

EMERGING TECHNOLOGIES

Customized Energy Solutions (CES) is a consulting and services company with over 20 years of diversified experience across North American energy markets. CES's Emerging Technologies group provides a range of products and services to help project developers, investors, technology companies and other clients understand the evolving market rules and the value proposition of new energy storage based technologies. Combining our practical experience running daily operations of over 220 MW of energy storage facilities and our deep expertise advising clients on policy developments in energy markets provides our team with superior credentials that sets our consulting services apart from other providers.



**Market Advisory
Services**



**Software
Services**



**Financial
Services**



**Strategy
Consulting**

MARKET ADVISORY SERVICES

Our market advisory services help clients understand energy market opportunities, developments and policies.

StorageIQ

Monthly regional market intelligence reports to ensure that our clients are 'in-the-know' about procurement opportunities, ISO/RTO rule changes, and state/federal regulatory proceedings that impact energy storage.

- StorageIQ provides tools that are needed to compete in a dynamic environment, ensures the most up-to-date market impact and pricing analyses, and offers fresh information about key meetings and deadlines.
- StorageIQ knowledge products include: detailed monthly summaries, webinars, price trends, individualized conference calls and ready access to our team of consultants to answer your questions

Bid Advisory

Bid support and advisory integrated with financial modeling for participation in utility request for offer (RFO) solicitations.

Policy Support

Preparation and submission of comments and observations to various regulatory proceedings, as well as expert testimonials to support non-discriminatory and efficient policymaking.

Training and Workshops

Customized, on-demand training and workshops for clients on relevant topics around Energy Storage, Distributed Energy Resources, Energy Markets, Rules, Policies, Regulations and Financial Due-diligence.

Market Overview

Reports across key regional energy markets that provide insights on market characteristics, key drivers, revenue opportunities, price trends, use cases for market participation and policy developments.

Energy Market Forecast

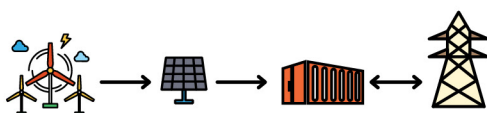
Market price forecasts for energy and ancillary services such as frequency regulation using robust industry leading simulation systems.

SOFTWARE SERVICES

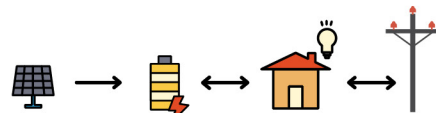
Our software services and analytical tools enable performance evaluation of new technologies and detailed analysis of asset dispatch for various applications

CoMETS Comprehensive Market Evaluation Tools for Storage

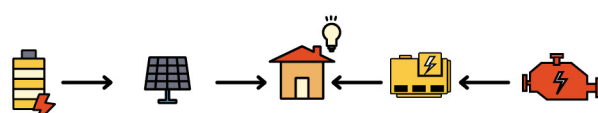
A suite of models that helps technology and project developers evaluate and optimize energy storage resources for in-front-of-the-meter, behind-the-meter storage and microgrid applications.



In-Front of the Meter



Behind the Meter



Microgrid Model

Wholesale

An optimization model for grid connected stand-alone storage or RE integrated hybrid resources, using multiple value streams available in wholesale energy markets. These models include consideration of wholesale capacity, energy and ancillary services products as well as various operating strategies.

Frequency Regulation

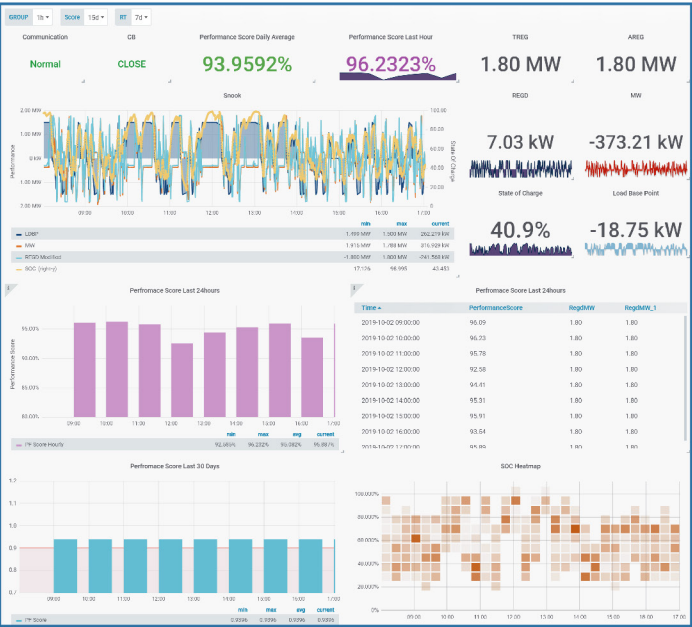
A dispatch model that evaluates second by second frequency regulation dispatch signals to estimate performance scores, revenue and cycle life in each of the major ISO/RTO markets. A dispatch model that evaluates second-by-second frequency regulation dispatch signals to estimate performance scores, revenue and cycle life in each of the major ISO/RTO markets. The model includes abilities to simulate State of Charge (SOC) management and capacity de-rating to manage battery cycling.

Microgrid

For simulation of microgrid layouts with a variety of generators such as solar, wind and diesel, coupled with energy storage systems. The model provides insights into technical aspects such as grid interactivity and islanding operations as well as commercial aspects like levelized cost of energy

Behind the Meter

For simulation of optimal operation of behind the retail meter energy storage and distributed energy resources to enable users to determine the right technologies, size and strategies for operation- including demand charge management, time of use energy shifting, demand response and wholesale energy market participation as aggregated resources.



FINANCIAL SERVICES

Our financial services help clients understand business trends, estimate revenues and cash flows, optimize investments and abate risks.

Financial Modeling

Comprehensive project financial models integrated with CoMETS dispatch models for standalone storage or renewable energy integrated hybrid projects. The models provide revenue forecasts, cash flows, financial statements, investment metrics and sensitivity analysis.

Due Diligence and Risk Analysis

Advisory services to provide technical and commercial due diligence for potential investments in energy storage projects. Due-diligence covers technology evaluation, critical review of contracts and market participation strategies, evaluation of warranties and scenario analysis.

Investment Advisory

Advisory services to help in preparation of the pitch-book, valuation of target companies and fund raising.

STRATEGY CONSULTING

Our strategy consulting services help clients to successfully enter and navigate the energy storage market to achieve key organizational objectives.

Market Potential

Assessment of accessible market size and ecosystem for technology deployment.

Partner/Investor Search

Research, identification and collaborations with qualified investors, business partners to aid market entry.

Market Entry Strategy

Development of a comprehensive market entry strategy to meet key business objectives.

Business Accelerators

Drivers for business growth, product development, commercialization, financing and marketing.

CES ADVANTAGE

Superior Market Intelligence

Our team understands and translates the complex rules and business practices of the North American RTO/ISO markets as they apply to energy storage resources.

Technology Expertise

Our team understands various storage technologies and has performed technical evaluation and competitive assessment from lab to commercial scale.

Operational Experience

We manage over 220 MW of energy storage assets across North American wholesale energy markets providing bidding strategies, state of charge management, scheduling, and dispatch services.

Analytical Abilities

Our modeling suite CoMETS optimizes revenue and performance of energy storage resources built to technology specifications and market rules.

Consulting Experience

We have advised numerous clients on economic and technical evaluation of storage projects across North American markets as well as international markets.



**Customized
Energy Solutions**

Analyze · Simplify · Implement



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