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Economic Impacts of Wind Projects: Myths and Facts

MYTH: Wind projects have net negative economic impacts.

FACT: Wind projects support local economies.

Indiana's first 1,000 megawatts of wind farms has led to estimated yearly benefits of $40 million of economic activity, $4 million in payments to land owners, $8 million in tax revenue, and 260 full time jobs. Wind farm construction led to an estimated $570 million dollars in economic activity and 4,400 temporary full time jobs.[1] This analysis is one of many showing the net economic benefits of wind energy.

MYTH: Wind energy is too expensive.

FACT: Wind can be competitive with conventional generation.

In 2013, long term wind energy power purchase agreements were signed for 2.5 cents per kilowatt-hour.[2] The average price for wholesale electricity in 2014 was, by comparison, approximately 5.2 cents per kilowatt hour.[3] Cost depends upon the wind resources and equipment installed, but North Carolina has many areas suitable for wind development.[4]

MYTH: Wind projects rely on tax subsidies to remain viable.

FACT: All electricity generation is subsidized. Unsubsidized wind projects can be competitive.

All electricity generation is supported by subsidies in various forms.[5] Wind-specific support includes some state-specific tax credits and the federal production tax credit which provided 2.3 cents for each kilowatt-hour a wind farm produced over its first 10 years.[6] The federal credit expired in December of 2014.

The independent, private financial firm Lazard Ltd. compared the unsubsidized levelized costs of energy (LCOE) from a variety of electric generation sources. Without tax credit support, Lazard found wind to be the lowest cost generation source at 3.7 to 8.1 cents per kilowatt hour with no tax credit support compared to natural gas options ranging from 6.1 cents to 16.8 cents per kilowatt-hour in 2014.[7]

MYTH: Wind turbines disrupt agriculture and harm farmers.

FACT: Wind turbines have minimal effects upon agriculture and can provide added revenue to farmers.

Wind lease holders have reported annual payments ranging from $4,000 to $6,000 per megawatt depending upon the specific site and equipment installed.[8] Wind farms only take 2 to 5 percent of a project area's total land out of service,[9] with access roads requiring the most space,[10] so it is common for farming to continue along with wind development. Small, localized effects on crops have been observed and leasing provisions may affect farming.[11] The Farm Legal Action Group has created a comprehensive resource for farmers considering wind leases.[12]

MYTH: Nearby wind turbines will decrease property values.

FACT: Wind turbines have no demonstrated effect upon property values.

A 2013 U.S. Department of Energy sponsored-study examined the effects of wind projects on the price of 50,000 homes in 9 states and 27 counties and found "no statistical evidence that home prices near wind turbines were affected in either the post-construction or post-announcement/preconstruction periods."[13] Other studies show similar results.[14]

MYTH: Wind projects will harm local tourism.

FACT: There is very little data on wind turbine impacts upon tourism, but impacts appear negligible.

The most recent comprehensive analysis of the impacts of wind farms on tourism conducted by the Government of Wales in 2014 concluded that wind development had negligible effects on tourism. Where negative impacts did occur, tourists were displaced within the same region.[15] There are very few peer-reviewed American studies examining the relationship between onshore wind development and tourism. Most studies report survey data about how people think turbines may affect tourism and do not report observed behavior. Opinion polls show that 82% of North Carolinians support onshore wind development while 12% oppose it.[16]

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