Union of Concerned Scientists

BURNING COAL, BURNING CASH

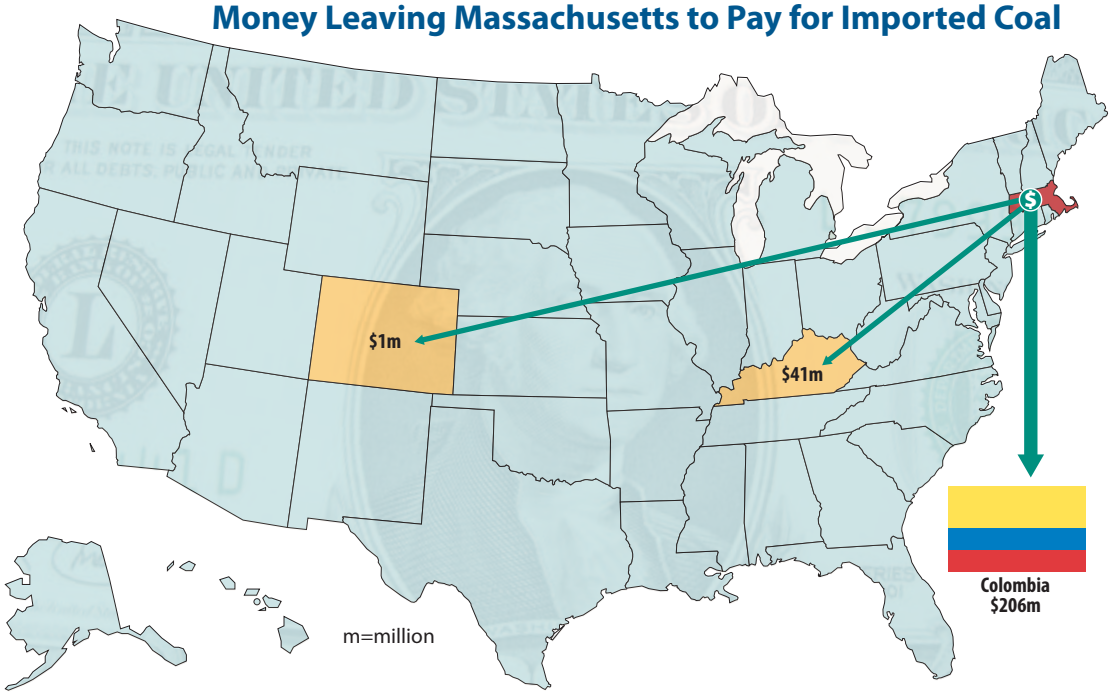
Massachusetts' Dependence on Imported Coal

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 Massachusetts ratepayers, and discusses ways to keep more of that money in-state through investments in energy efficiency and homegrown renewable energy.

Massachusetts imported all the coal its power plants burned in 2008—primarily from Colombia. To pay for that coal, Massachusetts sent ***$252 million*** out of state. Dominion Energy New England, one of the largest independent power producers in the state, purchased all that imported coal. Dominion's Brayton Point plant, in Somerset, spent $214 million on coal imports—more than any other coal plant in Massachusetts.

Boston, Massachusetts. The cost of importing coal to fuel power plants is a drain on Massachusetts' economy. 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 Massachusetts to Pay for Imported Coal



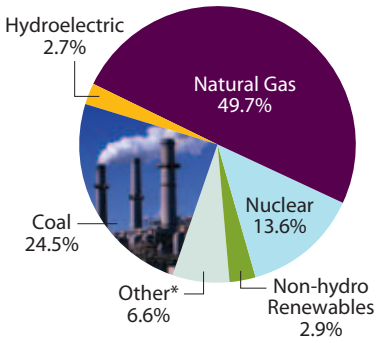
Compared with other states, Massachusetts:

- **Spent the 3rd most on international imports: $206 million**

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. In addition, the origin of coal imports worth $3 million was not reported to the Energy Information Administration.

Photos (top to bottom): Thinkstock; iStockphoto.com/Dennis Tangney Jr.; Photodisc

Massachusetts' Mix of Electricity Sources (2008)



Despite having no in-state coal supplies, Massachusetts relies on coal for one-quarter of its in-state electricity generation. Retail sales of electricity exceed the amount of power produced in Massachusetts by 24 percent. That means the state imports significant amounts of electricity—some likely produced from coal.

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

How Massachusetts Is Boosting Energy Independence with Clean Energy Solutions

Through strong leadership, Massachusetts is showing how local, clean energy solutions can significantly reduce dependence on imported coal. Investing in energy efficiency is one of the quickest and most affordable ways of replacing coal-fired power while boosting the local economy. Massachusetts spent $120 million on ratepayer-funded electricity efficiency programs in 2007, cutting power demand by 0.86 percent.

Since that time, Massachusetts has continued to strengthen efficiency programs, culminating in the unprecedented decision to invest more than $1.7 billion in electricity efficiency from 2010 to 2012. Beginning in 2012, the state will require utilities to use efficiency measures to reduce electricity use by 2.4 percent each year. Twenty-two other states have adopted similar requirements, but Massachusetts has one of the nation's most aggressive targets.

Massachusetts is also beginning to reduce its dependence on imported coal by tapping its wealth of renewable energy resources. Over the last two years, the state's Commonwealth Solar program has approved funding for the installation of 23.5 megawatts of solar power on more than 1,200 homes, businesses, and municipal buildings. The federal government also recently gave the go-ahead for the nation's first offshore wind facility, in Nantucket Sound, which could supply as much as 75 percent of electricity demand on Cape Cod, Martha's Vineyard, and Nantucket.

The state has the technical potential to generate 90 percent of its 2008 electricity needs from in-state renewable energy, led primarily by wind (land-based and offshore), solar, and bioenergy. Though economic and physical barriers will curb some of that potential, Massachusetts has made a significant commitment to deploying renewable energy. Utilities must rely on renewable resources to supply more than 23 percent of the state's power needs by 2025. Twenty-eight other states and the District of Columbia have adopted such renewable electricity standards.

Massachusetts has excellent potential for developing in-state renewable energy resources, which can help reduce the state's dependence on imported coal while creating jobs and other benefits. Over the last two years, the state's Commonwealth Solar program has approved funding for the installation of 23.5 megawatts of solar power on more than 1,200 buildings, such as this home in Newburyport.

Photos (top to bottom): Photodisc; Nexamp

Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions

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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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