

# Georgia Wind Energy Opportunities

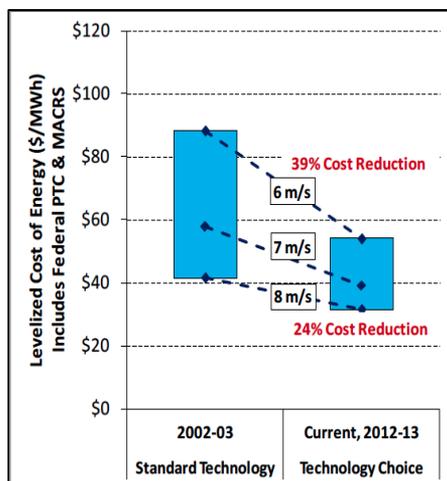
**Georgia** is already taking advantage of wind energy. In March 2013, Georgia Power announced a decision to purchase 250 megawatts (MW) of wind energy from Oklahoma—enough to power the equivalent of 50,000 homes a year! **Now Georgia has great potential for wind energy development within the state.** Advanced wind turbine technology and reduced costs have now made wind energy economically feasible throughout Georgia. A wind project in Georgia 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 hub height, Georgia contains a much greater area of land viable for development. **Approximately 2,500 MW of onshore wind potential currently exist in Georgia.**

## Reduced Costs

**Wind energy is now one of the least expensive sources of new power generation in the country.** After all, Georgia Power's decision to purchase wind energy from Oklahoma stemmed from the extremely low cost of energy for Georgia ratepayers.



Source: Adapted from National Renewable Energy Lab 2013

The chart in the lower corner shows that costs have declined by 39% over the past decade for lower wind speed areas like Georgia (averaging 13.4 miles per hour [6 meters per second]). As technology improves, wind energy prices will continue to drop.

## Economic Development Opportunities

**Georgia is currently home over 20 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: Casey Joyce/ NREL

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 Georgia could:

- Generate approximately 4,472 full-time equivalent jobs during construction periods with a total payroll of \$237 million
- Support approximately 130 ongoing operation jobs with a total annual payroll of \$7 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 Georgia. Yet, with advanced turbine technology and lower costs, **wind energy development could greatly boost Georgia's economy and provide homegrown and affordable energy.**

\*The model was the 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>

### Sources:

Williams, Dave (April 2013). "Georgia Power commits to wind energy," Atlanta Business Chronicle. <http://bit.ly/1o94bZH>  
Joseph Owen Roberts (September 2013). Presentation, Land-Based Wind Potential Changes in the Southeastern U.S., NREL