

Wind Turbines in Michigan



Compare

The industrial wind turbines that have been proposed to be built in Ingham County will be 650 feet tall or taller.

The center building of the Ren Cen is 727 ft tall. The four surrounding towers stand 522 ft.

Apex's proposed wind turbines **will stand taller** than the four Ren Cen towers and will be **visible more than 8 miles away**.

Industrial Wind Turbines

Harm People

- Shadow flicker is an encroachment to nonparticipating property owners and should not be allowed.
- Noise, audible and inaudible has been found to affect people close to wind turbines. Audible noise at night is disruptive to sleep. Inaudible noise is mechanical vibration felt in the body and is painful to many who have experienced it. See also 2010 paper by MSU's Dr. Jerry Punch & Richard James.
- Ludington, MI: Consumers Energy was successfully sued by neighbors of wind farm because their families suffered physical harm caused by noise - Property values were also harmed.

Harm Property Values

- APEX promotes a 2013 Berkeley Labs study to support their claim that property values are not harmed by presence of turbines. They state on Page 1: "Additional research is required, however, especially for homes located within about a half mile of turbines, where impacts would be expected to be the largest." The mean distance to the nearest turbine in this study was 4.96 miles (Pages 20 & 21). Only 2.4% of the transactions used in this survey were within 1 mile of a turbine. Berkeley assumes properties need to be more than 3 miles from a wind turbine for no impact to property value (Page 23). Ordinances should consider 3-mile setback from nonparticipating properties in order to protect home property values, which is consistent with the assumptions in this study.
- Neighboring Ontario, Canada courts have affirmed that properties close to industrial wind turbines are negatively impacted. Ref: Wiggins vs WPD Canada. Read judges' final comments to Wiggins.
- London School of Economic study released in 2014 (after Berkeley) found property values decrease in areas where wind turbines are visible. The impact diminishes with distance: 5-6% within 1.24 miles, less than 2% between 1.24 and 2.5 miles, and less than 1% beyond 8.7 miles-where turbines will likely not be visible. It found also that proximity to large wind farms, 20 or more turbines, can drive down home values by as much as 12%. Close proximity to industrial wind turbines drive down property values even before construction begins. See Page 6 for critique of Berkeley 2013 results.
- Berkely & LSE studies were of approximate 2MW size turbines. APEX is proposing much larger.

Harm the Environment

- Government and university studies have documented that industrial wind turbines kill bats and birds. A healthy bat population is necessary for the control of bug borne diseases such as EEE and heart worm. Ref: MSU's Bat Association website: [Economic Importance of Bats in Agriculture](#).
- There are reports that like humans, farm animals, pets and wildlife negatively react to the low frequency noise produced by industrial wind turbines.

Reference

- <https://stopthesethings.com/2014/11/23/punch-james-adverse-health-effects-from-industrial-wind-turbines/>
- https://d3n8a8pro7vhmx.cloudfront.net/allprojectswind/pages/22/attachments/original/1587060460/Berkeley_Lab_Property_Values_Study_2013.pdf?1587060460
- http://eprints.lse.ac.uk/58422/1/_lse.ac.uk_storage_LIBRARY_Secondary_libfile_shared_repository_Content_SERC%20discussion%20papers_2014_sercdp0159.pdf
- <http://www.batassociation.org/resources/>