Union of Concerned Scientists

FACT SHEET

BURNING COAL, BURNING CASH: 2014 UPDATE

North Carolina'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 in from other states and nations in 2012. The scale of North Carolina'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.[1]

Despite having no in-state coal supplies, North Carolina relied on coal for 44 percent of its in-state electricity generation in 2012 (EIA 2013). North Carolina's power producers paid nearly **$1.8 billion** to import 18.7 million tons of coal from six states, mainly from West Virginia and Kentucky. As a result, the state ranks second nationally for net coal import expenditures.

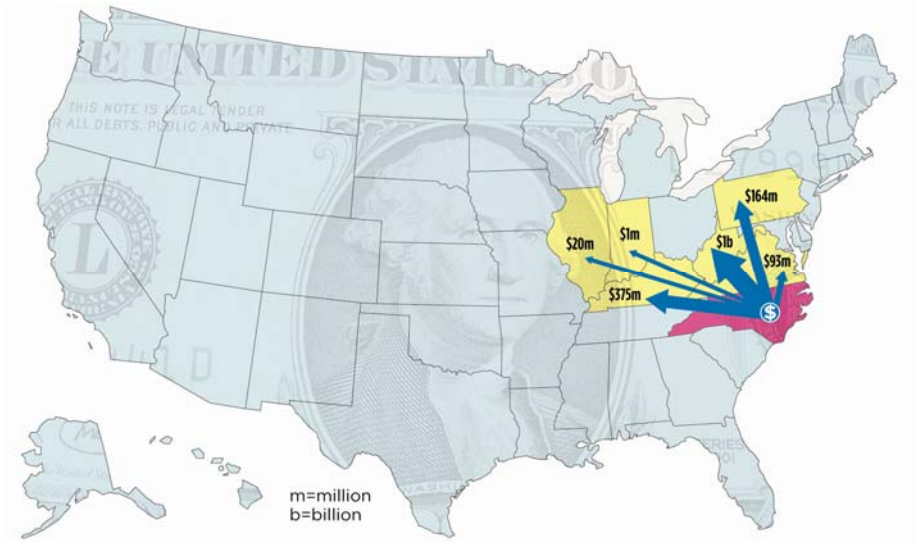
Duke Energy, North Carolina's largest electricity provider, sent $1.7 billion out of the state to purchase coal in 2012—98 percent of the state's total. In addition, Duke Energy ranks second among all U.S. power providers for coal import dependency in 2012, having spent more than $2.2 billion on out-of-state coal across its holdings in six states.

North Carolina'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. Since 2011 Duke Energy has also retired 2,904 megawatts (MW) of old and inefficient coal generators in the state (SNL Financial 2013).

From 2008 to 2012, natural gas generation in North Carolina increased nearly six-fold from 3 percent to 17 percent as coal generation declined from 61 percent to 44 percent (EIA 2013). During the same period, the tonnage of coal imported declined by 36 percent. Yet, coal expenditures dropped by just 25 percent as the average price paid for coal in North Carolina increased from $79.85 per ton to $93.74 per ton, which are among the highest prices in the United States.

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).

FIGURE 1. Nearly $1.8 Billion Annually Leaving North Carolina to Pay for Imported Coal



The nearly $1.8 billion spent to import coal is a drain on North Carolina's economy, which relies on coal for 44 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. In addition, North Carolina spent $600,000 on coal imports from unreported sources.

Clean Energy Can Boost North Carolina's Energy Independence

Instead of over-relying on natural gas to replace polluting coal, a better solution for consumers and the environment would be to invest more in renewable energy and energy efficiency. Energy efficiency is one of the quickest and most affordable ways to cut coal-fired power while boosting the local economy. Yet North Carolina's efficiency potential remains largely untapped as the state achieved electricity savings of just 0.39 percent in 2011—ranking thirtieth nationally (Downs et al. 2013).

There are positive signs that the state's commitment to efficiency investments is expanding. In 2011, Duke Energy agreed to adopt an annual efficiency savings target of 1 percent starting in 2015 (ACEEE 2013). Savings from energy efficiency measures can also count toward a portion of the state's 12.5 percent by 2021 renewable energy and efficiency portfolio standard (REPS). Combined, these actions put North Carolina more in line with the efficiency requirements of the 23 other states that have adopted efficiency resource standards, though leading states require annual cuts of 2 percent or more.

Investing in homegrown renewable energy is also a smart and responsible solution to reducing North Carolina's dependence on imported coal and keeping more money in the local economy. North Carolina 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). However, utilities are making progress toward achieving North Carolina's REPS, especially in driving solar energy investments. As of October 2013, the state ranked fifth nationally and first in the Southeast with more than 320 MW of installed solar capacity (SEIA 2013).

Despite its success, North Carolina's REPS continues to face attacks from clean energy opponents. Rather than repeal it, this standard should be maintained and strengthened (of the 28 other states with similar standards, 17 have targets of 20 percent or more). Doing so could further cut coal imports, reduce the state's growing reliance on natural gas, and deliver important economic and environmental benefits.

North Carolina has excellent potential for minimizing air conditioning and heat loss through greater insulation of existing buildings. Investing more in energy efficiency is one of the quickest and most affordable ways to help reduce the state's dependence on imported coal while creating jobs and other economic and environmental benefits. Photo: Dennis Schroeder/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.*

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