

Florida Wind Energy Opportunities

Florida is already taking advantage of wind energy. In 2015, Gulf Power announced the purchase of 178 megawatts (MW) of wind energy from Oklahoma—enough to power the equivalent of 50,700 homes a year.

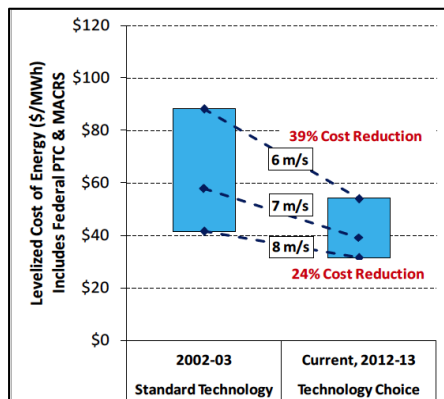
Now Florida has great potential for wind energy development within the state. Advanced wind turbine technology and reduced costs have now made wind energy economically feasible throughout Florida. A wind project in Florida could provide beneficial economic development opportunities for local communities.

Advanced Turbine Technology

In the past five years, wind turbine technology has greatly evolved. Wind turbine towers can reach up to 459 feet (140) meters in height. **Taller turbines and longer blades are capable of capturing more wind, thus harnessing more electricity and reducing wind energy prices.** As turbines increase in height, Florida contains a much greater area of land viable for development. **Some 1,500 MW of onshore wind potential may exist in Florida.**

Reduced Costs

Wind energy is now one the least expensive sources of new power generation in the country. Prices have declined by 39% over the past decade for lower wind speed areas like Florida (averaging 13.4 miles per hour, or 6 meters per second). As technology improves, wind energy prices will continue to drop.



Source: Adapted from National Renewable Energy Lab 2013

Economic Development Opportunities

Florida is currently home to 17 wind energy-related manufacturing facilities serving the domestic and international wind industry markets. Developing land-based wind in the state could greatly add to local economic benefits and create more wind energy-related jobs.



Credit: George Skene, Orlando Sentinel
Siemens Wind Service Training Center in Orlando

Based on the Jobs and Economic Development Index model,* developed by the National Renewable Energy Laboratory (NREL), developing 1,000 MW worth of wind energy capacity in Florida could:

- Generate approximately 4,645 full-time equivalent jobs during construction periods with a total payroll of \$239 million
- Support approximately 138 ongoing operation jobs with a total annual payroll of \$7.2 million
- Produce approximately \$3 million in extra income for farmers/households or others who lease their land to developers

Wind energy is currently an untapped resource in Florida. Yet, with advanced turbine technology and lower costs, **wind energy development could give a boost to Florida's economy and provide homegrown and affordable energy.**

*Jobs and Economic Development Impact (JEDI) model, developed by the National Renewable Energy Laboratory (NREL). More information about the JEDI model can be found at: <http://1.usa.gov/XpVcWY>

Source:

American Wind Energy Association (April 10, 2014). "State Wind Energy Statistics: Florida." <http://bit.ly/1tFGASN>
Joseph Owen Roberts (September 2013). Presentation, Land-Based Wind Potential Changes in the Southeastern U.S, NREL
Gulf Power (May, 2015). "PSC approves Gulf Power's Wind Project." <http://bit.ly/1svpFmo>