

Great Pathfinder Wind **YEAR IN REVIEW**

2023



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IN YEAR ONE, GREAT PATHFINDER WIND ...

Produced
**clean energy
to support** Meta's
operations in the region,
including its data center
campus approximately
40 miles away in
Altoona, Iowa



Displaced over
**486,000 metric
tons** of CO₂, the
equivalent displaced by
over 580,000 acres of
U.S. forests



Saw
400 workers
on-site during peak
construction



Created
7 full-time and
2 temporary jobs
for operations and
maintenance



BLADE-SIGNING SUMMARY



During construction, local residents joined staff and project partners of Apex Clean Energy at Great Pathfinder Wind for a turbine blade-signing ceremony.

Staff from Senator Chuck Grassley's office shared remarks on his behalf: "As the father of the Wind Energy Incentives Act of 1993, Senator Grassley sought to give this renewable energy source the ability to compete with traditional, finite sources ... wind energy is renewable and does not obligate the United States to rely on unstable foreign states. At 58 percent, Iowa has become the only state where over half of our in-state generated energy comes from wind."

A representative from Congressman Randy

Feenstra's office was also in attendance and noted, "Wind energy has had a positive impact on Iowa communities. From creating good-paying jobs to investing in community-centered initiatives, Great Pathfinder Wind prioritizes the well-being of employees, their families, and the entire community while simultaneously spurring economic development and fostering safe and secure neighborhoods."

Following the remarks, participants were invited to visit the Great Pathfinder Wind construction site, where they signed their names on one of the project's wind turbine blades.

RIBBON-CUTTING SUMMARY

Residents, local groups, county officials, and representatives from the offices of Senator Chuck Grassley and Congressman Randy Feenstra joined Apex Clean Energy at Great Pathfinder Wind for a ribbon-cutting ceremony on June 21 in celebration of the new operations and maintenance building in Stratford, Iowa.

More than \$57 million in state and local tax dollars have been generated by wind projects in the Hawkeye State, and more than \$68 million annually goes to Iowa residents in the form of land lease payments. In recognition of this milestone for Boone and Hamilton Counties, guests heard from Apex leaders as well as representatives from Senator Grassley's office and organizations that received Great Pathfinder Wind grants.

"Iowa has great people, great workers, and now, Great Pathfinder—a 225-megawatt wind project that will provide more than \$73 million



in local tax revenue over its lifetime and enough energy for the equivalent of 82,000 U.S. homes," said Ken Young, Apex's CEO.

"With more than 60 percent of electricity generated in Iowa coming from wind, our state continues to demonstrate the many benefits of wind energy. Projects like this one will ensure that Iowa continues to lead the way in renewable, homegrown energy sources while supporting the local economy. Congratulations to all those who've worked hard to bring the Great Pathfinder Wind project online," Senator Grassley said.

AIRCRAFT DETECTION LIGHTING SYSTEM (ADLS)



The Federal Aviation Administration (FAA) requires wind turbines to be equipped with red aviation obstruction lighting that can blink on and off to alert incoming aircraft of the presence of an obstruction.

At Great Pathfinder Wind, crews are installing a new system that will minimize light disturbance by only lighting up when an aircraft is within six nautical miles of a turbine rather than consistently blinking. The team is excited to share that the new system will be fully installed midyear.

What is an Aircraft Detection Lighting System?

An Aircraft Detection Lighting System (ADLS) is a sensor-based system that uses radar to detect aircraft as they approach an

obstruction or group of obstructions; these sensors automatically activate the appropriate obstruction lights until they are no longer needed by the aircraft. This technology reduces the impact of nighttime lighting on nearby communities by preventing lights from turning on unless an aircraft is approaching the facility.

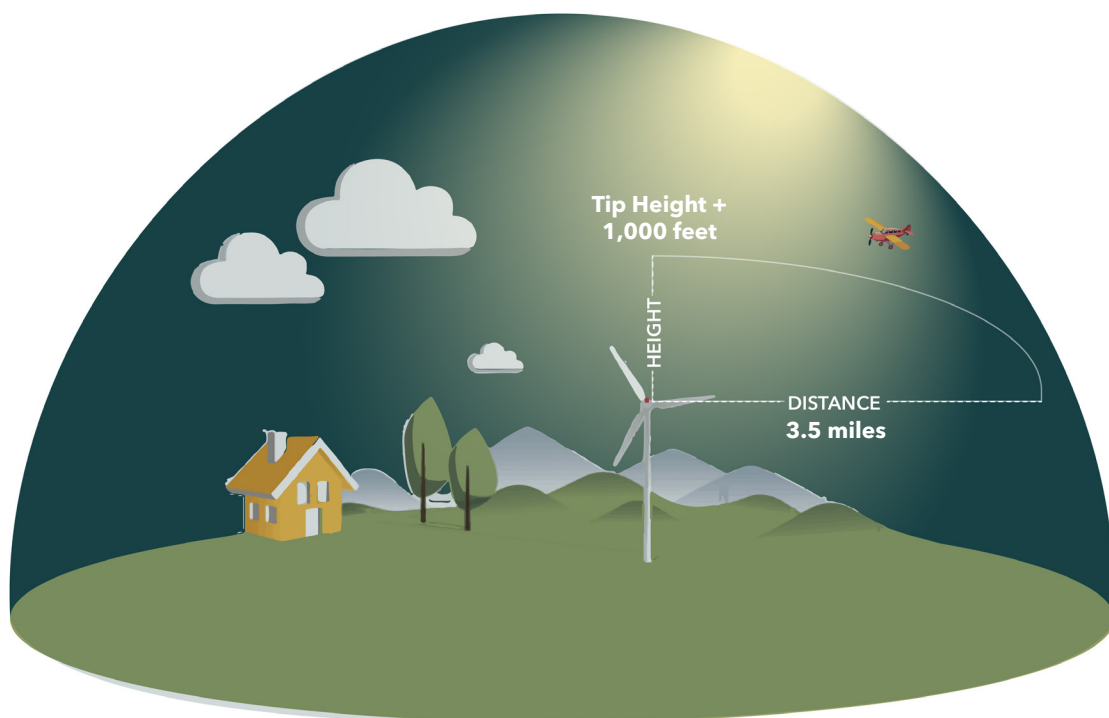


AIRCRAFT DETECTION LIGHTING SYSTEM (ADLS)

How does ADLS technology work?

In simple terms, when aircraft approach the project area, the ADLS automatically turns the lights on. As soon as the aircraft moves away, the lights turn off again. ADLS technology is designed to detect any aircraft that approach the area around the wind project—aircraft as small as one square meter. Lighting must be activated when aircraft approach the lighting area. This area is required to extend horizontally approximately 3.5 miles from the perimeter of the wind farm.

The lighting area also extends vertically to 1,000 feet above the highest point of an obstruction (i.e., for a wind turbine with a total height of 500 feet, coverage must extend to 1,500 feet). Current systems can detect aircraft in all directions and up to 16 miles away, long before they enter the required lighting area. Once an aircraft is detected, lights are activated until the aircraft exits the lighting area or for a pre-set amount of time, according to FAA guidance.



GREAT PATHFINDER WIND COMMUNITY GRANT

Apex Clean Energy is pleased to support educators, entrepreneurs, and changemakers in the communities of Boone and Hamilton Counties. One small way we can do this is by giving back through the Great Pathfinder Wind Community Grant Program.

Past funds awarded through the Community Grant Program have supported Stratford Rescue's purchase of a new ambulance; the Stanhope Development Group in teaching Hamilton County students about the growth of technology, including wind energy; and the Bridge Home to help combat homelessness in Boone County by working to provide resources to struggling households.



The Community Grant Program will continue to help fund local projects throughout Great Pathfinder's operational life. Grants prioritize projects advancing healthy communities, economic development, environmental

sustainability, or education.

Nonprofit groups in Boone and Hamilton Counties are encouraged to apply on the Great Pathfinder Wind website:

www.greatpathfinderwind.com/grant.



GREAT PATHFINDER WIND CONSERVATION GRANT

The Apex Clean Energy Conservation Grant Program is the first of its kind within the clean energy industry. For every commercialized Apex project, the Conservation Grant Program contributes a sum of money proportional to the size of the project (approximately \$1,000/MW or more) to support local or regional wildlife conservation, reforestation and flora restoration, or other environmental remediation investments in or near the project communities.

The Great Pathfinder Wind Conservation Grant Program awarded funds to the Nature Conservancy (\$170,000) and Practical Farmers of Iowa (\$55,000).

Alongside the U.S. Fish and Wildlife Service, the organizations are restoring a total of 18 degraded oxbow wetlands across the state, with a primary focus within the Boone River Watershed, one of the last remaining homes of the federally and state-endangered Topeka shiner.

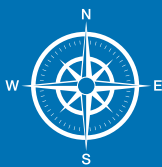






We look forward to continuing
the story of Great Pathfinder Wind
with you in the year ahead!





GREAT PATHFINDER
WIND

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