The new energy landscape is becoming more decarbonized, more decentralized and more digitalized.

Electricity consumers are seeking more control over their energy future and are driving the growing presence of Distributed Energy Resources (DER). This growth is disrupting utility operations, planning and the industry overall. And with the continued adoption of climate change mitigation policies and renewable energy goals, the adoption of DER will only increase.

The EcoStruxure™ Distributed Energy Resource Management System

Schneider Electric offers EcoStruxure DERMS as a grid-focused solution to manage this disruption. With grid constraint optimization at its core, DERMS enables critical capabilities including monitoring and estimating current and future state of DER, modeling real-time and forecasted activity, and optimizing management and control.
EcoStruxure™ DERMS offers a full breadth of functionality and deployment approaches to assist utilities on their digital transformation journeys.

For all DER assets
Delivering deliver value to the grid and all energy stakeholders with centralized control and analysis of all types of DER, regardless of ownership entity.

Flexible and sustainable
Supporting small proof-of-concept projects to full scale deployment rollouts that require direct device monitoring and control and integration with any number of third party aggregators.

DSO focused
Designed and built for the Distribution System Operator and their business drivers and processes, EcoStruxure™ DERMS serves grid operations, engineering, planning and innovation at the edge.

Key Benefits
• Maximizes DER value through grid constrain management
• Defers capital investments through operational efficiencies and non-wires alternatives
• Improves customer engagement and satisfaction by offering greater control over their energy
• Supports increasingly aggressive renewable energy and emission targets
A Closer Look

Deliver safe, efficient and reliable power
As the DER landscape evolves, EcoStruxure DERMS, through digitization and automation, enables utilities to orchestrate distributed generation and delivery of electricity while improving the safety, reliability and quality.
- Visibility into real-time and forecasted DER activity, both aggregated and individual, at system and local levels.
- Optimized dispatch of DER resources to resolve immediate issues and prevent future grid constraint violations.

Unlock DER flexibility for transmission and distribution management
As the adoption of DER continue to expand, the coordination between TSOs and DSOs will become increasingly important.
- Manage flexibility for all types, sizes and ownership of DER.
- Coordination of DER groups, aggregated DER and individual DER.
- Leverage DER flexibility for peak load management, load shifting, load limiting, VAR support, etc.

Leverage microgrids and demand response programs
Integrate with demand response, third-party DER aggregators and microgrids to capitalize on their flexibility.
- Integrates with microgrid controllers to enable monitoring and grid management while simulating microgrid behavior for what-if analysis.
- Demand Response management systems are complementary to DERMS deployments and can bring immediate value for grid situational awareness and constrain management through standards-based integration as dispatchable resources.

Enable the interconnection of all utility and customer-owned DER
Quick validation future planning of grid impact for new DER connections.
- The powerful Hosting Capacity heat map tool qualifies DER impact at all locations of the grid.
- Quickly and easily check the technical feasibility of DER connections; as well as a seamless analysis of alternative grid planning scenarios where connections are not possible.

Defer capital investments
Strengthen and enhance the grid with non-wires alternatives that can hold off costly investments.
- Analyze grid reinforcement alternatives with various planning scenarios including technical and economic feasibility analyses.
- Gain comprehensive support for DER, including the modeling of all DER types and smart inverter autonomous functions, the analysis of different levels of DER adoption and DER impact analysis in various load and weather conditions.