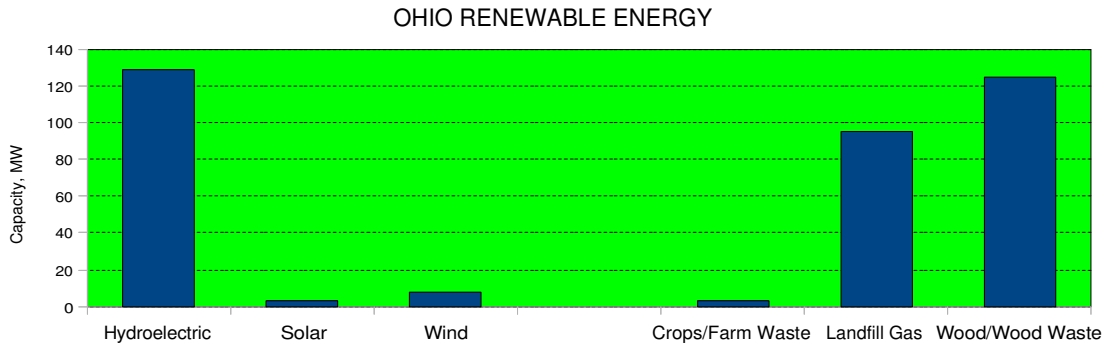
Date: Jan 2010
Next Update: May 2010

LEAGUE OF WOMEN VOTERS® OF OHIO

# Ohio Renewable-Energy Database

Ohio continues to lag 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.

The chart shows the capacity of our renewable energy operations. in Megawatts (MW). Ohio now has about **363** MW of renewable power, about enough for about 110,000 homes (One Megawatt can power about 300 homes).




Currently Ohio law envisions in-state renewable resources providing 6.25 percent of our electricity fourteen years from now (2024). The largest sources now (hydro and wood waste) are expected to have almost no growth. Wind appears set to become the dominant source of renewable energy:

| OHIO RENEWABLE ENERGY | | | |
|---|---|---|---|
| Type | Capacity, MW | | |
| | Existing | Proposed | Total |
| No Greenhouse gasses | | | |
| Hydro | 129 | 4 | 133 |
| Solar | 3 | 15 | 18 |
| Wind | 8 | 1849 | 1856 |
| Some Greenhouse Gasses | | | |
| Crops/Farm Waste | 3 | 312 | 315 |
| Landfill Gas | 95 | 25 | 119 |
| Wood/Wood Waste | 125 | 0 | 125 |
| Misc Waste | 0 | 60 | 60 |
| | | | |
| Total | 363 | 2264 | 2627 |

Not included in the table is First Energy's plan to build a 2,500 MW pumped-gas energy-storage facility. It is not clear how much renewable energy from Ohio this plant will require.*

The technologies listed in the table 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.

Fulfilling Ohio's long-term 6.25 percent renewable-energy requirement will probably lead to 3,500 to 4,000 MW capacity. The 2,627 MW cited in the table provides a good head start. There is also a requirement in the law for one-half percent solar energy, which would amount to about 300 MW of solar power, far in excess of existing and planned capacity.

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

---

* There is a description of this project on the First Energy web site http://tinyurl.com/lwvo-10-02