

Ultra-high Voltage Power Transmission

LCC
HVDC

VSC
HVDC

DC Control &
Protection

DC Field
Measurement

UHVAC Control
& Protection

Converter
Stations

Core Products

- Line-commutated converter valves (LCC-HVDC) for long-distance transmission
- Voltage-source converter valves (VSC-HVDC) for direct-current grids and connecting offshore wind farms
- DC control and protection systems
- DC field-measuring equipment for precise voltage and current readings
- AC control and protection systems up to 1,000 kV
- Circuit breakers and valve-cooling systems
- Digital platform for real-time monitoring and management

Capabilities

- Network planning & design
- Converter valve supply and integration
- Control and protection system configuration
- Grid connection
- Digital platform setup and integration
- Equipment supply, installation, testing, commissioning and certification
- Operation & Maintenance services

Moving power over long distances with minimal loss requires a different class of technology. Ultra-high voltage transmission enables surplus energy generation in one region to power areas in another, and connects offshore wind farms to inland demand centres, at scale.

Terra Sol offers a complete range of Ultra High Voltage and High Voltage DC solutions with proven deployments globally. From LCC and VSC converter valves to DC control and protection systems, smart substations and AC automation, we deliver the full transmission stack with the engineering depth to match.





Up to $\pm 1,100$ kV
Highest Voltage Class Available



Complete System Supply
From Valve to Control Room



World's First
 ± 500 kV, 1,500 Megawatt (MW) Valve



Very Low Losses
Carries Bulk Power Long Distances



Own Technology
In-House Control and Protection Design



Digital Platform
Smart Monitoring & Management

Proven

Precise

Efficient