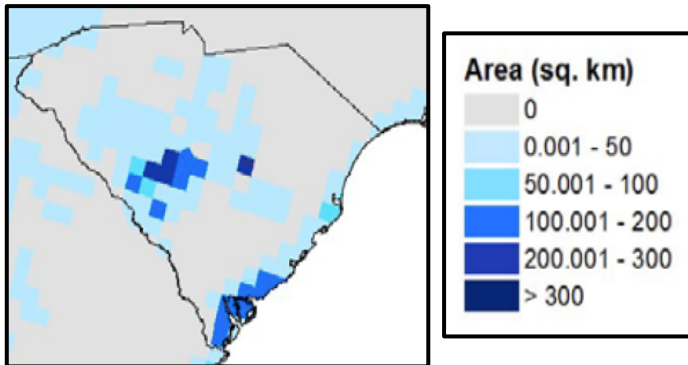


South Carolina Wind Energy Opportunities

South Carolina 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 South Carolina. Apex Clean Energy has recently proposed Ridge Spring Wind - a 200 megawatt wind farm that would generate enough electricity to power 41,000 homes. A wind project in South Carolina 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**



Adapted from National Renewable Energy Lab (2013)

As turbines increase in hub height, South Carolina contains a much greater area of land viable for development. The shading on the map above represents new available land for wind development with modern turbines with tower heights of 360 feet (110 meters) achieving a 35% capacity factor or greater. **Over 3,500 MW of onshore wind potential may currently exist in South Carolina.**

Reduced Costs

Wind energy is now one the least expensive sources of new power generation in the country. Costs have declined by 39% over the past decade for lower wind speed areas like South Carolina. As technology improves, wind energy costs will continue to drop.

Economic Development Opportunities

South Carolina is currently home to 18 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.



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 South Carolina could:

- Generate approximately 4,568 full-time equivalent jobs during construction periods with a total payroll of \$217 million
- Support approximately 136 ongoing operation jobs with a total annual payroll of \$6.5 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 South Carolina. Yet, with advanced turbine technology and lower costs, **wind energy development could greatly boost South Carolina'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>*

Sources:

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