

Date: Sept. 2009
Next Update: Jan 2010



Ohio Renewable-Energy Scorecard

This scorecard reports the status of renewable energy for electricity in Ohio. It puts numbers on the statement that we are lagging in alternative energy. While the national average is that seven percent of electricity comes from renewable sources, Ohio gets about one percent. We are close to the bottom rank of the states by several criteria. However, we may gain ground in the next few years, particularly from a large planned increase in wind power.

Electric plants are rated in Megawatts (MW). One Megawatt can power 500 to 600 homes. Ohio now has about 357 MW of renewable power (about enough for 180,000 to 215,000 homes). The table below gives details about our present and future generating capacity.

Some Perspective on the Numbers

- Currently Ohio law envisions one quarter of our electricity coming from alternative sources in fifteen years (2024). However, only half of this electricity need come from renewables and only half of the renewables need to come from in-state, resulting in a goal of 6.25 percent. This goal is likely to be reached in a few years since the total of existing and planned capacity of 2026 MW, cited in the table, is about seven percent of our current level. However, the 6.25 percent is a required minimum; exceeding it would only lead to less renewable energy being imported from out of state and/or less non-renewable alternative energy, such as clean coal, being developed.
- There is also a requirement in the law for one-half percent solar energy, which would amount to about 170 MW of solar power, far in excess of existing and planned capacity.
- There is concern about the environmental consequences of some of the sources of renewable power. In theory, burning rubber tires to generate electricity could be considered renewable, since nature continually produces new rubber.

Please send comments and suggestions to Al Rosenfield, LWVO Energy Specialist: <alanpeg@alum.mit.edu>

ELECTRICITY-GENERATING CAPACITY IN OHIO



Type	Capacity, MW		
	Existing	Planned	Total
Hydroelectric	129	0	129
Misc Waste	93	60	153
Landfill Gas	92	0	92
Wood/Wood Waste	32	0	32
Wind	7	1614	1621
Crops/Farm Waste	3	312	315
Solar	1	10	11
Total	357	1996	2353

TYPES OF ELECTRIC-POWER GENERATION

The value for Hydroelectric is deceptive since the Ohio River is beyond the state line. So dams credited to West Virginia and Kentucky actually are providing some power to Ohio.

Misc. Waste comes from landfills and industrial processes. It is burned to generate electricity and not considered 'green' by many.

Landfill Gas is methane (natural gas) collected to generate electricity. If it is not used in this way, or to fuel vehicles, it is burned off. It will generate CO₂ whether or not it is used.

Burning of Wood/Wood Waste is used to electrically-power lumber mills and furniture factories.

The large increase in Wind reflects applications for permits pending at the Ohio Power Siting Authority.

Crops/Farm Waste includes crops grown specifically for use in power plants, as well as crop waste. This category also includes animal manure and food waste.

The data for Solar are approximate. Because there are a large number of small installations, the total is difficult to evaluate.