Union of Concerned Scientists **BURNING COAL, BURNING CASH Michigan'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 Michigan ratepayers, and discusses ways to keep more of that money in-state through investments in energy efficiency and homegrown renewable energy.

Michigan imported all the coal its power plants burned in 2008-mainly from Wyoming, Kentucky, and Montana. To pay for those imports, Michigan sent \$1.36 billion out of state.

Detroit Edison, a subsidiary of DTE Energy and the state's largest provider of electricity services, purchased \$781 million in coal imports—more than half the state's total, and more than any other Michigan power producer. The utility's Monroe facility, near the city of Monroe, is the most import-dependent power facility in Michigan, having spent \$379 million in 2008. The plant is also the seventh-largest source of carbon dioxide emissions (the main cause of global warming) among hundreds of coal plants nationwide.



Detroit, Michigan. The cost of importing coal is a drain on Michigan'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 Michigan to Pay for Imported Coal

Compared with other states, Michigan:

- Imported the 5th most in net weight: 36 million tons
- Spent the 7th most on net imports: \$1.36 billion
- Is the 9th most dependent on net imports as a share of total power use: 60 percent

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.

Michigan's Mix of Electricity Sources (2008)



Despite having no in-state coal supplies, Michigan relies on coal for more than 60 percent of its in-state electricity generation.

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

Clean Energy Solutions Can Boost Michigan'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 Michigan was one of only six states with no ratepayer-funded electricity efficiency program in 2007. Fortunately, the state took an initial step in 2008 to exploit its efficiency potential by requiring utilities to reduce annual electricity use, ramping up to an annual savings of 1 percent by 2012. Twenty-two other states have adopted such power-saving targets, with several committing to annual savings of 2 percent or more.

Michigan is also on a path to reduce its dependence on imported coal by tapping its own wealth of renewable energy and manufacturing resources. The state is already home to nearly 150 megawatts of installed wind capacity, and Heritage Sustainable Energy recently announced an expansion of its Stoney Corners wind project near McBain. In addition, Danotek plans to build a facility in Plymouth Township that will manufacture high-efficiency generators for use with wind turbines, creating more than 140 jobs in the process.

The state has the technical potential to produce nearly twice its 2008 electricity needs from renewable energy, led primarily by wind and bioenergy (though economic and physical barriers will curb some of that potential). Utilities must rely on renewable resources to produce at least 10 percent of the state's power needs by 2015. Twenty-eight other states and the District of Columbia have adopted such renewable electricity standards, with 17 states setting targets of 20 percent or more.



Michigan has excellent potential for developing in-state wind power and other renewable energy resources, which can help reduce the state's dependence on imported coal while creating jobs and other economic benefits.

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

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