

### Find Your Community

What is the total renewable energy potential?

This map displays the total renewable energy potential in Wisconsin. Various data sources were converted to a common unit (megawatt) and combined using GIS to produce total energy potential. Renewable energy sources include: wind, biomass, solar, and biogas.<sup>1,2</sup>

**LEGEND**  
Renewable Energy Potential  
MW/3km<sup>2</sup>

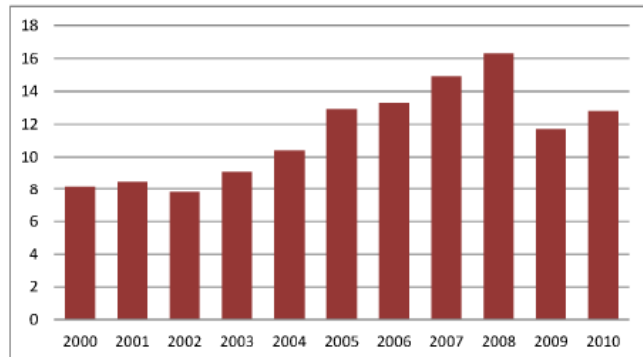
- 51 - 571
- 572 - 939
- 940 - 1,285
- 1,286 - 1,664
- 1,665 - 2,812

## ENERGY

### Costs of Fossil Fuels

Wisconsin has no sources of coal, petroleum or natural gas. Since 2004, more than \$10 billion has left Wisconsin every year to pay for these fossil fuels. In 2010, an average of \$5,600 was spent per household on fossil fuels. Moving toward energy independence reduces the dollars that leave our state and generates jobs in Wisconsin.

Figure 11: \$ Leaving Wisconsin for Energy (Billions)



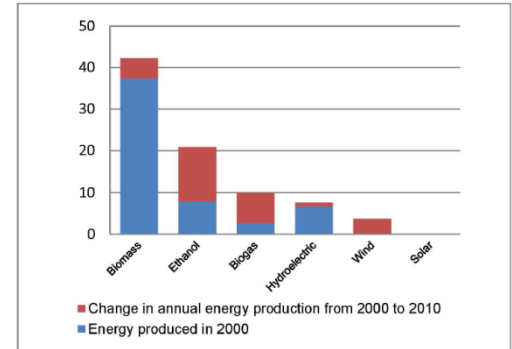
### Energy Efficiency

The cheapest, cleanest, and most reliable source of energy is the energy we do not use. Implementing the federal 2025 Corporate Average Fuel Economy (CAFÉ) standards, converting power plants to combined heat and power (CHP) to use the energy in released steam, and improving energy efficiency in buildings could reduce Wisconsin's total energy use by 36%. In comparison, renewable energy provided 5% of Wisconsin's total energy use in 2010.

### Growth in Renewable Energies in Wisconsin

From 2000-2010, ethanol and biogas production increased more than other renewable energies. Ethanol is a transportation fuel made primarily by fermenting field corn. Biogas is produced by plant and animal matter breaking down in the absence of oxygen in landfills, manure digesters and wastewater treatment plants. From 2003 to 2010, nearly 1 million acres in Wisconsin have been converted from pasture to field corn, mainly to produce ethanol. A Wisconsin map of acres converted is in the full publication.

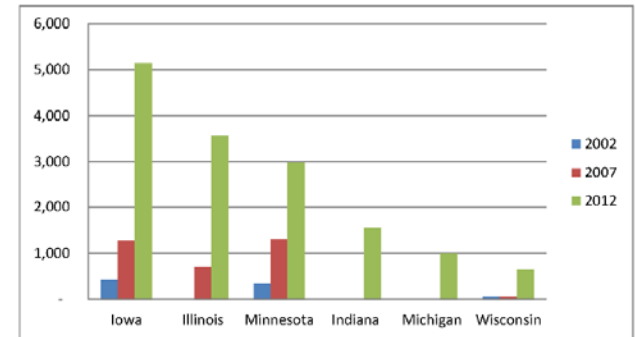
Figure B1: Change in Wisconsin Annual Renewable Energy Production 2000-2010 in Trillions of BTUs (Note: 2010 solar production was 0.04.)



### Wind

Wisconsin's production of electricity from wind power is increasing, albeit at a slow pace compared to other Midwestern states. Experts estimate that wind could be installed on 14.3 percent of Wisconsin land and has the potential to supply Wisconsin with more than the state's current electricity needs.

Figure W2: Installed Wind Capacity by State (in MW)



### Jobs

Wisconsin has over 12,000 jobs tied to solar and wind power, including about 135 solar power supply chain businesses and 171 wind power supply chain businesses.

### Policies

Renewable Portfolio Standards (RPS) require utilities to meet renewable energy targets by a set date, and have been found to significantly influence adoption of new energy technologies. The Wisconsin RPS was weakened by a 2011 law (Act 34) allowing utilities to meet their RPS with electricity purchased from large-scale, out-of-state hydropower.

The publication *Wisconsin Land Use Megatrends: Energy* is available at [www.uwsp.edu/cnr/ap/clue/Documents/megatrends/WisconsinLandUseMegatrendsEnergyIIFINAL.pdf](http://www.uwsp.edu/cnr/ap/clue/Documents/megatrends/WisconsinLandUseMegatrendsEnergyIIFINAL.pdf)

