



Engineering Led Sub MW Wind platforms:

Powering Distributed Generation and Repowering Opportunities

Distributed Wind 2026: Charging Ahead

23-25 February 2026

Residence Inn by Marriott Arlington Capital View
2850 South Potomac Avenue Arlington, VA 22202



Who We Are



Pioneer Wincon is a medium-scale wind specialist with full design ownership of 250 kW and 750 kW platforms — purpose-built for distributed and grid-connected applications.

25+

Years of Disciplined
Engineering

1,000+

Turbines Installed

500+

Turbines Under O&M

IEC 61400 ed3 Certified. Utility-Grade Sub-MW Focus.

Wind Turbine Portfolio

Three proven platforms — 250 kW to 750 kW — engineered for utility and commercial energy projects across diverse wind regimes in India and beyond.

P 750/57

750 kW pitch-controlled

P 750/49

750 kW stall-regulated

P 250/29.6

250 kW compact turbine





Flagship Platform

P57 — Lowest LCOE in Sub MW Class



Intelligent Drive Train

- Full power converter with variable speed & pitch

Adaptive Aerodynamics

- Adaptive aerodynamics for turbulent & light wind

Site Flexibility

- Hub heights up to 110m for site-specific wind shear
- Maximizes grid compliance & energy capture

Achieved

37% PLF at 7.4 m/s (90m hub height). IEC Class III standard: 7.5 m/s.
110m hub height available for further optimization.

60Hz Design, Tubular Tower Ready

Engineered to Adapt Across Markets



Structural Adaptation

- IEC wind class upgrades
- Custom towers optimized for site-specific loads

Grid Compliance

- 50/60 Hz compatibility
- Grid-code alignment
- Weak-grid capable for remote stability

Environmental Resilience

- Cold weather packages for icing
- Low-temperature operation worldwide



Wind–Solar Hybrid Power Plant

Co-located Generation | Unified Grid Connectivity



THE CONCEPT

Co-locating Wind Turbine Generators (WTG) and Solar PV plants to operate as a single power entity with unified grid connectivity.



NATURAL SYNERGY

Wind and solar generation profiles are inherently complementary with minimal overlap, ensuring a more consistent, year-round power supply.

RECORD-BREAKING PLF / CUF

Drives a drastically higher Capacity Utilization Factor — up to 54% recorded with the P57 750 WTG & Solar combo.

54%

CUF Achieved

10% CAPEX SAVINGS

Common infrastructure such as step-up transformers, HV switchgear, and transmission cables significantly reduces Balance of System (BoS) and Balance of Plant (BoP) costs.

~10%

BoP + BoS Savings



REDUCED OPEX

A higher Plant Load Factor (PLF) offsets the burden of fixed grid charges, as these costs are linked to evacuation capacity rather than actual generation.

Repowering Aging Fleets



The Approach

Replace aging 225–1,000 kW fleets

Reuse BOS infrastructure (foundations, transformers, grid)

Optimize for grid-constrained & dense wind corridors

Higher hub heights = higher wind speed, lower turbulence

Pragashree Case Study

Specification	Before	After
Brand	600kW Tacke	Pioneer P57 @ 90m Hub Hight
Plant Load Factor	10-18%	37%
Capital Cost		INR 19/kWh / 0.21\$/kWh Typical 2+ MW: 0.26\$/kWh (23%↑)
O&M Cost	X	X/2



Development

Engineering

Wind resource assessment, Micro-siting, yield modeling, site suitability



Foundation design, electrical specs, grid compliance

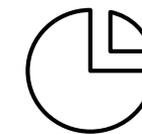
Project Certainty Beyond Equipment Supply

O&M planning, performance monitoring, lifecycle optimization



Operations

Procurement
Construction



Technical specifications, supplier coordination, installation oversight, commissioning

Why We Are Here



**Connect with US
distributed wind
developers, project
originators, and EPCs**



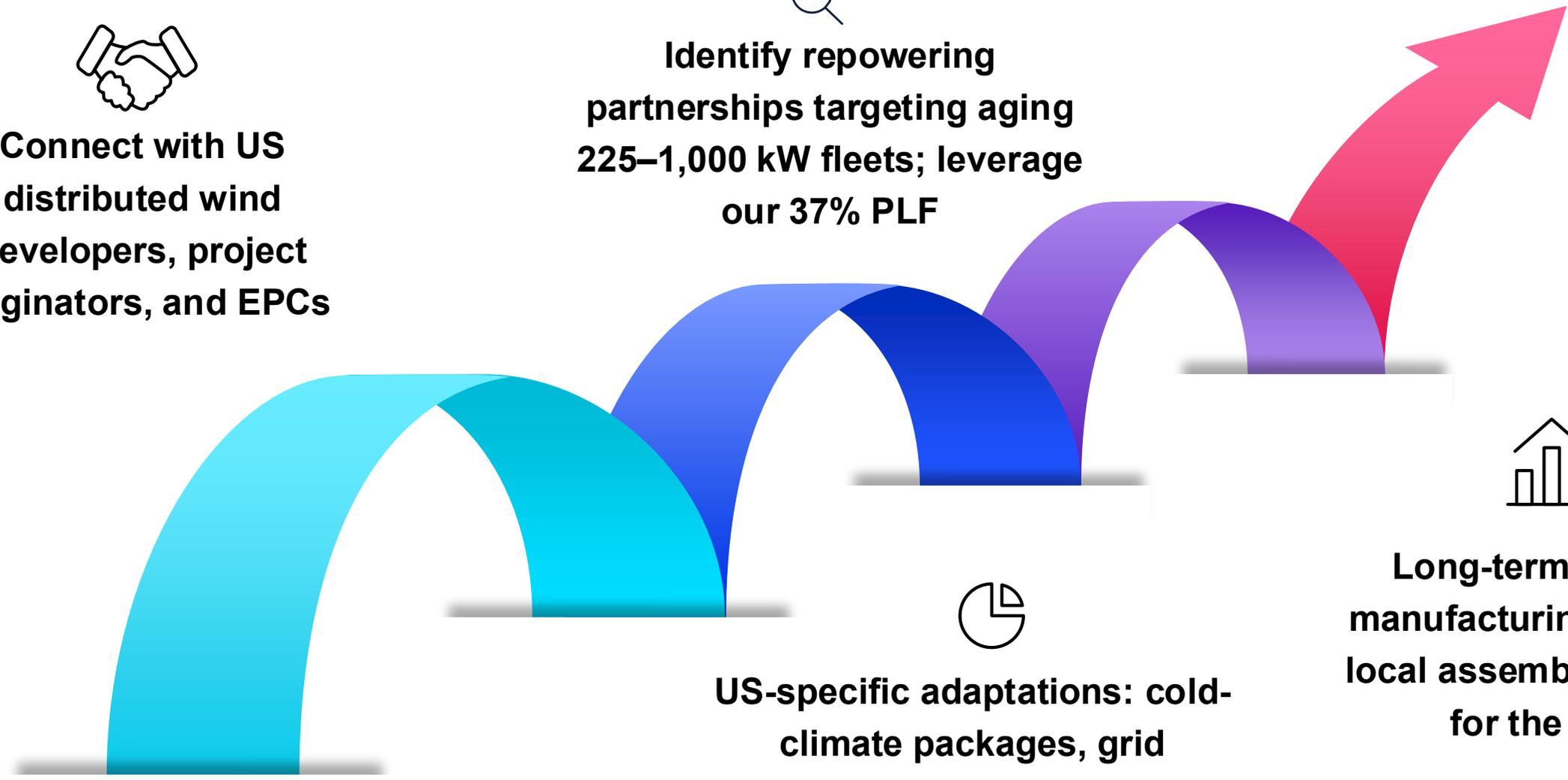
**Identify repowering
partnerships targeting aging
225–1,000 kW fleets; leverage
our 37% PLF**



**US-specific adaptations: cold-
climate packages, grid
compliance (FERC), US
certification pathways**



**Long-term technology &
manufacturing Collaboration,
local assembly, co-innovation
for the US market**



Proven, Experienced & Committed.



Proven Technology

37%

- 250 kW & 750 kW platforms,
- 37% PLF achieved & 98% availability
- Full design ownership

Deep Experience

25+

- 25+ years engineering
- 1,000+ turbines installed, 500+ turbines under O&M
- Repowering & hybrid know-how

Our Commitment

100%

- Long-term perspective
- Open to collaboration
- Here to listen and learn

Pioneer Wincon Energy Systems Pvt Ltd.



Let's Build Together !

**Engineering-led sub-MW wind since 1996.
Ready for the US market.**

www.pioneerwincon.com

