

Small Wind for Federal and Military Applications

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Bergey Windpower

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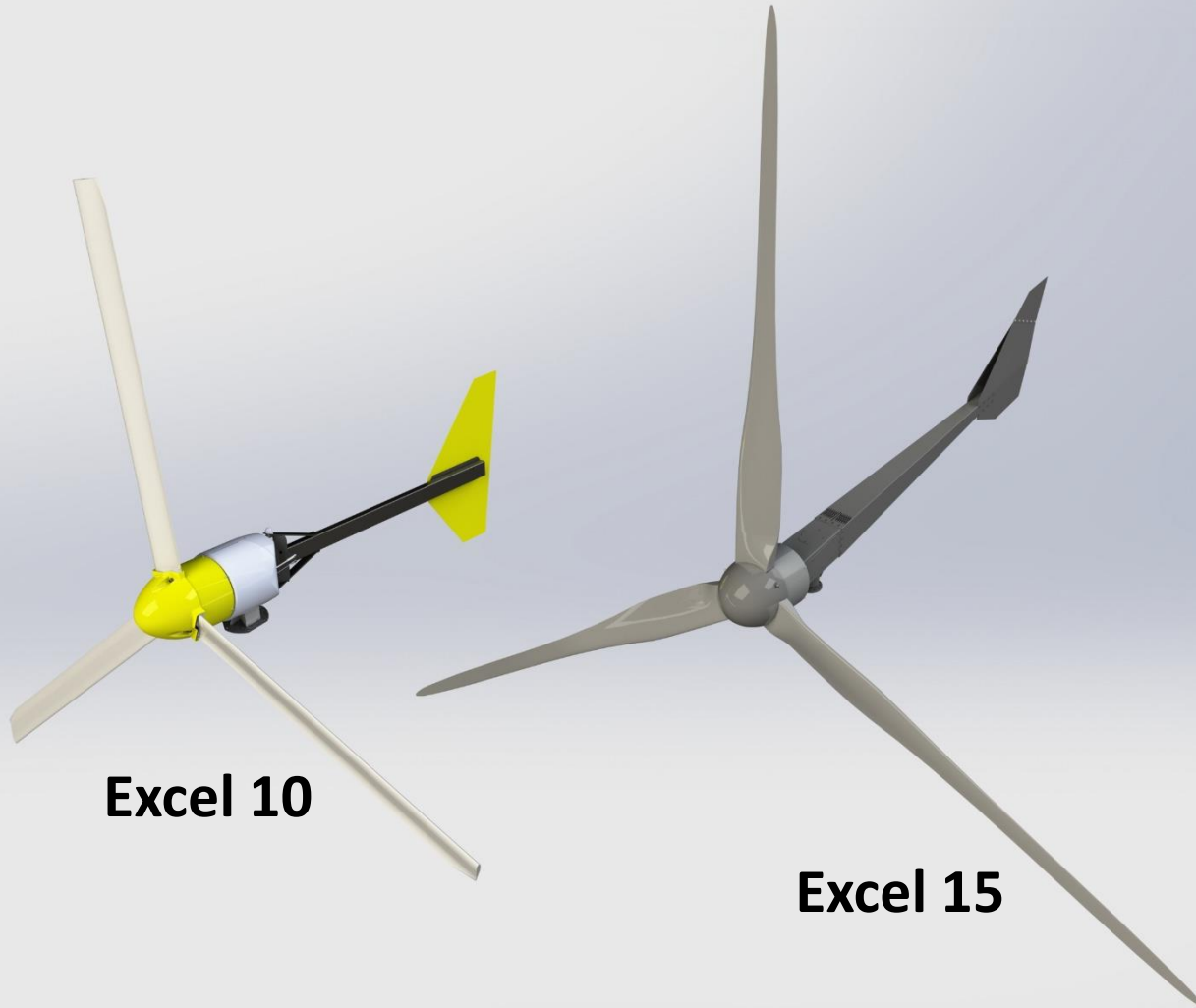
What's your Cleantech Goal?

- ❖ Net-Zero Buildings?
- ❖ Clean Grid by 2035?
- ❖ GHG Reduction?
- ❖ Resiliency?
- ❖ Beneficial Electrification?
- ❖ Decarbonization?
- ❖ Save money



Bergey has the advanced technology and experience to help

Next-Gen Turbine: Excel 15



Excel 10

Excel 15

R&D supported by US-DOE

Excel 15 - Advanced Technology



- Highest-efficiency
- 25,000 – 60,000 kWh/year
- Very Quiet
- Bird Friendly
- Certified
- Electronics upgradable to microgrid functionality
- 2 Moving Parts (Rotor & Yaw)
- No maintenance; 5 Year Inspection Interval; 30 – 75 Year Predicted Operational Life

Excel 15 – Breakthrough Economics

	Excel 10	Excel 15	Change
Rotor Diameter	7m (23 ft)	9.6m (31.5 ft)	+ 37%
Rotor Area	38.5m ²	72.4m ²	+ 88%
Ref. Power (11 m/s)	8.9 kW	15.6 kW	+ 75%
Max. Cp	0.30	0.40	+ 33%
Max. RPM	450	140	- 69%
AEO at 6 m/s (NREL LCOE)	18,825 kWh	44,950 kWh	+ 139%
MSRP, with inverter	\$31,770	\$37,500	+ 18%
CAPEX, 30m SSL Tower	\$77,000 (\$6.13/Wp)	\$82,500 (\$3.30/Wp)	+ 7%
LCOE*, 30m SSL Tower	21.4¢	9.5¢	- 56%

* LCOE does not include tax credits, depreciation and other incentives

Excel 15 – Including Advanced Installation

	Excel 10	Excel 15	Change
MSRP, with inverter	\$31,770	\$37,500	+ 18%
CAPEX, 30m SSL Tower	\$77,000 (\$6.13/Wp)	\$67,500 (\$2.70/Wp)	- 12%
LCOE*, 30m SSL Tower	21.4¢	7.8¢	- 64%

Result: LCOE for Small Scale Wind Reduced by 64%!

* LCOE does not include tax credits, depreciation and other incentives

Levelized Cost of Energy (LCOE)



Bergey Windpower Co.

The World Leader in Small Wind

- ❖ Small wind turbines, up to 15 kW: On-grid and off-grid for distributed applications
- ❖ Turbines have 2-4 moving parts, require no scheduled maintenance, and have demonstrated 20+ years with 100% availability and zero O&M costs
- ❖ 40 years, 9,800 installations, covering all 50 States and over 100 countries
- ❖ Over 200 dealers
- ❖ Free performance and economics analyses, worldwide



BWC Federal Projects

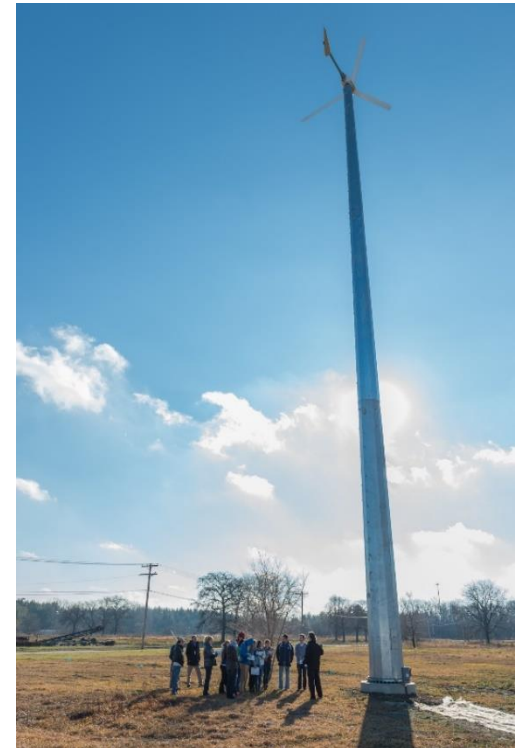


FWS
Lake
Benton
NWR,
MT

FAA
Lake
Chandalar,
AK



US-DOE
Argonne
Nat'l Lab,
IL



NWS
Wilmington,
OH

Federal Projects



Lockheed-Martin
Dallas, TX



U.S. Air Force
Murphy's
Dome, AK



**U.S. Coast
Guard**
Concord,
CA

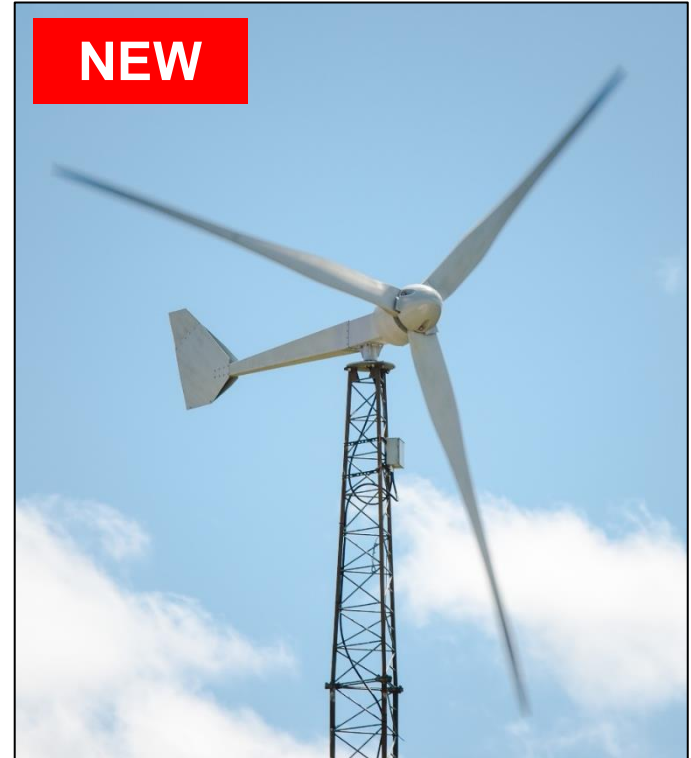


U.S. Navy
Atlantic
Ocean, SC

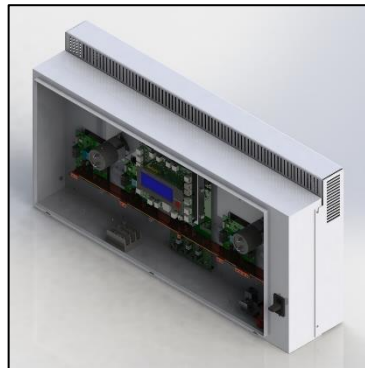
Bergey WindPower Products



10 kW
23 ft. Dia.



15 kW
31.6 ft Dia.



**Inverters
& 48 VDC Battery
Charger**

Many Standard Tower Options 60 – 160 ft.



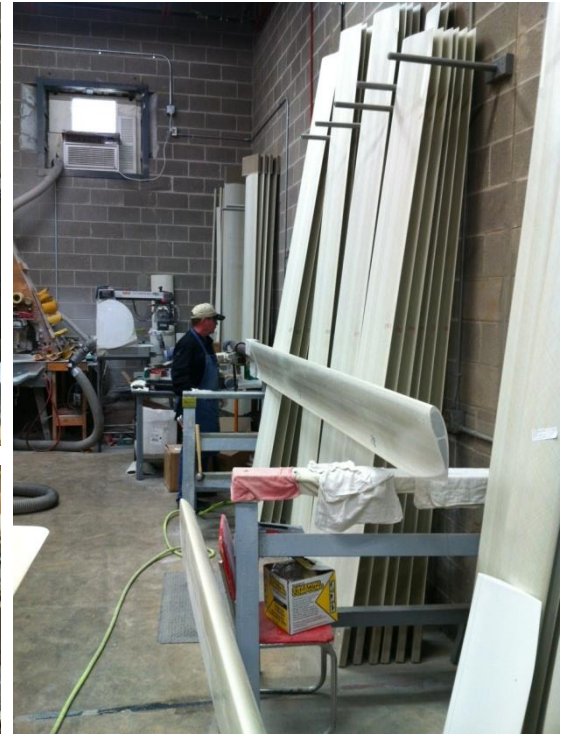
Guyed Lattice

Self-Supporting
Lattice



Monopole

Made in America



Domestic Content: >90%



Ingredients for Project Success

- ❖ Wind resource of 5 m/s (11.2 mph)+ at top of tower (we have the maps!)
- ❖ High electricity costs
- ❖ Sufficient space (No rooftop siting!)
- ❖ Certified wind turbine(s), like the Excel 15
- ❖ Tower at least 80 ft.
- ❖ Experienced, stable, and “local” installer/developer

Next Steps are Easy

Give us a call or email and let Bergey Windpower apply 40 years of experience to your building, facility, mission, program or goal. If we're not a good fit, we'll tell you.

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