



WIND WORKS

Building a Wind-Powered Economy in New York

Clean, affordable and reliable wind is powering millions of homes, creating jobs and driving economic growth across the nation. Ten states already get at least 10 percent of their power from wind. In total, there are now over 61,000 megawatts (MW) of wind power operating in the U.S.—enough to power 15.5 million homes.¹ New York has some of the best wind potential on the East Coast,² along with a ready workforce and communities demanding clean, renewable energy.

WIND RIVALS FOSSIL FUELS

The cost of wind power dropped an amazing 40 percent from 2011 to 2013,³ making it increasingly competitive with fossil fuels. In fact, in many areas, power from wind is now cheaper than power from new gas plants.⁴

As a result of dropping prices, Warren Buffet's MidAmerican Energy purchased the nation's largest single order of land-based wind turbines at the end of 2013. The turbines will be manufactured at plants in Iowa and Kansas for five projects in Iowa that will power 320,000 homes. The investment will help replace retiring, outdated coal plants.⁵

WIND POWER CREATES JOBS

The wind industry already supports more than 75,000 jobs in the U.S. According to a study by New York's energy agency, wind energy produces 27 percent more jobs per kilowatt-hour of electricity than coal plants, and 66 percent more jobs than natural gas plants.⁶

Over 400 American manufacturing plants build wind components, and over 60 percent of a U.S.-installed

turbine's value is produced right here in America. New York has the manufacturing base and infrastructure to tap this market, but is missing out on this tremendous opportunity.

WIND LOWERS COSTS

Wind power is a critical resource because it lowers the overall cost of electricity for consumers. In fact, over the past five years the 11 states with the most wind energy in their mix have seen electricity prices drop while prices have increased in every other state.⁶

In Detroit, the average household is expected to save \$80 a year on their bills starting in 2014 as a result of lower rates from adding more wind power to their mix.⁷ In Oklahoma, utility giant Public Service Company of Oklahoma tripled an already large purchase of new wind power when prices came in extraordinarily low. The company estimates the deal will save customers \$53 million in just the first year, with even greater savings over time.⁸

WIND INVESTMENTS GENERATE REVENUE

Wind energy offers rural landowners a new cash crop. According to the Department of Energy, a 250-acre farm could increase its annual income by \$14,000 per year and \$55 an acre, making it competitive with the most successful crops. Turbines have a small footprint, so crops and livestock can go right up to the base. "It's almost like renting out my farm and still having it," said Leroy Ratzlaff, a third-generation farmer in Hyde County, South Dakota, "and the cows don't seem to mind a bit."⁹

In Iowa alone, landowners earn an estimated \$14.46 million in lease payments every year. Turbines in a single county in northwest Iowa will contribute an estimated total of \$189 million to the total county tax base. Similarly, at a time when property values were plummeting across Michigan, the largest increase in value was in Gratiot County, following development of a large wind farm there.¹⁰

WIND KEEPS THE LIGHTS ON

Wind power provides electricity security because it's always available. Unlike coal and gas, wind isn't dependent on constant fuel supplies that are vulnerable to shortages and malfunctions. It's easier to predict wind patterns using our vast knowledge of meteorological data than to know when a power plant is going to go down.

This winter, wind provided the critical power necessary to keep heaters running and costs low during record low



temperatures that spanned from the Midwest to the East Coast. Nebraska avoided using natural gas when prices spiked to more than 300 percent above average by relying on more affordable wind power.¹¹

TURNING NEW YORK INTO A WIND LEADER

It's time for Governor Cuomo to get serious about making New York a climate leader by extending and expanding our clean energy program to double wind power in the state and directing the Long Island Power Authority and PSEG-LI to invest in offshore wind power.

Learn more at:

sierraclub.org/coal/new-york

ENDNOTES

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- 4 Bloomberg, "Wind Power Rivals Coal With \$1 Billion Order From Buffett", <http://www.bloomberg.com/news/2013-12-17/wind-power-rivals-coal-with-1-billion-order-from-buffett.html>.
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- 10 The Center for Michigan, "County-by-county rankings on property values in Michigan", http://www.mlive.com/business/index.ssf/2013/04/whos_no_1_county-by-county_ran.html.
- 11 American Wind Energy Association, "Wind Energy Helps Ward Off Power Outages", <http://www.aweablog.org/blog/post/wind-energy-helps-ward-off-power-outages>.

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