

Minnesota'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 Minnesota'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, Minnesota relied on coal for 44 percent of its in-state electricity generation in 2012 (EIA 2013). To supply that power, the state's power producers paid nearly **\$420 million** to import 12 million tons of coal from Wyoming and Montana. Consequently, Minnesota ranks eighteenth nationally for expenditures on net coal imports.

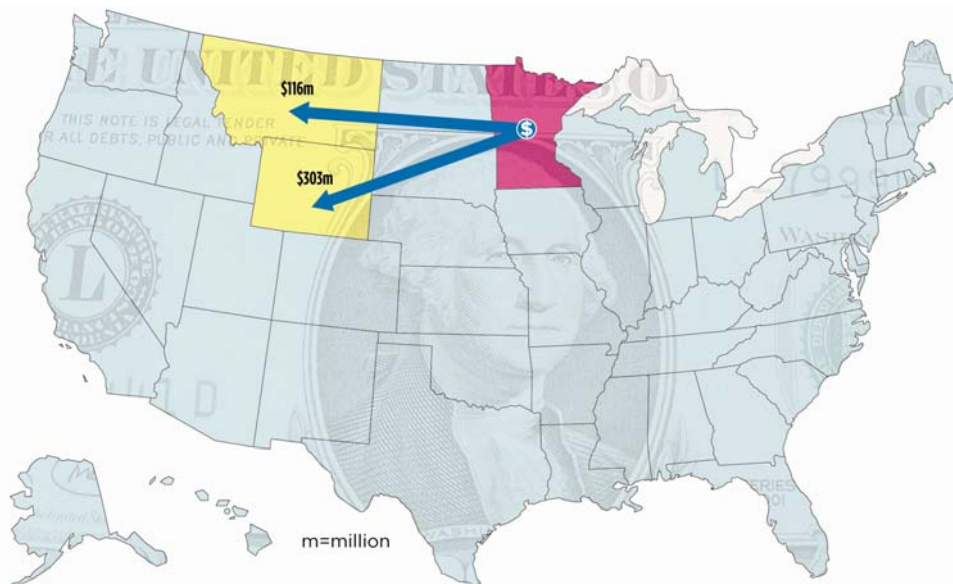
Xcel Energy, the state's largest power provider, sent \$250 million out of Minnesota to purchase coal in 2012—nearly 60 percent of the state's total.

Minnesota's dependence on coal generation has been

declining as a result of flat power demand and the growth of cleaner, more affordable alternatives like natural gas and wind. From 2008 to 2012, natural gas generation in Minnesota nearly tripled from 5 percent to 14 percent as coal generation declined from 58 percent to 44 percent (EIA 2013). The tonnage of coal imported declined by 24 percent during this same period. Yet, coal expenditures dropped by just 7 percent as the average price paid for coal in Minnesota increased from \$28.46 per ton to \$34.93 per ton.

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. Nearly \$420 Million Leaving Minnesota to Pay for Imported Coal



The nearly \$420 million spent to import coal is a drain on Minnesota'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.

Clean Energy Can Boost Minnesota's Energy Independence

Investing in homegrown renewable energy is a smart and responsible solution to reducing Minnesota's dependence on imported coal and keeping more money in the local economy. Minnesota has a wealth of renewable energy resources like wind, solar, and bioenergy; and the state has made great progress tapping these resources as they supplied more than 18 percent of the state's power in 2012. Utilities are ahead of schedule in meeting a requirement to produce 25 percent of the state's power needs from renewable energy by 2025 (Xcel Energy's requirement is 30 percent by 2020) and are doing so at little to no cost to consumers due to the competitive cost of wind power in Minnesota (UCS 2013).

Minnesota can do even more to build on this renewable energy momentum. In 2013, the state legislature adopted a solar energy requirement for investor-owned utilities of 1.5 percent by 2020, which will help boost the deployment of photovoltaic installations statewide. A proposal to further strengthen the renewable energy requirement to 40 percent by 2030 is also under consideration. Increasing Minnesota's renewable energy standard to this level would further cut coal imports, reduce the state's growing reliance on natural gas, and spur more local clean energy investments that deliver important economic and environmental benefits.

Investing in energy efficiency is another quick and affordable way to replace coal-fired power while boosting the local economy. Minnesota emerged as a national leader in its commitment to energy efficiency in 2007 by requiring utilities to reduce electricity use, ramping up to an annual savings of 1.5 percent by 2010. The policy has been a success as electric utilities have exceeded their annual targets in the last several years (Downs et al. 2013). In 2013, the Minnesota legislature took the additional step of identifying cost-effective energy savings as the preferred energy resource over all others (Nissen 2013). This measure will help guide future utility resource planning processes, and could also further reduce money leaving Minnesota to pay for coal imports.



Minnesota is on track to meet its current requirement of generating 25 percent of its electricity from renewable energy by 2025 and is considering strengthening that standard to 40 percent by 2030. Investments in renewable energy and energy efficiency reduce the state's dependence on imported coal while creating jobs and other economic and environmental benefits. Photo source: T. Spink/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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