

Date: May 2010
Next Update: September 2010



Ohio Renewable-Energy Database

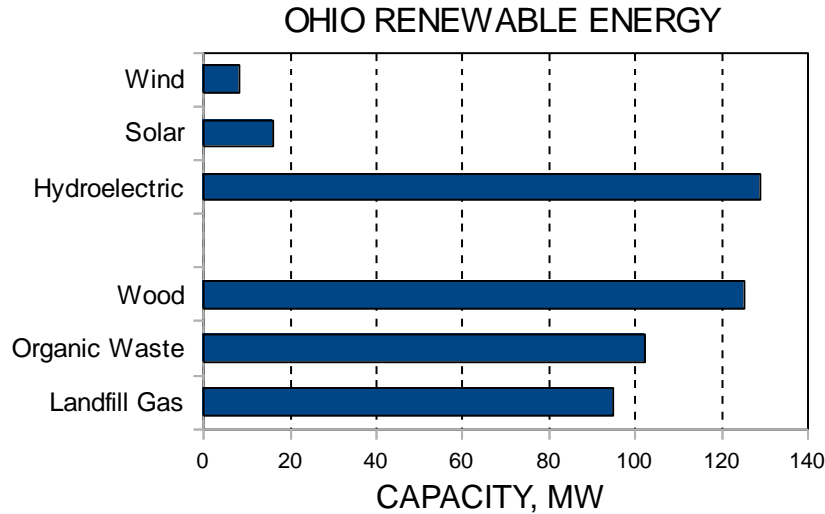
Although Ohio continues to lag other states in renewable energy, there have been some promising developments this year:

A large solar facility has begun operation in Wyandot County. It now provides more that two-thirds of the solar power in Ohio.

The Ohio Power Siting Commission has approved three large wind farms in Northwestern Ohio. When they become operational next year they will provide about a seventy-fold increase in the State's wind power.

However, Ohio still gets only a bit more than one percent of its electricity from renewable sources. Since the national average is about nine percent, we rank close to the bottom of the states by several criteria.

The chart shows the capacity of our renewable energy operations in Megawatts (MW). Ohio now has about 474 MW of renewable power, about enough for about 160,000 homes (One Megawatt of renewable energy can power about 300 homes).



The technologies shown in the chart are divided according to their greenhouse-gas production. When hydroelectric, solar, and wind generate electricity they emit no greenhouse gasses, the other technologies produce electricity by burning fuel. However, production of these fuels reduces their carbon footprint. For example, growing trees absorb CO₂. Burning wood waste returns the CO₂ to the atmosphere, making the fuel roughly carbon neutral.

Currently Ohio law envisions investor-owned utilities providing in-state renewable resources for 6.25 percent of our electricity fourteen years from now (2024). Hydro, a large source currently, is expected to have almost no growth. Wood appears set to become the largest source of renewable energy. However, there is concern that the level of planned wood power will cause excessive deforestation.

Fulfilling Ohio's long-term 6.25 percent renewable-energy requirement will probably lead to 3,500 to 4,000 MW capacity. While the 4,197 MW cited in the table provides good promise, the supply problem for wood suggests that it is likely an overestimate.

There is also a requirement in the law for one-half (0.5) percent solar energy, which would amount to about 600 MW of solar power, far in excess of existing and planned capacity.

Ohio Renewable Energy Breakdown (Data in MW)

	Existing	Planned	Total
Green Technologies			
Hydroelectric	129	4	133
Solar	16	7	23
Wind	8	1335	1343
Total	152	1346	1498
Biomass (Less Green)			
Landfill Gas	95	0	95
Organic Waste	102	27	129
Wood	125	2350	2475
Total	322	2377	2699
Grand Total	474	3723	4197

On April 15, 2010, the investor-owned utilities reported their progress in fulfilling their mandated goals for renewable energy produced in-state. While all of them made the goals for non-solar electricity, they were able to provide only about one quarter of the total solar goal because of a shortage of facilities. PUCO is adding the shortfalls to their 2010 goals.

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