



# TGO Alliance

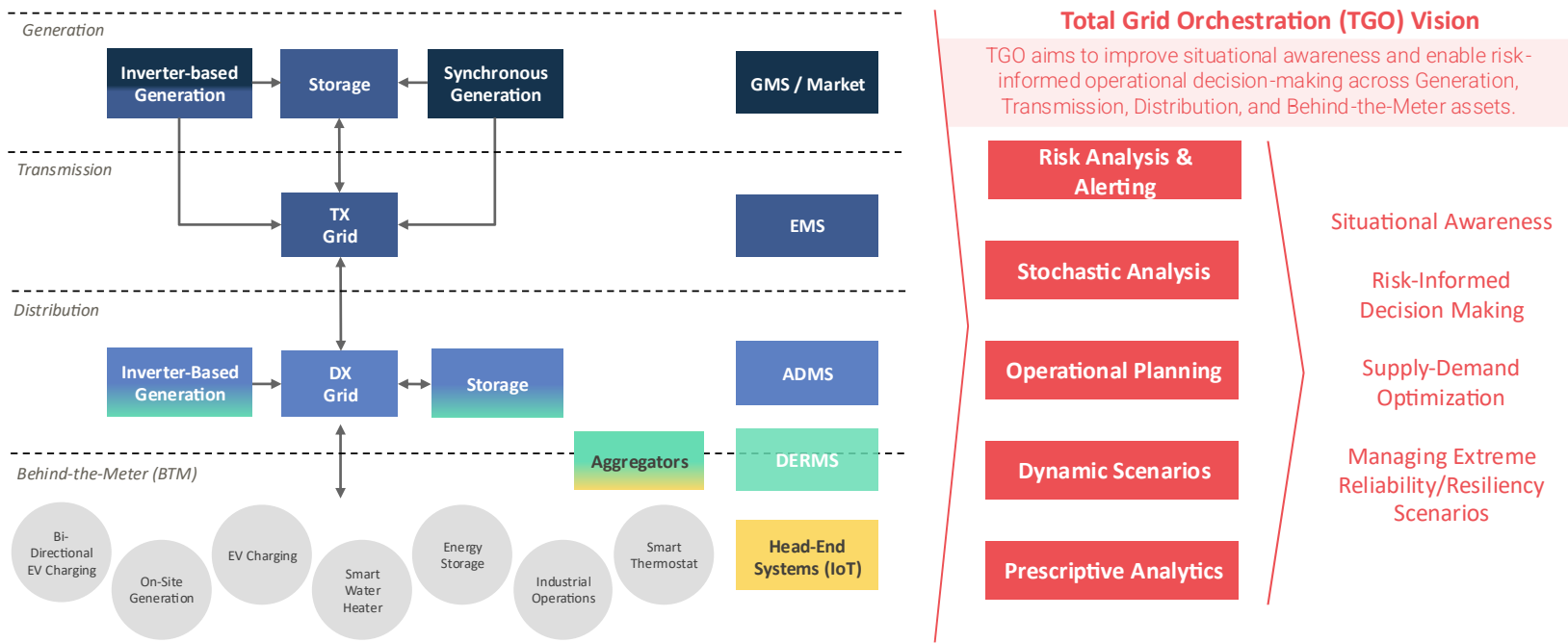
Orchestrating the Grid to Enhance Reliability and Unlock Grid Resources

## A Changing Energy Landscape and a Market Need

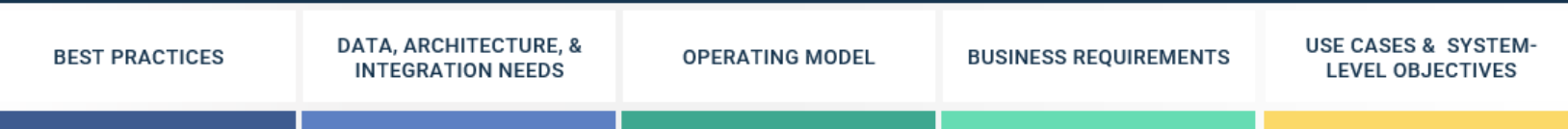
Better tools and frameworks are needed to align the variable supply & demands and constraints of reliability and sustainability. Total Grid Orchestration (TGO) is a holistic way to consider system-wide coordination, situational awareness, and risk management.

There are no market-ready solutions nor frameworks to optimally manage the exponential increase in supply-demand variability and associated risks holistically across generation, transmission, distribution, & behind the meter (BTM) (entire grid), especially in real-time (day-of, day-ahead) and near-time (week-ahead) horizons. The siloed approach to defining problems and deploying solutions based upon the current grid architecture and operating model is putting the grid at higher risk of failure.

These challenges are being exacerbated by spot load growth, customer adoption of behind-the-meter technologies and programs, and decarbonization and decentralization of grid assets. A new planning and operating philosophy is needed, along with advanced tools and capabilities to maintain grid reliability, resiliency, and security. A holistic approach is essential to optimize investments and ensure reliable grid operations, incorporating new business processes and innovative thinking across the entire grid.



Industry collaboration is needed to drive practical direction and solutions for evolving grid needs.



## Total Grid Orchestration (TGO) includes



**Real Time Operational Risks** across the grid hierarchy

**Integrated Framework** to align operational, near-, & long- term planning approaches

**System of Systems** approach to drive new Grid Architecture

**TGO and Optimization** across the entire grid hierarchy

# WHO WE ARE

A utility-driven, collaborative forum advancing Total Grid Orchestration concepts to improve reliability and resiliency outcomes – We aim to drive practical direction and solutions for near real-time and real-time operational risks.



Support utility best practice adoption and evolving operating models



Inform vendor product roadmaps and capabilities

## ➔ What We Do

- ✓ Promote development of requirements and best practices
- ✓ Enable adoption of innovative technologies and practices
- ✓ Drive practical direction and solutions for near real-time and real-time operational risks.

## ➔ How We Work

- ✓ Working Groups develop use cases, frameworks, requirements, and operating models for TGO and priority capabilities such as Grid Flexibility
- ✓ Members elevate TGO Concepts through work products, webinars, white papers, and participation in industry events



# Join Us!

TGO Alliance is a unique forum where utilities and technology vendors can collaborate. Membership is free with signed member form.\*

### Utility Member Benefits

- ✓ Shape priority use cases and focus areas
- ✓ Influence requirements and best practices that inform technology development
- ✓ Access to peer learning and shared insights

### Non-Utility Member Benefits

- ✓ Translate utility needs into requirements and best practices
- ✓ Gain access to insights to align product roadmaps
- ✓ Contribute expertise to accelerate practical adoption of technologies and practices

\*Non-Utility Members must also support utility member recruitment and be approved by the TGO Alliance Steering Committee.