

# CorGrid Smart Energy

QuickDeploy SaaS Application



## Powering the Future with Intelligent Connected Energy

Our CorGrid Smart Energy SaaS application delivers real-time intelligence, automation, and predictive insights that address the most critical operational, safety, and reliability issues across the modern energy landscape. Whether in upstream oil, midstream pipelines, downstream refining, wind operations, or distributed energy systems, CorGrid provides unified visibility and control where it matters most.

**CorGrid offers value to the energy sector through various innovative applications.**

- Provide real-time insights for quick anomaly response & process optimization.
- Detect pollutants to ensure compliance and sustainability.
- Enable seamless data sharing for informed decisions and improved operations.
- IoT sensors ensure safe production by monitoring changes and preventing hazards.
- Enhance performance and responsibility, advancing smart manufacturing.

**Real-Time Monitoring and Predictive Intelligence for Oil, Gas, and Renewable Energy**



**Reducing Unplanned Downtime**



**Operational Efficiency and Performance**



**Enabling Remote Operations**



**Protecting Critical Infrastructure**



[www.corgrid.io/smart-energy/](http://www.corgrid.io/smart-energy/)

**CORVALENT**™



# Is Your Energy Infrastructure Ready for Today's Demands Costs?

Today's power environment is more complex than ever, and it's no longer enough to simply generate or distribute energy. Budget constraints, aging equipment, fluctuating loads, manual monitoring, and unpredictable failures often result in energy loss, grid instability, increased downtime, and higher operating costs.

CorGrid Smart Energy addresses these challenges by transforming traditional energy systems into adaptive, self-correcting environments that optimize performance, enhance reliability, and maintain resilience in real time.

EQUIPMENT / SENSOR	MONITORING	OBJECTIVE	RESULT
Smart Power Meters	Real-time energy consumption; phase balance; peak demand	Identify inefficiencies and reduce energy waste	Lower operational costs; optimized energy usage
Voltage & Current Sensors	Overcurrent, undervoltage, harmonics	Prevent equipment damage and ensure power quality	Reduced downtime; extended equipment lifespan
Power Factor Sensors	Reactive power levels; PF fluctuations	Improve power factor and reduce penalties	Lower utility charges; stabilized power delivery
Transformer Temperature Sensors	Core temperature, oil temperature	Prevent overheating and early transformer failures	Increased safety Fewer outages Accurate life expectancy determination
Thermal Cameras (Electrical Panels, Distribution lines, Ceramic isolators)	Hotspots in breakers, busbars, cables	Detect anomalies before failures occur	Reduced fire risk; predictive maintenance
Substation IoT Gateways	Connectivity, load metrics, status	Centralize power distribution monitoring	Faster response to events; Unified revenue visibility
Solar Inverter connectivity	PV output, Inverter efficiency Fault codes KWh delivered	Maximize renewable output and detect PV degradation	Increased energy yield Lower maintenance cost Accurate Revenue prediction

\*For complete list of sensors, contact us at [salesteam@corvalent.com](mailto:salesteam@corvalent.com)