



Small Wind Turbine at Lindley Estate

Adelanto, CA 92371 | Bergey Excel 10 | 10 kW turbine, 45 foot tower | Installed by Pacific Solar & Wind LLC



Photo Credit: Chelsea Lindley, Owner

The **Lindley Estate** in Adelanto, California, has adopted a hybrid energy solution, integrating a Bergey Windpower 10 kW wind



turbine together with their solar system in June 2024. The wind turbine generates power during overcast days and windy evenings, increasing energy independence and lowering overall fuel consumption.

By addressing the limitations of solar-only systems during low sunlight periods, the wind turbine's 12,000 kWh annual output offsets half of the estate's energy needs. Avoiding a costly utility line extension further enhances the project's economic value.

"Wind and solar working together work better than either one of them alone. I like the way it looks and sounds," noted hybrid system owner Chelsea Lindley.

Key Findings

- Produces ~ 12,000 kWh of electricity annually (50% of the site's energy needs)
- Generates 99% of site's energy needs from wind+solar
- 3-year estimated payback period
- 15-year-old turbine retains value with an expected additional 20+ year lifespan

Impact

- Showcases off-grid energy for remote land development
- Saves 1,000s of dollars in utility line costs with a 100% off-grid system
- Demonstrates innovative energy independence solutions

California - Annual Average Wind Speed at 30 m

124* 122* 120* 116* 116* 114*

Source: Wind resource estimates developed by ANS Truspower, LLC. Web: http://www.wasturepower.com. Map developed by NPS Truspower. NPS Truspowe

More than 230,000 California properties have wind resources suitable for distributed wind, with a combined technical potential of 3.8 GW, per NREL

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