
POLICY MATTERS OHIO

COLUMBUS: 1372 GRANDVIEW AVE. SUITE 242 • COLUMBUS, OHIO, 43212 • TEL: 614/486-4601 • FAX: 614/486-4603
HTTP://WWW.POLICYMATTERSOHIO.ORG

For Immediate Release

November 17, 2009

Contact: Amanda Woodrum, (614) 221-4505

awoodrum@policymattersohio.org

View the report at <http://www.policymattersohio.org/GreeningOhioIndustry.htm>

Report finds ways to reduce costs, pollution and energy use by Ohio industry Combined heat and power, industrial efficiency could increase competitiveness

With assistance, Ohio manufacturers could substantially reduce their costs, save energy, and reduce carbon emissions by investing in industrial efficiency, according to a report released today by Policy Matters Ohio. A hearing today in the House Alternative Energy committee will consider HB 301, which would expand Ohio's advanced energy fund to provide such assistance.

Ohio's industrial sector consumes 33 percent of Ohio's energy, more than any other part of our economy including homes, commercial businesses and transportation. Manufacturing, the largest sector in Ohio's economy, consumes the bulk of the energy used by Ohio industry. "A stronger advanced energy fund will give Ohio manufacturers the resources that they need to improve their efficiency and green their plants," said State Representative Mike Foley. The report finds that if manufacturing were more efficient, the state as a whole would use less energy.

To reduce Ohio's dependence on polluting fuel, most of which is purchased from outside the state, manufacturers should be encouraged to and assisted in managing energy use. Nationally, manufacturers who undertake energy assessments implement fewer than 40 percent of recommendations because capital investments required for energy saving measures compete with other capital needs. Policy Matters' analysis of data from the University of Dayton found that only about half of energy efficiency recommendations were implemented, even though the average cost per manufacturer, around \$120,000, would have been recouped within slightly less than one year. The total savings from over 6,000 recommendations made, if implemented, would have been \$105.6 million annually while the one-time cost would have been \$104.9 million. More than 1,100 of the recommendations had no cost.

The report also finds:

- In 2006, Ohio manufacturers together spent an estimated \$5.6 billion on energy, averaging \$260,000 each.
- Nearly 70 percent of energy generated at electric plants is lost during generation or transmission on our outdated grid. Every kilowatt-hour of electricity used means 3.3 kilowatt-hours worth of polluting fossil fuels must be burned at a power plant.
- Ohio's electric power industry ranks second only to Texas in carbon emissions.



- By decentralizing electricity production through adoption of combined heat and power technology (CHP), American could reduce energy use and emissions by 20 percent.
- Generating 20 percent of power from CHP in Ohio, would mean a \$10.5 billion capital investment that would produce \$2.9 billion in energy savings annually, create over 40,000 jobs, and reduce emissions by 36 million metric tons (equal to taking 6.6 million cars off the road).
- Ohio ranks in the top five states for potential energy production through CHP, but ranks 43rd in adoption of the technology.

“Heat generated during electricity production is discarded. At the same time, manufacturers are purchasing fuel to heat and cool facilities and products,” said Amanda Woodrum, report author and researcher at Policy Matters. “Combined heat and power, which transfers heat lost from the electric sector to manufacturers, could drastically reduce waste, costs and pollution.”

Ohio, which is already home to firms that do this kind of production, like Steam Power LLC, based in Milford and reXorce Thermionics, based in Akron could be a leader in producing gas turbines, steam turbines, high-pressure steam lines, valves, railroad engines, cooling towers, and the other essential parts of CHP systems.

The state of Ohio instituted a number of measures to encourage industrial efficiency. Ohio passed advanced energy and energy efficiency standards that require utilities, by 2025, to increase advanced energy use to 25% and reduce consumption by 22%. Investments in industrial efficiency and CHP qualify towards meeting goals in the law. Ohio also removed barriers to CHP technology by passing new interconnection standards. Finally, Ohio’s Energy Office made industrial efficiency a priority for allocating federal stimulus dollars.

Further policy change could encourage combined heat and power and other efficiency measures. Policy Matters concludes with recommendations that include:

1. Pass federal climate change legislation. The climate bills currently under consideration provide tools, capital, and technical assistance to make efficiency spending worthwhile for companies and communities. The Initiative for Manufacturing Productivity in Advanced Competitive Technologies (IMPACT) proposal of Senator Sherrod Brown, and industrial efficiency legislation introduced by Senator Jeff Bingaman reshape existing programs and provide new resources for the transition to clean energy. Additional provisions ensure funds for workforce training in lean manufacturing techniques.
2. Extend and expand Ohio’s Advanced Energy Fund, which is currently set to expire and is wholly inadequate in size. Use some of the proceeds to facilitate investments in efficiency and CHP. Support HB 301, expanding and extending the fund.
3. Provide free industrial energy assessments, efficiency training, and implementation assistance to manufacturers to encourage private investment. Provide resources to do the assessments and ensure availability of capital for this purpose, by ensuring access to low-interest loans from revolving loan funds. Companies receiving state or federal funds for retooling should be required to undergo energy assessments and implement recommendations to make them greener.

4. Investigate the potential for municipal power authorities to build combined heat and power plants on brownfields in order to provide manufacturers affordable and stable energy prices through long-term power purchase agreements (green incentives).

“It is a good time to invest in manufacturing efficiency,” said Woodrum. “The resulting energy savings can solidify Ohio’s manufacturing stronghold in the new global clean energy economy, and make Ohio a more sustainable and vibrant state with a vital role in the nation’s future.”

Policy Matters is a non-partisan policy research institute dedicated to a more sustainable, vibrant, equitable and inclusive economy. Policy Matters is the host to the Ohio Apollo Alliance, a coalition of environmental, labor, business and community groups advocating for a clean energy economy and good green jobs.