

Wind Turbine at Niagara Aquaculture

Ransomville, NY 14131 | NPS 100B-24 | 100 kW | Installed by Buffalo Renewables, Inc.



BUFFALO
RENEWABLES INC.

Photo Credit: Thomas Fleckenstein, owner

Farmer **Thomas Fleckenstein** installed a 100 kW wind turbine and a 12 kW tracker-mounted solar system to power his aquaponic facility with a closed loop fish growing facility and greenhouse located on-site in December 2018. The hybrid wind and solar system offsets 100% of the farm's energy needs making the farm profitable given its high energy costs. Excess electricity generated is then remote net-metered to five other offsite meters.

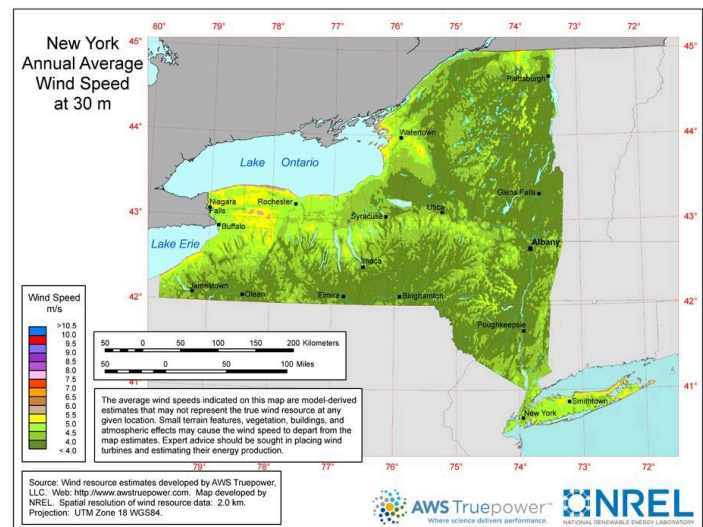
"I am extremely happy with the Northern 100," noted farmer Thom Fleckenstein. "It has been performing flawlessly for years. It is very easy to maintain with access to the nacelle from inside the tower."

Key Findings

- Produces ~ 103,529 kWh of energy annually
- Meets 100% of energy needs
- 5-year payback period for solar & wind system

Impact

- Ensures energy independence
- Demonstrates feasibility of wind energy for agricultural applications



More than 41,000 New York properties have wind resources suitable for distributed wind with a combined technical potential of 543 MW, per NREL

Want further information? Please see: www.AgWindEnergy.org or www.DistributedWind.org