

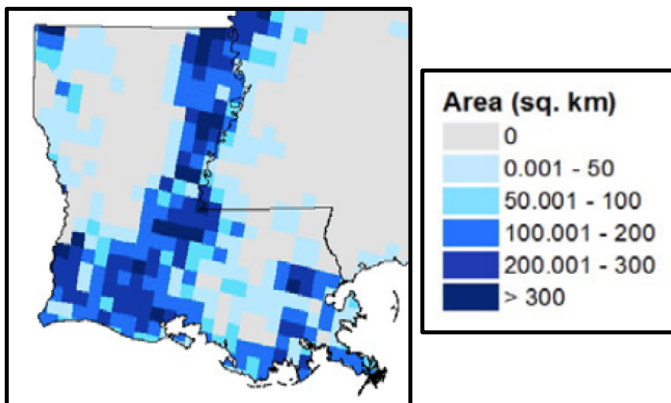
Louisiana Wind Energy Opportunities

Louisiana is already taking advantage of wind energy. Southwestern Electric Power Co. (SWEPCO), a utility serving the state, has signed 469 megawatts (MW) of long term wind energy power purchase agreements. More recently SWEPCO announced a request for proposal (RFP) for 200 MW of additional wind energy and seeks to add 1,200 MW of wind energy by the end of the planning period, beginning in 2017. Entergy Louisiana, another key utility in the state, recently announced an RFP for 200 MW of renewable energy.

Now Louisiana 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 Louisiana. A wind project in Louisiana 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, Louisiana contains a much greater area of land viable for development. The map above represents new areas for wind development with modern turbine towers reaching 360 feet (110 meters) height and with a 35% capacity factor or greater. **Louisiana may now have 25,000 MW of onshore wind potential.**

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 Louisiana (averaging 13.4 miles per hour [6 meters per second]). As technology improves, wind energy costs will continue to drop.

Economic Development Opportunities

Louisiana is currently home to 7 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: Dennis Schroeder / 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 Louisiana could:

- Generate approximately 4,143 full-time equivalent jobs during construction periods with a total payroll of \$229 million
- Support approximately 127 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 Louisiana. Yet, with advanced turbine technology and lower costs, **wind energy development could greatly boost Louisiana'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:
 "Renewable Energy for SWEPCO" AEP Southwestern Electric Power Company. <http://bit.ly/1sW7xPY>

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SWEPCO (September, 2015): "IRP Planning Report"

Entergy Louisiana (May, 2016): "2016 ELL Renewables RFP"