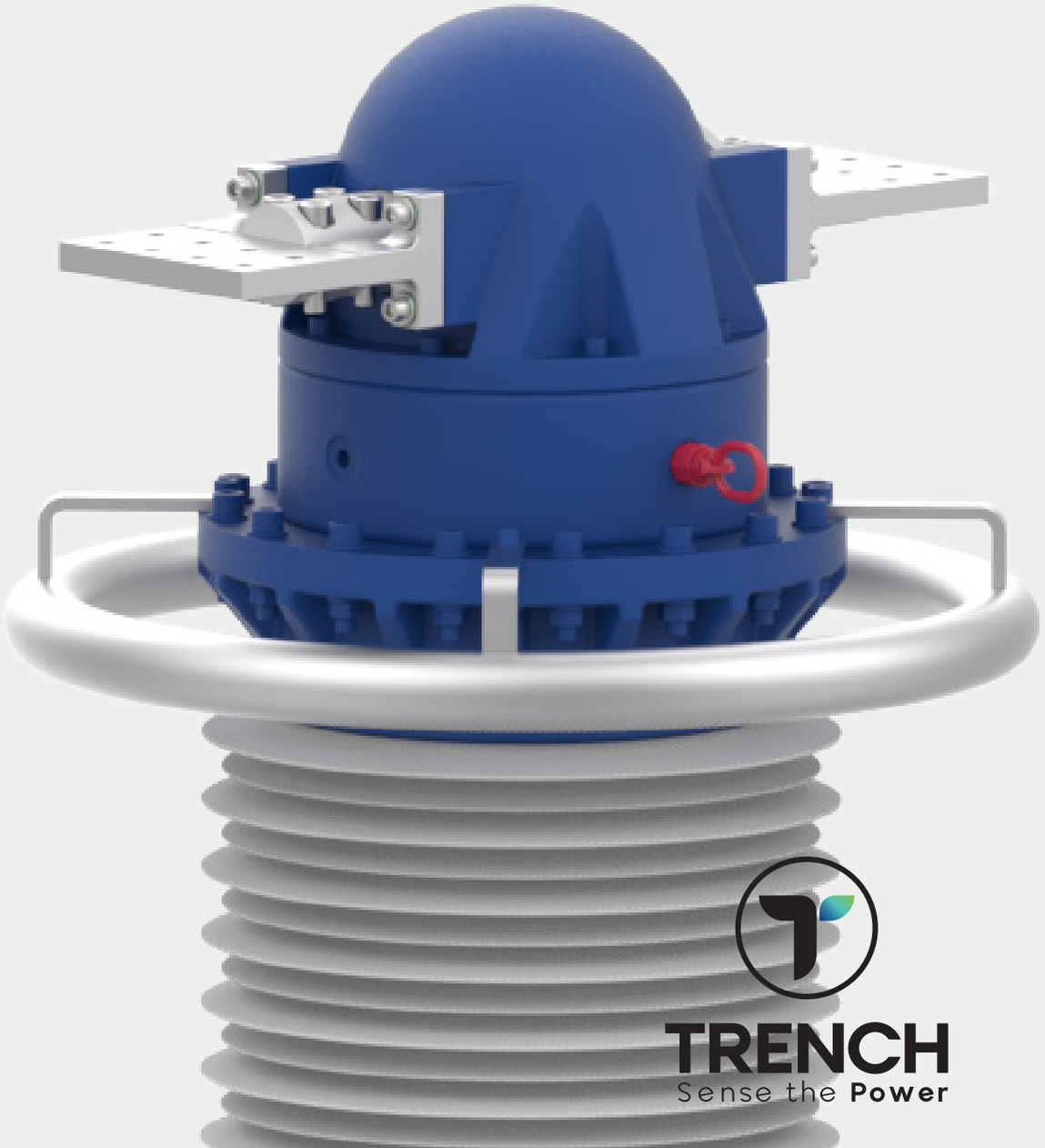
OPTICAL CURRENT TRANSFORMER

800 kV / 4000 A

Trench Optical Current Transformers are a **revolutionary alternative to conventional current transformers**, providing an advanced solution for measurement and protection applications, based on cutting-edge optical sensing technology.

SCAN ME OR
CLICK HERE



TRENCH
Sense the Power

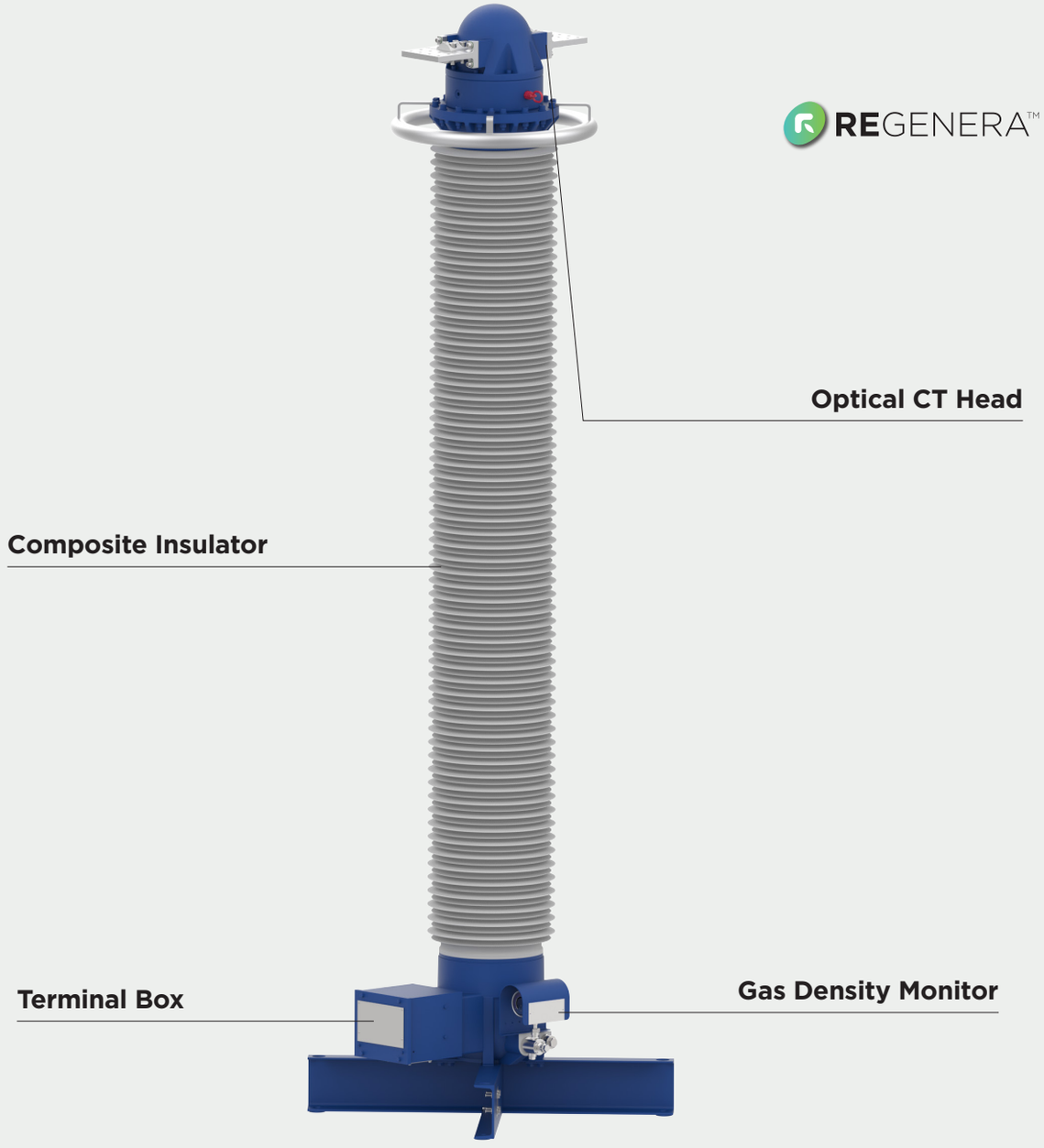
OPTICAL CURRENT TRANSFORMER

CHARACTERISTICS

- No ambient temperature limitation
- Filled with nitrogen compressed slightly above ambient pressure – to avoid ingress of moisture or other objects

GENERAL

- Aluminum housing with glass ring sensors
- Insulators made of composite materials that can withstand mechanical stresses, including tensile, short-circuit, and seismic forces
- A connection box for attaching a TOCT to the station's fiber optic cables
- A signal processing unit, merging unit, containing a light source, photodetectors, and signal processing. It comes with up to three individual channels for measurement



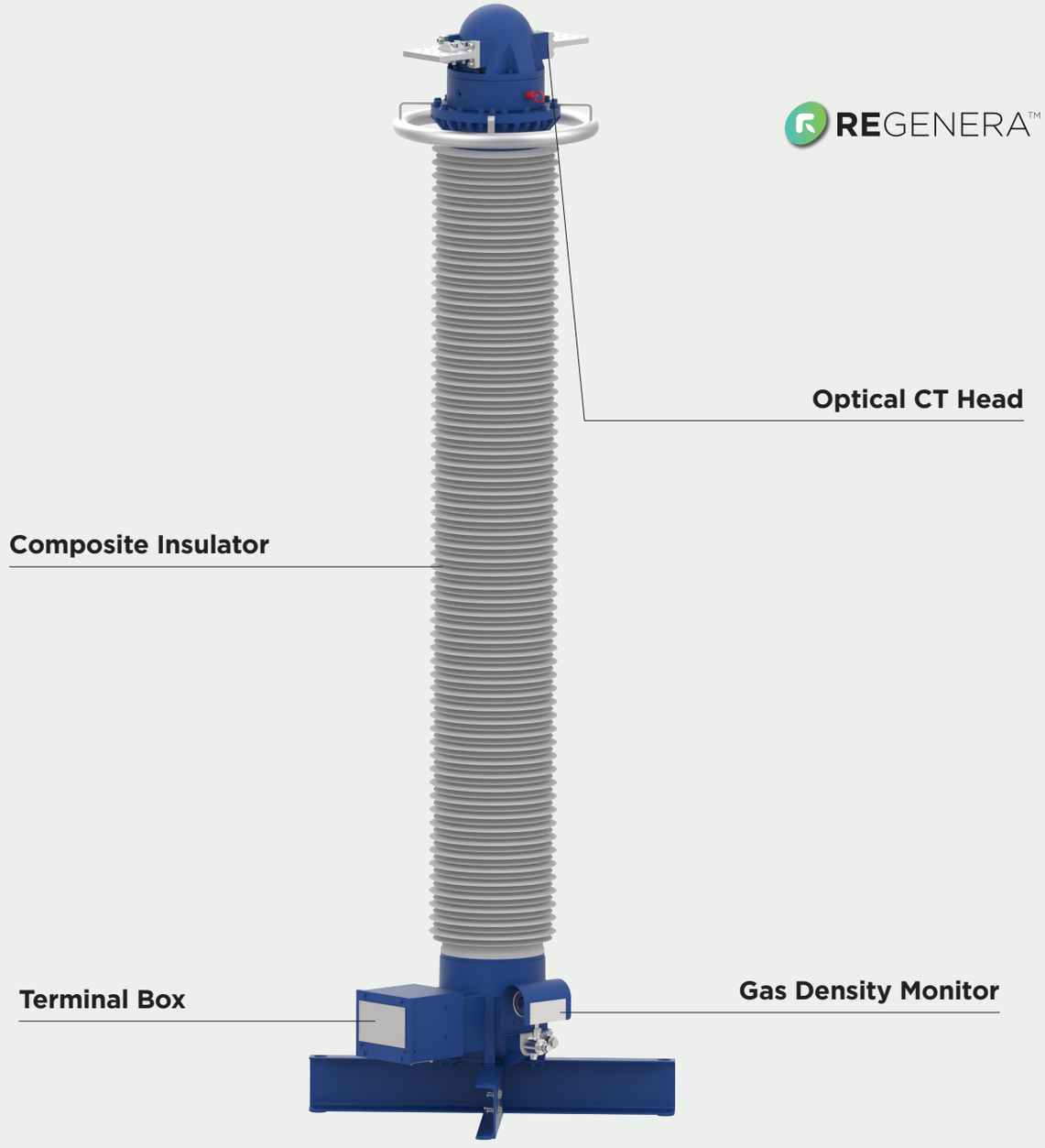
OPTICAL CURRENT TRANSFORMER

APPLICATION AREAS

Suitable for low-temperature applications at -50 °C and below, In IEC 61850-9-2 compliant digital substations, thanks to digital “process bus” interface with long-distance fiber optic cable, which offers maximum flexibility for applications.

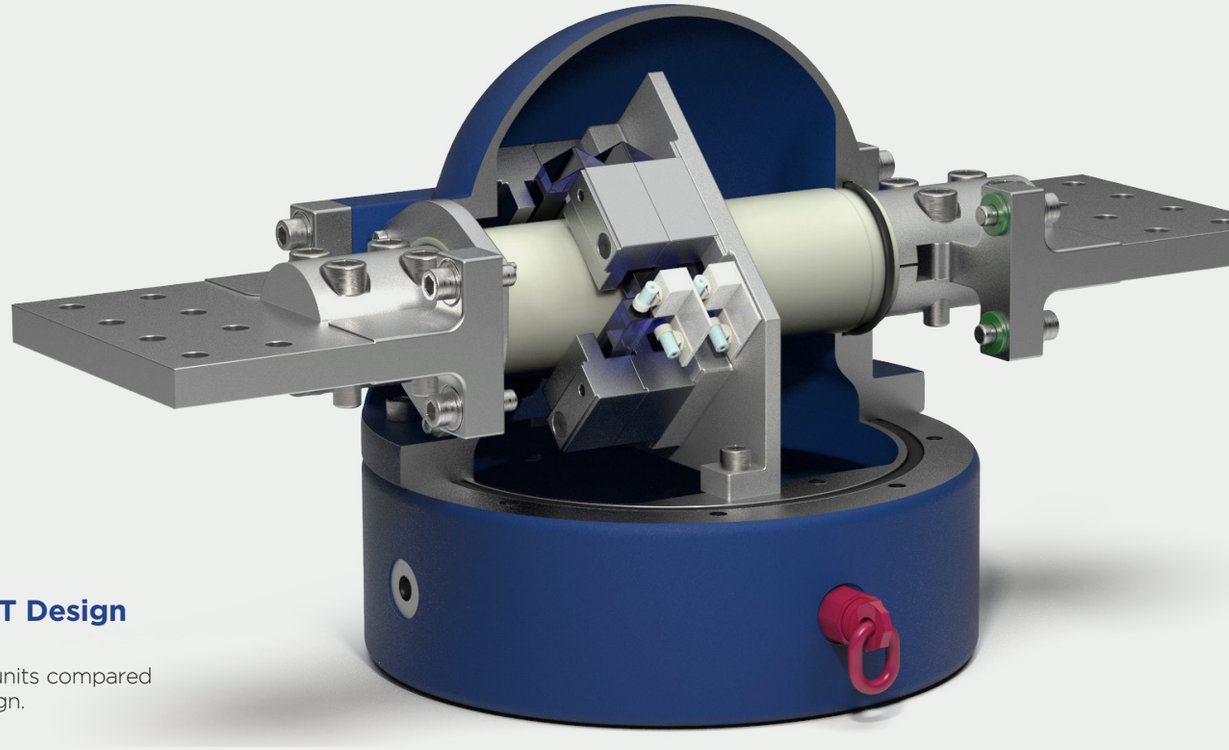
SUSTAINABILITY

REGENERA™ is our holistic approach to protecting ecosystems, fostering environmental harmony and promoting a circular economy.



MAIN FEATURES

Trust in our tailor-made solutions for your unique needs



Wide Application Range

Optical current sensor enables use of only one type of TOCT for a wide range of protection and measurement applications.

Passive System

No electronic components needed within the TOCT.

More Compact CT Design

Small and light-weight units compared to conventional CT design.

Reduced Cabling Effort

Single fiber-optic cable instead of several copper cables with large cross-sections.

Improved Operational Safety

Galvanic separation between primary and secondary side.

GWP Of Zero for Insulation Gas

Zero CO2 equivalent compared to 24.300 kg CO2 equivalents by using conventional gas.

Merging Unit 6Mu85 + IO245

Together with 6MU85, the IO245 forms the merging unit which provides an IEC 61850-9-2 interface with redundant digital connections to station bus, IEC 61850-8-1, and process bus, IEC 61850-9-2.

Complete TOCT Set for A 3-Phase Installation

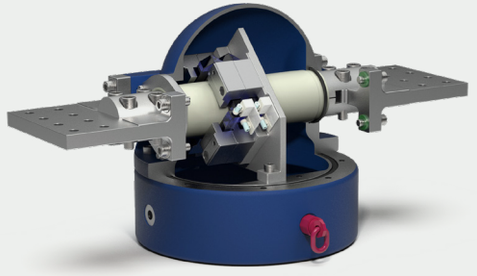
Contains three TOCTs, primary equipment, one 6MU85, base merging unit, one IO245, providing the interface to the TOCTs.

APPLICATIONS

INSIDE THE PRODUCT

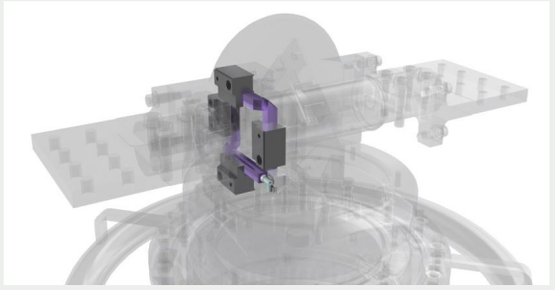
Main components of of the Optical Transformer

As a pioneer of innovation in the field of digital technologies in high-voltage switchgears, the powerful and durable Trench Optical Current Transformers do not require any harmful insulating medium.



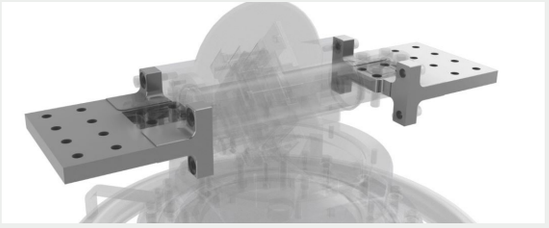
SIMPLIFIED INSULATION SYSTEM

Eco-friendly without harmful insulators.



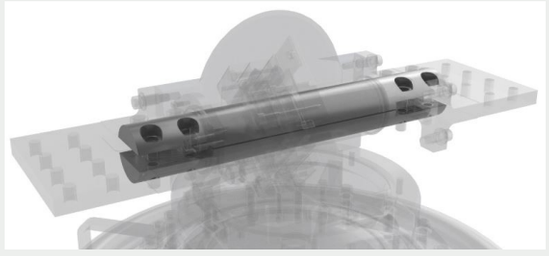
OPTICAL CURRENT SENSOR

Measures electrical currents at high voltage potentials using the Faraday effect. Provides a wide dynamic range with a single turn primary bar by eliminating the need for primary reconnection.



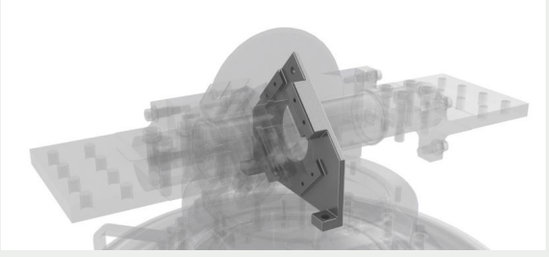
PRIMARY TERMINALS

Customized HV-Connection, suitable for IEC, NEMA and others.



PRIMARY BAR

Designed for high rated currents up to 6000 A. Compact but rigid design, suitable for short time currents, short circuits, up to 80 kA, rms, /ls



SUPPORT

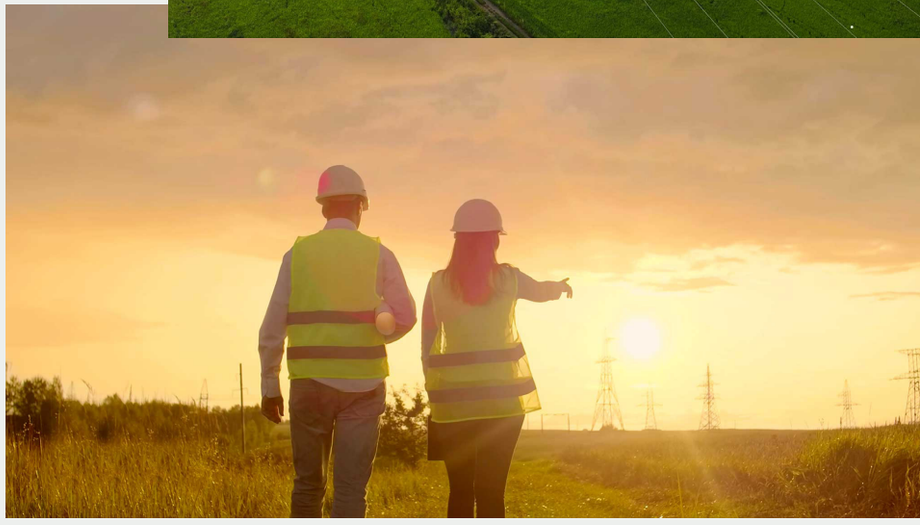
Support for optical current sensors specially designed to minimize vibration effects.

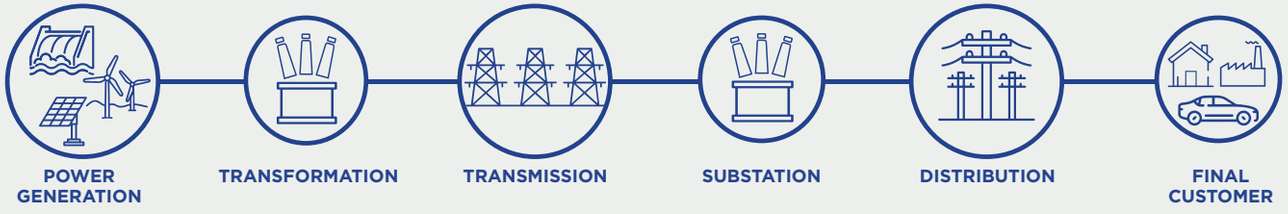
THE **FUTURE** OF ENERGY IS **NOW** AND IT'S **EXTRAORDINARY**

THE CRUCIAL ROLE OF POWER TRANSMISSION

Our vision of a sustainable future starts with an eco-friendly portfolio of high voltage products and systems, brought to you by our dedicated team of global innomakers.

Our mission is to support our customers, from power generation through transmission and distribution to the electricity consumers, in their transition to clean energy and a greener world.





Get in touch:
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Sense the Power

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