

Report: Use 'brownfields' as energy parks

January 29 2009, Bill O'Brien

Northwest Michigan could generate hundreds of new jobs and generate enough electricity for thousands of its residents by converting abandoned factories and other brownfield sites for renewable energy production.

Researchers at Michigan State University released a report Tuesday recommending the redevelopment of unused or under-utilized industrial areas as renewable energy parks. It estimates around 465 existing brownfield sites in northwest Michigan would be suitable for wind power development, enough for more than 400 wind turbines that could generate up to 826 megawatts of electricity -- enough to serve more than 800,000 people.

The study also identified more than 500 sites in northwest Michigan suitable for solar power development. Those sites could generate more than 280 megawatts of electric power.

"I think it's a reasonable use for some of these areas," said Rick Wilson, of Heritage Sustainable Energy in Traverse City. His company developed Stoney Corners wind farm near Lake City, a \$15 million facility with the potential to generate up to 20 megawatts.

Wilson said wind farms can be difficult to establish because the massive size of the turbines can create land-use issues with neighbors. But many of the ex-factory and brownfield sites pose those problems anyway, he said.

"Land use is obviously a big factor," Wilson said. "We want these



facilities to be accepted in the communities where they're located."

Tom Karas, of the Michigan Energy Alternatives Project, said abandoned factory and other brownfield sites would be "ideal" for temporary use as solar energy production sites while properties wait for long-term adaptive re-use proposals.

"On a short-term basis, these are the perfect sites to make use of," Karas said. "It would be a huge community service to introduce the idea that solar technology is advancing by leaps and bounds and is appropriate for this area."

The report projects that wind energy projects could generate more than 400 new construction jobs in northwest Michigan, while solar energy projects could produce more than 2,800 jobs. Estimated construction expenditures could exceed \$600 million, according to the report.

The study suggests some brownfields could be used for the installation of solar panels or wind turbines capable of generating an estimated 5,855 megawatts of electricity -- enough to power about 1.8 million, or nearly 50 percent, of Michigan's homes.

The study estimates that transforming brownfields into renewable energy parks would stimulate an investment of more than \$15 billion in solar and wind energy equipment and related construction. It also would create 17,500 short- and long-term jobs.

"The opportunities are extremely huge," said Soji Adelaja, director of Michigan State's Land Policy Institute and the report's lead author.

With its location among the Great Lakes, the state has the potential to generate enough wind energy to sell it to other states, he said.



To establish Michigan as a leader in the renewable energy industry, the study recommends that the state amend current brownfield redevelopment guidelines to fast-track renewable energy projects and make funding a priority.

Besides being well-suited as sites for the installation of solar panels and wind turbines, brownfields also could be used to make equipment for generating electricity from the sun or the wind, Adelaja said.

"That potential will be huge," he said.

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