

8. What is Michigan's long-term potential for more wind, solar, hydro, biomass, landfill gas, and other renewables sources?

NREL estimates that Michigan has the potential for 59,000 MW of on-shore wind energy (based on windy land area with a gross capacity of 30% and greater at an 80-m height and the wind energy potential from development of the "available" windy land area after exclusions) and over 423,000 MW of off-shore wind energy.

With the annual assessments of bone-dry tonnes (BDT) and methane emissions in each county, NREL estimates that biomass in Michigan has an energy potential of 2,000 MW.

NREL breaks solar down into two categories. The first category is urban utility-scale photovoltaics. This is defined as large scale-PV located within the boundaries of an urban area. Under this distinction Michigan has a solar potential of 34,000 MW spread over 699 KM<sup>2</sup>. The second category is rural utility-scale photovoltaics. This is defined as large-scale PV located outside the boundaries of urban areas. Michigan's rural utility-scale photovoltaics has the solar potential of 3,444,000 MW spread over 71,741 KM<sup>2</sup>.

Source:

NREL Technical Potential Report - [NREL:U.S. Renewable Energy Technical Potentials: A GIS-Based Analysis](#)