Union of Concerned Scientists

BURNING COAL, BURNING CASH

Tennessee's Dependence on Imported Coal

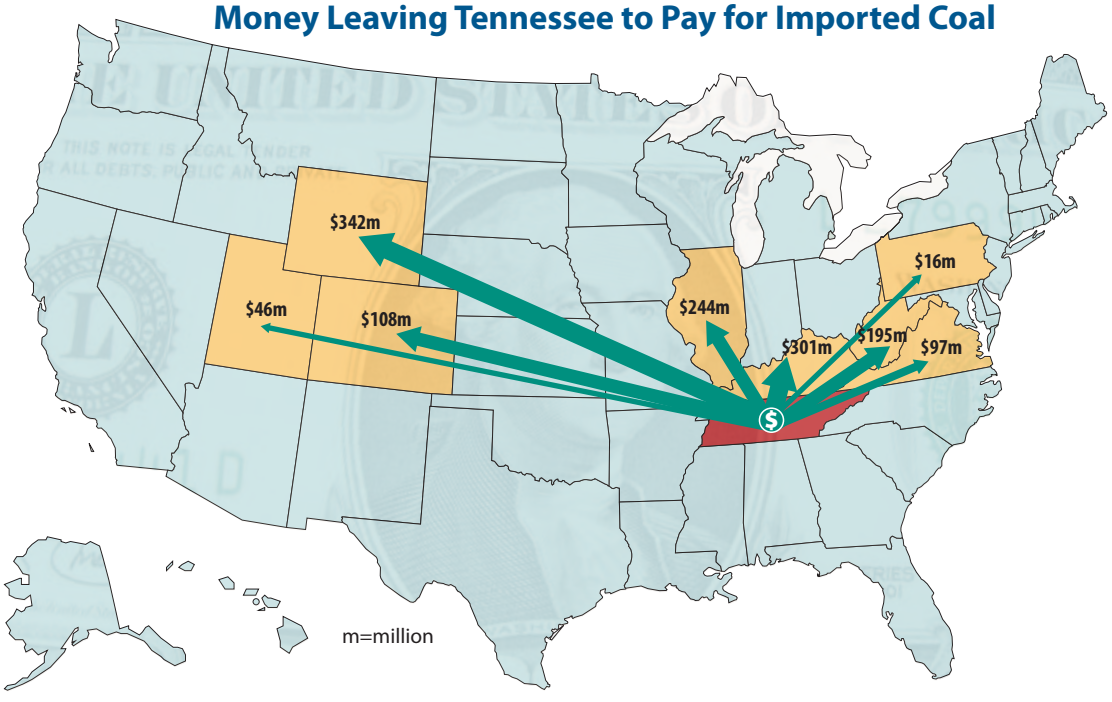
The cost of importing coal is a major drain on the economies of many states that rely heavily on coal-fired power. Thirty-eight states were net importers of coal in 2008, from other states and, increasingly, other nations. *Burning Coal, Burning Cash* ranks the states that are the most dependent on imported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

Tennessee imported more than 99 percent of the coal its power plants burned in 2008—some from as far away as Utah and Wyoming. In-state mines supplied the remaining fraction and also exported coal worth $139 million to other states. Tennessee spent a net ***$1.21 billion*** on imported coal.

The Tennessee Valley Authority (TVA), a federally owned corporation that produces electricity, purchases nearly all the state's imported coal. TVA's Cumberland plant, in Cumberland City, is the most import-dependent power facility in Tennessee, having spent $314 million in 2008. The plant is the fourteenth-largest source of carbon dioxide emissions (the main cause of global warming) among hundreds of coal plants nationwide.

Nashville, Tennessee. The cost of importing coal is a drain on Tennessee'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.

Money Leaving Tennessee to Pay for Imported Coal



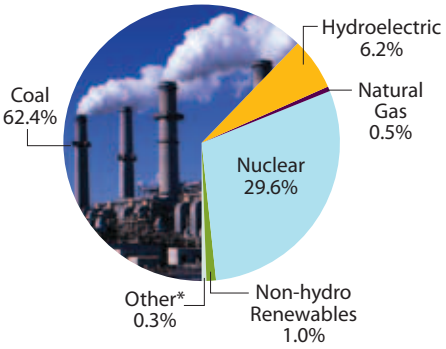
Compared with other states, Tennessee:

- Spent the 5th most on net imports per person: $194
- Spent the 6th most on net imports relative to gross state product: 0.48 percent
- Spent the 8th most on total net imports: $1.21 billion
- Is the 8th most dependent on net imports as a share of total power use: 63 percent
- Imported the 9th most in net weight: 26.5 million tons

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.

Photos (top to bottom): Thinkstock; iStockphoto.com/David Liu; Photodisc

Tennessee's Mix of Electricity Sources (2008)



Tennessee relies on coal for more than 60 percent of its in-state electricity generation, and imports more than 99 percent of that coal.

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

Clean Energy Solutions Can Boost Tennessee'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 Tennessee spent just $1.62 per person on ratepayer-funded electricity efficiency programs in 2007—about 120 times less than it spent on net coal imports per capita.

A commitment to reduce the state's electricity use by 1 percent annually could save consumers $54 million, while avoiding the need to send as much as $22 million out of state the first year alone. Tennessee could save that much power or more by adopting an energy efficiency resource standard. Twenty-three states have adopted such a standard, with most requiring 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.

Tennessee can also reduce its dependence on imported coal by tapping its wealth of renewable energy resources. Wind, solar, small-scale hydropower, and several types of biomass could technically supply as much as 60 percent of Tennessee's 2008 power demand. Though economic and physical barriers may curb some of that potential, by-products from the state'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 is already becoming a manufacturing hub for solar energy technologies. In the last year alone, three solar power companies have announced plans to invest more than $2 billion combined in new facilities in Tennessee. For example, Confluence Solar's $200-million plant in Clinton (near Knoxville) will employ 250 people to produce silicon for photovoltaic modules.

To spur in-state deployment of renewable energy, Tennessee could adopt a renewable electricity standard, requiring utilities to gradually increase their use of renewable resources. Twenty-nine states and the District of Columbia have already adopted this proven policy.

Tennessee has excellent potential for developing in-state renewable energy resources. The wide-scale deployment of solar photovoltaic technology, like the array pictured here, can help reduce the state's dependence on imported coal while creating jobs and other benefits.

Photos (top to bottom): Photodisc; Nexamp

Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions

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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