Summary and Background

Alternative energy sources are gaining popularity as communities and individuals seek to be more sustainable. Planners must be prepared to respond to the increasing demand for the development of alternative energy systems as a way to reduce dependence on fossil fuels. Wind energy is particularly important in Michigan as this burgeoning industry has the potential to explode in this wind rich state.

Municipalities must be prepared to embrace this new technology while protecting important local character, the environment, and quality of life. A balance between the economic and environmental benefits of wind energy, and the likely adverse land use impacts, must be achieved.

In Michigan there is a long history of local control over land use, and the role of community planners to protect the health, safety and welfare is longstanding. Through careful comprehensive planning, and adoption of codes and ordinances that establish standards for wind energy development, local government can accommodate the needs of the wind energy industry, reduce the use of non renewable energy sources, and protect residents from the potential adverse effects of wind generation turbines and their requisite supports.

The planning profession is well positioned to contribute their expertise and leadership skills to the wind energy conversation. Communities that proactively plan for wind turbines and carefully develop standards and regulations for their installation will avoid the uncertainty and public opposition that often accompanies new innovations and land uses. As interest and demand for renewable energy increases, Michigan’s communities must incorporate wind energy and other renewable energy resources into their vision for the future. To create sustainable communities, we must consciously plan for increased energy conservation and for alternative energy sources.

MAP will offer policy advice to state, regional and local planning authorities based on the best currently available scientific information.

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Wind Energy Issues

Commercial Wind Farm Operations versus Single Household/Business Use

There are two distinct applications for generating wind energy that are emerging in Michigan. One is the large wind farm operations used to produce energy on a commercial scale. The other is the use of smaller scale turbines or windmills for energy consumed in a single household or business. While the large scale application generally attracts more attention because of its size and impact, small scale applications also can have adverse impacts on neighboring properties relating to safety and nuisance issues. Unique regulatory measures for each type of application will be necessary to protect communities and neighbors from the effects of wind energy systems.

Wind as a Community Resource

Wind energy resource maps are estimates of wind resources and are based primarily upon computer modeling. The maps are intended to be suggestive of areas within Michigan that may be suitable for wind generation. Local government should conduct a thorough assessment and analysis of the suitability of sites within their community to ascertain the true wind generation opportunities and potential as part of a visioning and master planning process. Not all communities in Michigan are appropriate, or could reasonably expect to benefit, from the construction of wind energy facilities. ASW Truewind developed wind energy resource maps the Energy Office and the National Renewable Energy Laboratory with financial support from the U.S. Department of Energy.

Local Authority

The advent of wind energy systems is fairly new to Michigan, and local government must be prepared to respond to requests for siting wind turbines locally. Like any constructed improvement, wind energy elements should be subject to local planning and zoning regulations. Whether wind turbines are considered “essential services”, and therefore exempt from local authority, has yet to be established. Given the significant health, public safety and welfare issues associated with this use, government should be authorized to regulate locational and site development standards as a police power.

Note there may be various levels of authority at the state and local level related to wind turbine development. Wind energy is both a state and local issue.
Policy Statements

1. MAP supports the development of all wind energy systems.

2. The Michigan Association of Planning has a strong commitment to sustainable development. Securing sources of clean, reliable and affordable energy for current and future generations of Michigan’s residents and businesses is central to achieving this reality.

3. The Michigan Association of Planning supports the adoption of state legislation and local regulations that require the planning and evaluation of decisions regarding energy production, distribution and use to mitigate associated adverse impacts.

4. The Michigan Association of Planning encourages the creation of procedures and standards to ensure that siting decisions for energy generation, transmission, and distribution facilities will be evaluated to ensure consistency with community and regional development objectives, and the overall protection of public health, safety and the environment

A. Environmental and Social

1. MAP supports state, county and local legislation that will help to reduce dependence on fossil fuels and stimulate development of wind energy systems.

2. MAP encourages planners to work with utility providers to plan for the land-use and infrastructure requirements of renewable energy production so that environmental impacts are minimized or eliminated; scenic and natural beauty areas, view sheds and corridors are protected; and social and environmental justice is not compromised.

3. MAP supports a siting process for wind energy infrastructure that reflects sound environmental practice and does not place undue environmental justice burdens on any one community.

B. Economic

1. MAP supports the development of renewable wind energy sources to supply diverse business models and the broadest range of consumer choice.

2. MAP supports Michigan’s adoption of strong net metering rules requiring the sale of excess site-generated power back to the grid at full rate.

3. MAP supports an aggressive renewable energy portfolio standard that specifies targets for wind power and other renewable energy sources.
4. MAP supports financial incentives that encourage conservation and renewable energy advancement.
5. MAP encourages energy providers and consumers to take immediate steps to reduce the state’s dependence on fossil fuel-based sources of electric energy

C. Locating and Regulating Wind Energy Facilities

1. MAP encourages the siting of new wind energy facilities as part of a comprehensive planning process, which includes the opportunity for meaningful public participation and public consensus. Meteorological Tower (MET) and other available studies should be used to help communities identify appropriate locations.
2. MAP supports the creation of siting criteria and guidelines that address considerations such as setbacks, height, placement, adjacency issues such as noise and shadow flicker, maintenance, and decommissioning, and should be consistent with local land use plans and meet the most rigorous standards to protect the environment.
3. MAP recognizes that energy generation is an economic development activity, and supports strategies that maximize the benefits of renewable energy including the potential to stimulate innovation and new employment.
4. MAP encourages the careful development of uniform statewide regulations for the installation, operation, safety, and maintenance of wind turbines.

For additional information and resources, go to the MAP web page www.planningmi.org/resources/detailsasdeveloped