downs et al. 2013). In 2011, Alabama budgeted just \$2.09 per person on ratepayer-funded electricity efficiency programs—101 times less than utilities spent on imported coal.

Alabama could boost efficiency investments by adopting an energy efficiency resource standard. Twenty-four states have adopted such a standard, with most requiring utilities to achieve annual electricity savings of at least 1 percent. Leading states require annual cuts of 2 percent or more.

Investing in homegrown renewable energy is also a smart and responsible solution to reducing Alabama's dependence on imported coal and keeping more money in the local economy. Alabama has a wealth of renewable energy resources like sustainable bioenergy, solar, and wind; yet non-hydro renewable resources supplied just 2.1 percent of the state's power in 2012 (EIA 2013).

In 2012, Alabama Power embraced renewable energy by purchasing 404 megawatts of wind power generated in Oklahoma and Kansas; in doing so they noted the decision was cost-effective compared with their avoided cost (Spencer 2012). That is a positive step as purchasing clean, renewable energy from out-of-state is a smarter choice than importing polluting coal, but Alabama Power could do more to develop in-state wind resources as well. Thanks to reductions in wind costs and recent advances in low-wind speed technology, several wind power projects have been proposed in the state (Mahan 2013).

Alabama could further spur local renewable energy development, cut coal imports, and reduce its growing reliance on natural gas 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 adopted this effective and affordable clean energy policy.



Alabama has excellent potential for developing in-state solar power and other renewable energy resources, which can help reduce the state's dependence on imported coal while creating jobs and other economic and environmental benefits. Photo Source: Susan Bilo / NREL

### ENDNOTES

- 1 This fact sheet is based on the findings from an update of *Burning Coal, Burning Cash: Ranking the States That Import the Most Coal*, a 2010 analysis by the Union of Concerned Scientists. More information about our methodology and assumptions, as well as other state profiles, can be viewed at [www.ucsusa.org/bcbc2014update](http://www.ucsusa.org/bcbc2014update).

### REFERENCES

- Downs, A., A. Chittum, S. Hayes, M. Neubauer, S. Nowak, S. Vaidyanathan, K. Farley, and C. Cui. 2013. *The 2013 State Energy Efficiency Scorecard*. Washington, DC: American Council for an Energy Efficient Economy.
- Energy Information Administration (EIA). 2013. *Electric power annual 2013*. Washington, DC: U.S. Department of Energy.
- Fleischman, L., S. Sattler, S. Clemmer. 2013. *Gas ceiling: Assessing the climate risks of an overreliance on natural gas for electricity*. Cambridge, MA: Union of Concerned Scientists.
- Mahan, S. 2013. *What's Up with Wind Energy in Alabama?* Atlanta, GA: Southern Alliance for Clean Energy.
- Spencer, T. 2012. *Alabama Power Purchases Electricity Generated by Wind in Oklahoma, Kansas*. *Birmingham News*, Sept. 30. Online at [http://blog.al.com/spotnews/2012/09/alabama\\_power\\_purchases\\_ele\\_ctr.html](http://blog.al.com/spotnews/2012/09/alabama_power_purchases_ele_ctr.html), accessed December 27, 2013.
- SNL Financial. 2013. *SNL Interactive*. Online at <http://www.snl.com>, accessed December 21, 2013.

## [Union of Concerned Scientists

FIND THIS DOCUMENT ONLINE: [www.ucsusa.org/bcbc2014update](http://www.ucsusa.org/bcbc2014update)

*The Union of Concerned Scientists puts rigorous, independent science to work to solve our planet's most pressing problems. Joining with citizens across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.*

### NATIONAL HEADQUARTERS

Two Brattle Square  
Cambridge, MA 02138-3780  
Phone: (617) 547-5552  
Fax: (617) 864-9405

### WASHINGTON, DC, OFFICE

1825 K St. NW, Suite 800  
Washington, DC 20006-1232  
Phone: (202) 223-6133  
Fax: (202) 223-6162

### WEST COAST OFFICE

2397 Shattuck Ave., Suite 203  
Berkeley, CA 94704-1567  
Phone: (510) 843-1872  
Fax: (510) 843-3785

### MIDWEST OFFICE

One N. LaSalle St., Suite 1904  
Chicago, IL 60602-4064  
Phone: (312) 578-1750  
Fax: (312) 578-1751