

Fenner Project Turbine Trivia.

- ✦ Manufactured by GE Wind Energy in California, the Fenner Project's 1.5 MW turbines are the largest wind turbines manufactured in the United States.
- ✦ The Fenner Project is expected to produce about 89,000,000 kilowatt hours each year – enough clean electricity to serve about 10,000 average American homes.
- ✦ Turbine Height: 328 feet – taller than a 32 story building!
- ✦ Over 6,000 tons of concrete was used to complete the Fenner Project wind turbine foundations (more than 300 truckloads) – enough concrete to make a 3'x3" sidewalk approximately 20.5 miles long.
- ✦ The Project's wind turbines make one revolution every 3 to 5.5 seconds.
- ✦ Each Fenner wind turbine has a rotor diameter of 231 feet – 10% longer than the wingspan of a Boeing 747-400 jumbo jet.

How does it work?

The rotor blades of a wind turbine work somewhat like the wings of an airplane. As air passes over the specially-designed blades "lift" is created. This lift, in turn, sends the blades spinning in a circular motion, which drives an electric generator. When winds reach about 8 miles per hour, the rotor is engaged and the wind turbine begins producing power.



Melissa, 6th grade

Original artwork generously donated by students of the Cazenovia Central, Canastota Central and Morrisville Eaton Central School Districts.



Wind Energy.

Wind power is a reality today. Over the last five years wind power was the world's fastest growing energy source, with an annual average growth rate of over 31%. With continued government encouragement to accelerate its development, this increasingly competitive source of energy could provide at least six percent of the nation's electricity by 2020 and revitalize farms and rural communities - without consuming any natural resource or emitting any pollution or greenhouse gases. Today, Denmark, Germany, and some regions of Spain now have between 10 and 20 percent of their electricity needs being served by wind energy. By contrast, wind power supplies only .05% of America's current electricity needs. America's wind resource is vast, however, and could contribute much more clean, green electricity.



Julie, 4th grade

For more information, contact:
Madison County
(315) 366-2201

Website: www.madisoncounty.org
or

Madison County Tourism, Inc.
(315) 684-7320 or (800) 684-7320
Website: www.madisontourism.com

For more information about the Fenner Wind Power Facility,
visit www.fennerwind.com



The Fenner Wind Power Facility

A self-guided tour of the
Fenner Wind Power Facility



Area Attractions

New York's largest wind power project – right here in Madison County!

Humans have used the power of the wind for thousands of years – wind powered boats sailed the waters and mills ground grain into flour and pumped water from the ground. Today, here in Madison County, the wind powers the largest wind farm in New York. The 30 megawatt Fenner Wind Power Facility, located in the Town of Fenner, was developed to meet New York's demand for clean, green electricity. Completed in late 2001, the project comprises 20 GE Wind Energy 1.5 MW wind turbines, the largest manufactured in America. Owned by Canastota Windpower, LLC, a subsidiary of CHI Energy, Inc., and co-developed with Atlantic Renewable Energy Corp., the project was funded with the assistance of the New York State Energy Research and Development Authority (NYSERDA) under NYSERDA's competitive wind power solicitation.

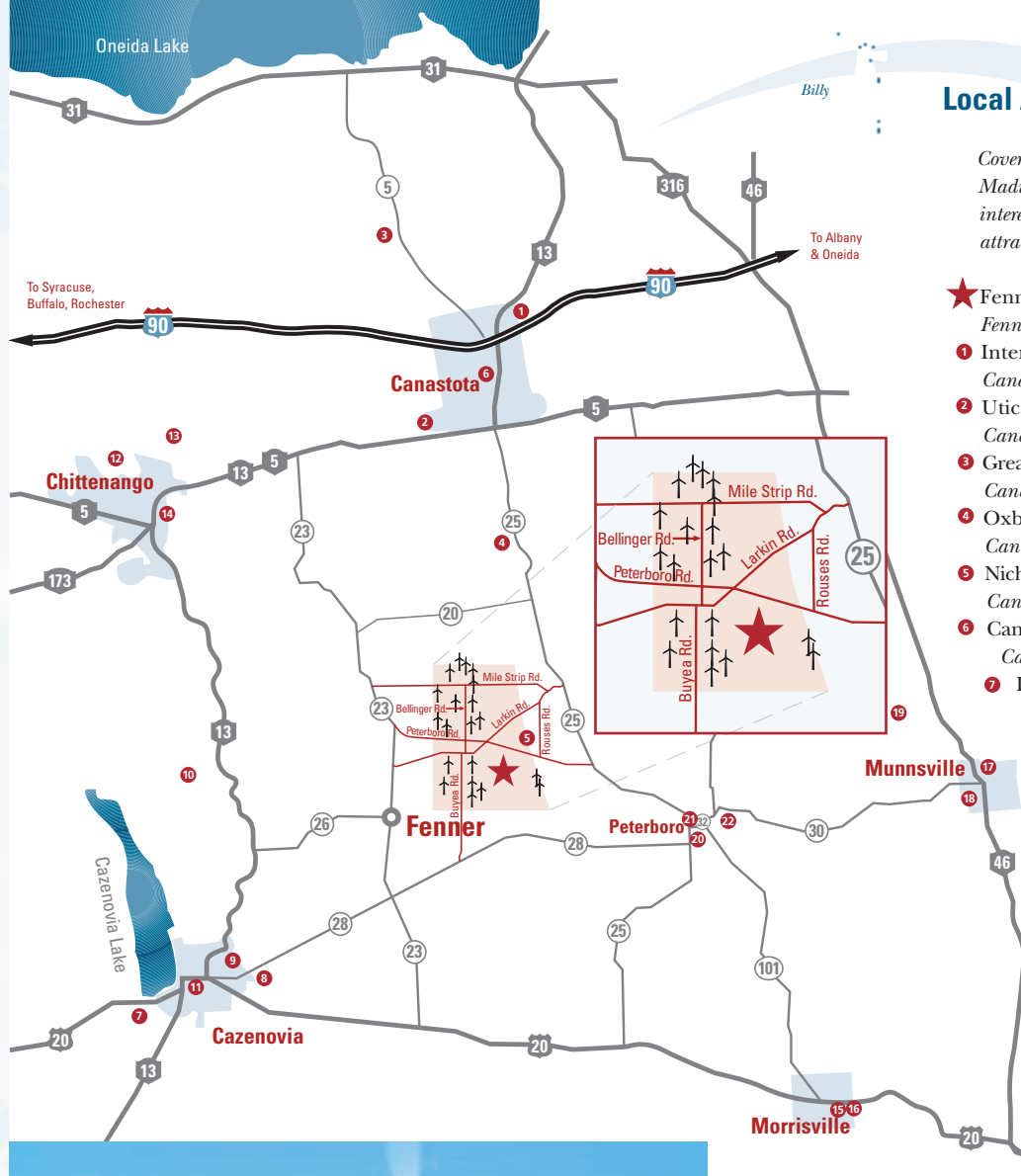
Constructed by M.A. Mortenson Company, more than six miles of underground 24.9 kV power collection system connect the wind turbines to a new substation where the voltage is stepped up to 115 kV for connection to an adjacent Niagara Mohawk transmission line. The project is interconnected with the NYISO through a newly built substation. The Project's green electricity is marketed by Community Energy to environmentally conscious businesses and individuals throughout the State of New York, including universities like SUNY Buffalo, government entities like the U.S. General Services Administration., and private companies like Penguin Putnam to name a few.

Power up with the wind!

Throughout the East Coast, the Appalachian Mountains are the most prominent topographical feature – stretching from Georgia through Madison County into Maine. Winds average over 17 miles per hour here (at wind turbine hub height), more than enough for commercial wind power generation. The Fenner Wind Power Project is located on rolling farmland leased from 14 different landowners. And, since the wind project utilizes less than 1% of the total 1,536 acre project area, the wind is able to be harvested while the land

continues to be used for local farming and ranching operations.

Fueled by New York's winds, the Fenner Wind Power Project generates new income for local farmers, boosts the local tax base, attracts tourists, and delivers clean and affordable electricity to East Coast consumers.



Tyler, 6th grade

Local Attractions/Sites.

Covering more than 600 square miles, Madison County offers an abundance of interesting, scenic, and educational attractions. Here are just a few...

- ★ Fenner Wind Power Project
Fenner, 800 684-7320
- 1 International Boxing Hall of Fame
Canastota, 315 697-7095
- 2 Utica School of Commerce
Canastota, 315 697-8200
- 3 Great Swamp Conservancy
Canastota, 315 697-2950
- 4 Oxbow Falls Park
Canastota, 315 366-2376
- 5 Nichols Pond County Park
Canastota, 315 366-2376
- 6 Canal Town Museum
Canastota, 315 697-3451
- 7 Lorenzo State Historic Site
Cazenovia, 315 655-3200
- 8 Stone Quarry Hill Art Park
Cazenovia, 315 655-3196
- 9 Lehigh Valley Railroad Depot
Cazenovia, 315 655-2224
- 10 Chittenango Falls State Park
Cazenovia, 315 655-9620
- 11 Cazenovia College
Cazenovia, 315 655-7208
- 12 Chittenango Landing
Canal Boat Museum, 315 687-3801
- 13 Old Erie Canal State Park
Chittenango, 315 687-7821
- 14 L Frank Baum Museum
Chittenango, 315 687-3423
- 15 Wildlife Museum at SUNY
Morrisville, 315 684-6390
- 16 Madison Hall
Morrisville, 315 684-9505
- 17 Munns Railroad Station
Munnsville, 315 495-6721
- 18 Fryer Memorial Museum
Munnsville, 315 495-6148 or 315 495-5395
- 19 Stockbridge Falls
Munnsville, 800 684-7320
- 20 Gerrit Smith Estate
Peterboro, 315 684-9022
- 21 Land Office
Peterboro, 315 684-9022
- 22 Peterboro Area Museum
Peterboro, 315 684-9022

