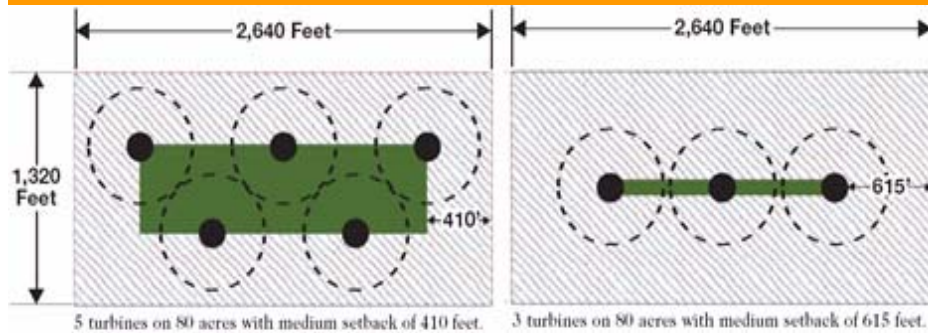## Overview

Very few Michigan jurisdictions have laws on their books to guide local land use officials who must decide on permit applications for siting new wind energy facilities. A recent (2004) US Department of Energy Wind Potential Map for Michigan has helped fuel an increase in landowner interest in wind energy and when landowners inquire about local permits they often discover that the rules are unclear.

To assist local governments wishing to develop local laws for siting wind energy systems, guidelines were released in December 2005 by the Michigan Energy Office in the Department of Labor and Economic Growth. In this bulletin, we describe the most important provisions of the new Guidelines and we look closely at the science behind what they say.

5 turbines on 80 acres with medium setback of 410 feet.   3 turbines on 80 acres with medium setback of 615 feet.

Michigan Land Use Guidelines for Siting Wind Energy Systems is available for downloading at http://www.msue.msu.edu. Go to "Publications," then "Search." Enter the Inventory Number: WO-1053. On the next page, click on the highlighted inventory number and then on "available."

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MICHIGAN STATE
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Publication Available:
Michigan Land Use Guidelines for Siting Wind Energy Systems

"Communities that proactively plan for wind turbines and carefully develop regulations for their installation will avoid a measure of uncertainty and the unfortunate public discord that sometimes comes along with new land use proposals."

—*Michigan Land Use Guidelines for Siting Wind Energy Systems*

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Michigan Land Use Guidelines for Siting Wind Energy Systems helps communities shape a more sustainable future.

Electricity generation from wind energy systems will reduce air pollution and help slow global climate change. It will increase the fuel diversity and security of our electric system, reduce the impacts of coal mining, and relieve pressure to extract oil and gas from fragile environments. It will provide a hedge against increases in the price of fossil fuels while reducing the need to build new central power plants. And industrial or agricultural activity can continue in and around wind tower sites. Many people see renewable energy, and particularly wind energy, as a substantial part of Michigan's diversified energy supply in the future.

A study released in 2006 by the Rand Corporation states, "Wind is the fastest growing form of renewable energy in the United States and the only source of renewable energy that is currently cost-competitive in multiple markets with conventional electricity sources." Wind production capacity in the United States has grown approximately 30% annually in recent years. (Rand 2006).

What the *Michigan Guidelines* Have to Offer

The new Michigan Siting Guidelines for Wind Energy Systems are meant to help local officials strike a balance between the need for clean, renewable energy resources and a local government's responsibility to protect the public health, safety and welfare. They present background commentary and suggested zoning language for local governments that was created with deliberation and substantial input from Michigan stakeholders and experts in the field.

As a starting point, the Guidelines suggest that local governments should adopt different requirements for systems constructed for on site use, and for larger systems built to supply the utility grid. They suggest that communities place personal systems in one class and utility scale systems in another class of land use.

The new Guidelines provide local land use leaders with a menu of provisions to select from, and they offer useful background and guidance to answer some of the questions they will undoubtedly hear from neighbors.