



**Velocity**  
Energy Aggregators

CIN: U35106TZ2026PTC040718

CORPORATE PROFILE &  
CAPABILITY STATEMENT

# Powering India's **Clean Energy** Infrastructure



Solar EPC



Wind Energy



Grid Infrastructure

End-to-end renewable energy  
infrastructure solutions across India.

**VELOCITY ENERGY AGGREGATORS PRIVATE LIMITED**

Coimbatore South, Tamil Nadu - 641016, India • Serving Pan-India

[www.velocity.in](http://www.velocity.in)  
[projects@velocity.in](mailto:projects@velocity.in)

LEADERSHIP PERSPECTIVE & VISION

Corporate Overview & Renewable Vision

Accelerating utility clean energy development through integrated engineering, rapid site mobilization, and uncompromised safety standards.

VELOCITY ENERGY AGGREGATORS PRIVATE LIMITED is an incorporated clean energy engineering contractor headquartered in Coimbatore, Tamil Nadu. We specialize in utility-scale balance-of-plant (BOP) engineering, civil foundations, structural installation, electrical evacuation, and long-term asset maintenance.

Our engineering execution delivers large-scale solar power plants and specialized wind turbine infrastructure. By combining mechanized equipment fleets with strict statutory compliance, Velocity Energy ensures zero schedule slippage and highest generation yields.

"Our commitment is to make clean energy execution dependable, fast, and bankable. By managing every critical milestone from site survey to final grid synchronization and lifetime maintenance, we empower developers and IPPs to scale fearlessly."



STATUTORY REGISTRY & CREDENTIALS

|                    |                                         |
|--------------------|-----------------------------------------|
| Entity Type:       | Private Limited Company                 |
| CIN:               | U35106TZ2026PTC040718                   |
| Reg. Authority:    | Ministry of Corporate Affairs, CRC      |
| Head Office:       | Coimbatore South, Tamil Nadu            |
| Official Email:    | projects@velocity.in                    |
| Core Domains:      | Solar EPC, Wind BOP & O&M Maintenance   |
| IT & Tech Partner: | Topnotch Services (topnotchservices.in) |

CORE EXECUTION CAPABILITIES

Solar Plant EPC

Mechanized GPS pile ramming, MMS structural alignment, AC/DC cabling, and pooling substations.

Wind Turbine BOP

Massive concrete WTG raft foundations, 250T crane hardstands, and internal 33kV DP yards.

Lifecycle O&M

Preventive mechanical servicing, drone blade/thermal audits, transformer care & 24/7 breakdown support.

55+ MW

DELIVERED TRACK RECORD

Multi-state utility project footprint

100%

CEIG COMPLIANCE

Statutory grid approvals & synchronization

0

LOST-TIME INCIDENTS

Strict zero-harm site HSE culture

## UTILITY SOLAR CAPABILITIES

# MW-Scale Solar Civil & Structural Engineering

Comprehensive site infrastructure, precision grading, hydraulic piling, and structural mounting solutions tailored for maximum long-term power generation yield.



### Topography, Earthworks & Civil Infrastructure

- **Drone LiDAR Surveys & Site Contouring:** High-resolution 3D contour mapping, grading, and mass earthwork across complex terrain types.
- **Inverter Stations & Control Buildings:** Pre-fab and RCC inverter stations, step-up transformer plinths, and main control room (MCR) construction.
- **Civil Drainage & Perimeter Security:** Heavy-duty internal gravel access roads, stormwater drainage, and perimeter solar security fencing.



### Mechanized Pile Ramming & MMS Structural Assembly

- **GPS Automated Pile Driving:** High-speed hydraulic pile rammers, rock augering, and driven steel posts with sub-millimeter verticality.
- **Tracker & Fixed-Tilt MMS Assembly:** Fixed-tilt (portrait/landscape) and single-axis tracker MMS structural erection with calibrated torque audits.
- **Module Handling & Fastening:** Safe mechanical handling and clamp fastening of N-TOPCon, Mono-PERC, and Bifacial PV modules.



### Geotechnical Testing & High-Tolerance Quality Assurance

Every solar foundation undergoes geotechnical pull-out, lateral load, and compression testing to withstand wind loads up to 180 km/h. Automated piling rigs ensure sub-millimeter post verticality, eliminating mechanical stress on module frames and guaranteeing decades of structural durability.

## END-TO-END SOLAR CIVIL WORKFLOW

### STAGE 01

#### Survey & Yield

LiDAR topography, pull-out tests, and PVsyst layout simulations.

### STAGE 02

#### Civil & MMS

Site benching, drainage, precision hydraulic piling, and MMS torque tightening.

### STAGE 03

#### Module Mounting

Module clamping, string formation, and visual inspection for zero micro-cracks.

### STAGE 04

#### Testing & Handover

String open-circuit voltage tests, I-V curve tracing, and structural sign-off.

## UTILITY SOLAR CAPABILITIES

## Solar Electrical Erection & Grid Evacuation

Flawless AC/DC electrical balance-of-plant execution, central/string inverter integration, pooling substations, and statutory CEIG synchronization.



### AC/DC Electrical Erection & Inverter Yards

- **1500V DC String Cabling:** UV-resistant solar cable trenching, conduit routing, combiner box (SCB/SMB) terminations, and calibrated MC4 crimping.
- **Inverter Skids & AC Combiners:** Modular central and string inverter stations, skid mounting, LT/HT switchgear panels, and power transformer tie-ins.
- **Earthing & Lightning Grid:** Comprehensive GI/copper earthing networks, deep chemical earthing pits, and ESE lightning protection arresters.



### Pooling Substations & 33kV-230kV Evacuation

- **33kV to 230kV Switchyards:** Circuit breakers, isolators, current/potential transformers, and protective numerical relays.
- **Battery Energy Storage (BESS) Readiness:** Conduit routing, bidirectional inverter interface plinths, and hybrid storage integration.
- **Statutory CEIG Synchronizations:** Complete DISCOM liaison, pre-commissioning testing, and commercial operation (COD) approval.



### Plant SCADA Telemetry & Remote Monitoring Systems

Turnkey installation of fiber-optic communication rings, weather monitoring stations (pyranometers, module temperature sensors, anemometers), and remote SCADA interfaces providing real-time string-level generation analytics directly to the state load dispatch center (SLDC).

### \* Turnkey Solar Plant Reliability Standard

From raw terrain grading to final CEIG grid energization, Velocity Energy manages every mechanical and electrical milestone under strict ISO-grade quality protocols for maximum plant uptime and decades of trouble-free generation.

**WIND ENERGY INFRASTRUCTURE**

## Specialized Wind Mill & WTG Balance of Plant (BOP)

Heavy-duty civil foundations, crane lift platforms, access logistics, and internal 33kV collector networks for 2.0 MW to 4.5+ MW Wind Turbine Generators (WTG).



### WTG Heavy Mass Raft Foundations

- **Continuous Concrete Pours:** High-volume M35/M40 grade pours with thermal gradient management to prevent structural hydration cracking.
- **Precision Anchor Bolt Assembly:** Laser-leveled template alignment and tensioning of high-tensile anchor studs for 3.3+ MW turbines.
- **Rock Anchoring & Grouting:** Post-tensioned rock anchors and high-strength non-shrink grouting at tower base pedestals.



### Crane Hardstands & Heavy Lift Pads

- **Heavy Crane Lift Platforms:** Compacted gravel hardstands engineered to sustain 100T to 250T crawler and hydraulic mobile cranes.
- **Component Laydown Staging Yards:** Dedicated staging areas for nacelles, rotor hubs, generators, and 70m+ turbine blades.
- **Heavy Haul Access Logistics:** Hill-cut widening, turning radius development, and culvert reinforcement for long blade trailers.



### 33kV DP Yards, Met-Masts & Internal Wind Collector Lines

Turnkey execution of internal 33kV underground XLPE collector lines connecting individual WTG unit substations (CSS) to pooling switchyards. Complete erection of 33kV DP terminal yards, lightning arresters, and turnkey 120m/140m meteorological masts for continuous wind resource evaluation.

### Turnkey Wind Civil & Heavy Balance of Plant Excellence

From high-wind corridor site logistics and heavy 250T crane lift platforms to massive concrete raft foundations and 33kV DP yard erection, Velocity Energy delivers durable wind infrastructure engineered to endure harsh climatic forces.

## ASSET LIFECYCLE MANAGEMENT

## Comprehensive Renewable Asset Operations & Maintenance (O&M)

Safeguarding capital investments, maximizing kilowatt-hour yield, and ensuring high asset availability through predictive servicing, diagnostics, and 24/7 technical support.



### Wind Turbine Operations & Servicing (O&M)

- **Torque Auditing & Bolt Tensioning:** Calibrated torque verification on tower flange bolts, foundation anchor studs, and hub assemblies.
- **Drone Blade Inspection & Repairs:** High-resolution optical drone scans, leading-edge erosion repairs, and aerodynamic surface restoration.
- **Drive Train Servicing & Tribology:** Mechanical servicing, yaw/pitch calibrations, brake caliper overhauls, and gearbox lubrication management.
- **24/7 Rapid Emergency Response:** Dedicated wind maintenance teams deployed for rapid mechanical fault clearance and minimum downtime.



### Utility Solar Plant Care & Diagnostics

- **Aerial Drone Thermography:** Infrared thermal imaging across module strings to pinpoint hotspot anomalies, bypass diode faults, and micro-cracks.
- **Mechanized & Robotic Module Cleaning:** Scheduled waterless/semi-automated cleaning cycles optimized to preserve peak irradiance capture.
- **Inverter & SCB Preventive Maintenance:** Central/string inverter thermal scans, filter replacements, DC connector tightening, and cable checks.
- **Vegetation & Civil Maintenance:** Systematic vegetation mowing, berm weed clearing, drainage desilting, and perimeter security upkeep.



### 33kV to 230kV Substation & Switchgear Preventative Care

Comprehensive substation asset care including step-up transformer oil BDV dielectric testing, online oil filtration, numerical protection relay calibration, and vacuum circuit breaker (VCB) timing audits. Continuous SCADA telemetry validation ensures full statutory DISCOM and SLDC grid compliance.



### Committed to >98.5% Plant Availability & Long-Term Asset Health

Velocity Energy acts as a lifetime lifecycle partner for plant developers and asset owners. Our structured preventative schedules, spare-parts inventory management, and trained on-site engineers ensure uninterrupted green power generation year after year.

## PROVEN EXECUTION TRACK RECORD

## Major Projects &amp; Client Portfolio

Demonstrated multi-state track record delivering MW-scale solar civil foundations, pile & MMS installation, AC/DC erections, and wind turbine balance of plant.

| CLIENT / PARTNER              | PROJECT SCOPE & CAPACITY              | LOCATION                 | DOMAIN |
|-------------------------------|---------------------------------------|--------------------------|--------|
| PROGEN RENEWABLES             | 15 MW Solar Civil Foundation Work     | Vagarai, Tamil Nadu      | SOLAR  |
| PROGEN RENEWABLES             | 10 MW Solar Civil Foundation Work     | Veppore, Tamil Nadu      | SOLAR  |
| PROGEN RENEWABLES             | 15 MW Solar Civil Foundation Work     | Namakkal, Tamil Nadu     | SOLAR  |
| B2G GREEN & AIKYA NIRMAN LLP  | 15 MW Pile, MMS with AC/DC Erection   | Mahalgol,<br>Maharashtra | SOLAR  |
| VC GREEN ENERGY PVT LTD       | 13 MW Solar AC/DC Electrical Erection | Tirunelveli, Tamil Nadu  | SOLAR  |
| VC GREEN ENERGY PVT LTD       | Wind Mill WTG BOP & 33kV DP Yard      | Tamil Nadu               | WIND   |
| PIONEER WINCON ENERGY SYSTEMS | 5 MW Wind Turbine BOP & Commissioning | Palladam, Tamil Nadu     | WIND   |

## VELOCITY ENERGY AGGREGATORS PRIVATE LIMITED

CIN: U35106TZ2026PTC040718 • Ministry of Corporate Affairs Registered

Turnkey Clean Energy EPC & O&M

## REGISTERED HEADQUARTERS

Coimbatore South, Tamil Nadu - 641016, India

Pan-India Footprint: Tamil Nadu • Karnataka • Maharashtra

## PROJECTS &amp; TENDERING DESK

Official Email: [projects@velocity.in](mailto:projects@velocity.in)

Corporate Portal: [www.velocity.in](http://www.velocity.in)