

Other Midwestern States

Most of the Midwestern states have a biofuels industry, and many have substantial wind-energy production. However, in most of the other Midwestern states, we did not find groups of manufacturers with connections to research facilities in the universities and national laboratories.

Indiana

Indiana does not have a renewable electricity standard and public benefits fund, and the state's dependence on coal for electricity (95 percent) is among the highest in the country. As a result, the state has not moved as rapidly toward clean-energy generation and industrial development as some of the other Midwestern states. Governor Mitch Davis has supported clean technologies in general, but in more targeted ways than some other governors. Some of the attention in energy development has gone toward clean coal, including the production of synthetic natural gas. The state has a large wind farm in Benton County and some wind manufacturing, and it has over twenty biofuels refineries. A report by the Natural Resources Defense Council suggested that the state could take advantage of its proximity to transmission lines to eastern cities to produce much more wind, and it could also convert coal-burning plants to biomass by taking advantage of agricultural waste (Cohen 2010).

Of particular note for Indiana is the Energy Systems Network, a partnership of businesses with government agencies. The network has helped the state to capitalize on the greening of the automotive industry by developing three programs. The Hoosier Heavy Hybrid Partnership is oriented toward hybrid-engines for trucks; Project Plug-In is developing an infrastructure for plug-in electric vehicles and received \$416 million of a \$2.4 billion ARRA allotment; and the MicroGreen Project is testing a smart microgrid system with distributed energy for commercial and military markets. Indiana has several businesses in the electric vehicle and battery industries, including Ener1 (a manufacturer of lithium-ion batteries), a partnership with the Chinese firm Wanxiang, and the Norwegian electric vehicle manufacturer ThinkGlobal.

Missouri

Missouri has some of the standard demand policies in place, including a renewable electricity standard (15 percent by 2020) with a solar set-aside. There are also some standards for state government buildings, but not at the level of LEED silver. The state is distinguished by some excellent research resources in biofuels, such as the Donald Danforth Plant Sciences Center and the Enterprise Rent-a-Car Institute for Renewable Fuels at Washington University. However, the research strengths have not yet translated into a cluster of biofuels technology companies, and the state government programs that would support the formation of new businesses are not as strong as in some of the other Midwestern states.

The Green Impact Zone in Kansas City has received national attention. The city is not otherwise known for leadership on environmental issues, although it received some recognition for water control initiatives and the use of carbon dioxide that a local distillery uses in its water

treatment facilities. However, the Green Impact Zone represents an important and relatively unusual model of combined economic and community development initiatives. In 2009, U.S. Representative and former Kansas City mayor Emmanuel Cleaver II proposed a comprehensive development strategy for the 150-block area of the city that is the home of the city's low-income, ethnic minority neighborhoods and has an unemployment rate of up to 50 percent. The proposal called for spending of up to \$200 million by combining local resources, ARRA funds, and other federal government funds. The city council quickly backed the proposal and awarded \$1.5 million in start-up funds to the Mid-American Regional Council, a nonprofit planning organization that connects local governments in the region, to supervise the initiative. In addition to funds from the ARRA for programs such as weatherization, the Green Impact Zone sought federal funds from the Environmental Protection Agency for brownfields restoration, the Department of Justice for community policing, the Department of Housing and Urban Development for rehabilitation of abandoned and foreclosed homes, and the Department of Labor for green jobs training. Local partner organizations included neighborhood councils and the Metropolitan Energy Center, an organization dedicated toward green energy issues that will train residents to become certified energy auditors. The city government also planned to invest \$27 million in a bus rapid transit system with green bus shelters (Grady 2009).

Although by mid-2009 there was some criticism about the slow pace of progress, a visit from Obama administration officials in September, 2009, suggested that the Green Impact Zone could become a showcase project, and in November 2009 some ARRA funds were awarded through the Department of Energy. Although far short of the original goal of \$200 million, the federal government provided \$24 million, which was matched by \$24 million by Kansas City Power and Light, to develop smart-grid improvements in the zone and surrounding area (Horsley and Everly 2009). It is possible that the full range of programs that would combine community and economic development may not materialize, but the initiative represents an innovative model that connects community development with building improvements and other sustainability initiatives.

South Dakota

South Dakota has a modest voluntary renewable electricity standard of 10 percent by 2015 and a goal of LEED-silver certification in its state government buildings. The state is home to a strong biofuels refining industry, there is some research at the Center for Bioenergy at the South Dakota School of Mines and Technology, and *Biofuels Digest* listed the biofuels firm KL Energy was listed among the 50 "hottest" bioenergy firms. The state is also home to one of the largest wind farms in the country. Due to the relatively small size of the state's population and research universities, it is likely to remain a production center for biofuels and wind energy rather than become a manufacturing and innovation center.

References

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