

# MICHIGAN'S CLEAN ENERGY FUTURE

BY *Michael Garfield*

## WHAT NEEDS TO HAPPEN

In October, two years after half the United States had adopted clean energy legislation, Governor Granholm signed into law a package of bills to promote energy efficiency and renewable energy in Michigan. The new renewable energy law is admittedly weak, so it begs the question—what do we really need to do to bring wind and solar energy, advanced biofuels, and plug-in hybrid vehicles to Michigan?

And the Ecology Center is not the only one raising the question. The Governor herself has said repeatedly that the large-scale transition to clean energy is the surest way to revitalize Michigan's economy. "The new energy economy is, singularly, Michigan's greatest opportunity to create thousands of new jobs, attract new investment and diversify our economy," Granholm said while reorganizing all of the state's energy programs within the new Department of Energy, Labor, and Economic Growth.

She's now got a kindred spirit in the White House. In his first press conference after the election, President-Elect Obama reiterated that two of his top three domestic agenda items are climate change and energy independence. During the campaign, he had argued that his clean energy investment would lead to five million new jobs nationwide, estimates that are confirmed by several studies.

### Michigan's New Energy Laws

After a lengthy stare-down between the Michigan Senate and House of Representatives, the Senate agreed to the core principles of the House energy package,

including the "re-regulation" of most of Michigan's electricity market.

One key clean energy plank calls for energy efficiency programming that requires a one percent annual reduction in electricity demand starting in the year 2012, and every year thereafter. A kilowatt of energy costs 3 or 4 cents to conserve, compared to 10 cents or more to generate from a new power plant. If implemented to plan, this law could give Michigan one of the strongest efficiency laws in the country.

Another key plank features a requirement of 10 percent renewable energy generation by 2015. Twenty-seven other states have these sorts of "renewable portfolio standard" policies. Unfortunately, Michigan's new law includes enough loopholes and exceptions that the American Wind Energy Association opposed the bill, arguing that it contained "toothless enforcement provisions as well as other provisions that potentially undermine cost-effective procurement."

### What We Really Need to Do

To move beyond toothless policy, Michigan needs to adopt an aggressive agenda of CO2 regulation, a low-carbon fuel standard, tough building codes, and "feed-in tariffs." The latter policy, also known as a Renewable Energy Payment, has been wildly successful in Germany, Spain, and other European countries, and has catapulted those countries to the forefront of global wind and solar energy development.

The feed-in tariff replaces the existing hodge-podge of incentives for renewable energy with a



long-term, simple price for every kilowatt-hour that a clean energy developer feeds into the grid. The utility is required to allow the power source to connect to the grid, and to buy that power at a fixed price. The policy was so successful in Germany that the renewable portion of the power supply surged more than one percentage point per year during the first eight years it was in effect.

Earlier this year, a German company called Q-Cells became the world's largest producer of photovoltaic cells, and the country has become the largest market for solar systems in the world by far, accounting for more than half of all PV installations worldwide.

By the way, the sun shines about as infrequently in Germany as it does in Michigan.

Electric utility opposition has stymied the establishment of feed-in tariff rules across the U.S., but the tide is shifting. In Michigan, Rep. Kathleen Law introduced a feed-in proposal in the current legislative session, and Governor Granholm says it's a high administration priority. When the new House and Senate convene in 2009, we'll soon see if Michigan's ready to lead the way into the new energy economy.

## Solar Ann Arbor!?!

Last year, the City of Ann Arbor was designated a Solar America City, one of only 13 cities nationwide to receive solar start-up grants from the U.S. Department of Energy. The initiative hopes to make solar energy cost-competitive with conventional sources of electricity by 2015.

For 25 years, Ann Arbor has developed Michigan's finest municipal energy efficiency programs. Since Mayor John Hieftje issued a 2006 Clean Energy Challenge, the City has been exploring ways to receive 20 percent of its electricity from renewable sources by 2015. Under the Solar America grant, the City receives \$200,000 to serve as a model for integrating solar energy in the community.

So far, the City has installed solar panels at the Farmers Market, with an educational exhibit to be installed later this fall. The Clean Energy Coalition is helping the City develop a solar plan for Ann Arbor and has completed interviews of solar experts and policymakers, focus groups of homeowners and building professionals, market research, etc. The Great Lakes Renewable Energy Association has held two Go Solar Ann Arbor seminars, and is educating teachers on solar curriculum items. In the coming months, the City will be assessing opportunities for integrating solar into emergency management, installing solar panels at another city facility, and exploring innovative financing models being developed across the country.

If German roofs can be dotted with photovoltaic panels, then Ann Arbor's certainly can, too.

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