



# Commercial Storage System

SolarEdge CSS-OD

For Europe

# Riding the EU Energy Market Rollercoaster

EU market dynamics and wide-ranging geopolitical factors present businesses with complex challenges as they navigate fluctuating electricity costs and an unpredictable energy landscape



Increasing electricity costs and evolving dynamic tariffs



Rising demand charges



Lower return on exported energy



Higher demand for EV charging



Environmental impact reporting requirements

# A Look at Electricity Realities in Various Countries



- Increasing kWh prices
- Increasing demand chargers
- Low return on exported energy to the grid from PV production



- EV charging uptake alongside a limited and congested grid
- Moving away from net metering
- Market participation programs popularity increases



- Increasing kWh prices
- Government program incentivizing PV and storage



- Increasing electricity prices
- Exposure to dynamic prices (volatility, unpredictability)
- Clusters and government programs incentivizing storage





# Introducing SolarEdge's New Commercial Storage System

SolarEdge CSS-OD

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# CSS-OD

## Battery Cabinet and Battery Inverter

Outdoor Rated

Two-Cluster Design



- 102.4kWh (rated)/ 50kW, scalable to 1MWh
- Rated for outdoor use:
  - Battery Inverter: IP65, Battery Cabinet: IP54
- 6000 cycles / 10-year warranty
- Pre-assembled cabinet for minimal on-site work
  - Fast deployment
  - Reducing installation errors
- Advanced safety
  - Fire detection & suppression
  - Built in AC + DC SPDs
- Built-in HVAC
- Two-cluster design for resiliency
- Weight and size: < 1.5T, 110 x 110 x 238cm

# A Solution that Scales: Supported Configurations

PCS Power (kW)	50	100	150	200	250
Total Energy (kWh)					
100					
200					
300					
400					
500					
600					
700					
800					
900					
1000					

\* Preliminary and subject to change

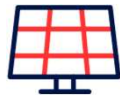
# SolarEdge ONE **For C&I**



An energy optimization system that automatically and constantly manages site energy production, storage and consumption:

- One system that manages all the site energy
- Optimizes PV production, storage, EV charging & loads
- Consolidates internal and external data to make intelligent energy decisions
- Utilizes real-time data analytics
- Integrated and pre-installed on SolarEdge core products
- Integrates with selected third-party products and devices

PV



Storage



EV



Loads



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# ONE Controller - Enable Effective Communication & Performance

On site hardware that integrates and ensures the communication of the site's energy assets, including energy meters, inverters, EV chargers & building loads

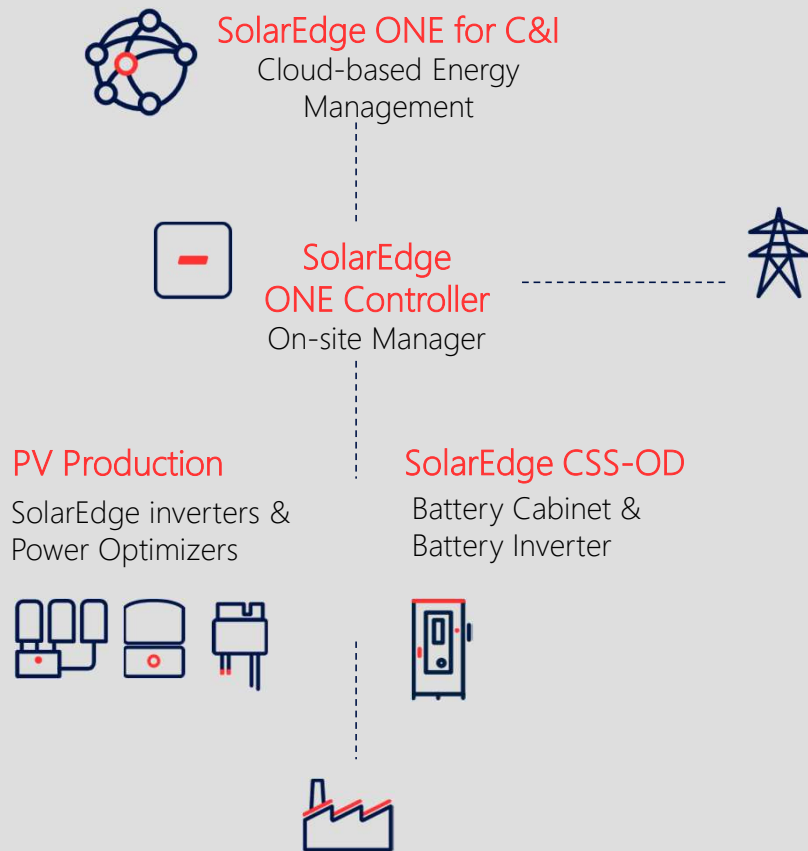
- Optimizes use of locally generated energy, to minimize energy charges
- Interfaces with third-party sensors and platforms
- Integrated with SolarEdge environmental sensors and energy meters
- Complies with grid regulations to enable safe, reliable electricity generation (PPC)
- A cyber-secure gateway for external communications, protecting the system from unauthorized access



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# Solution Diagram



- End-to-end site optimization, enabled by SolarEdge ONE and ONE Controller
- Orchestrates PV and storage

# Supported Multiple Use-Cases

Designed to optimize energy production and consumption for a wide range of sectors and needs:

## Maximized Self-Consumption

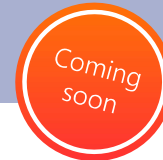
Store excess solar production in the battery during the day, for use later when needed

## Peak Shaving

Reduce kW meter reading by discharging the battery at the time of peak site load

## Tariff Optimization for Dynamic Pricing

Dynamically respond to electricity market prices and adjust the battery charge/discharge power according to energy prices



## Market Participation

Leverage the storage system to participate in electricity markets and Virtual Power Plant Programs



← Value Stacking →

# The CSS-OD Value Proposition



## Single Trusted Vendor

- One end-to-end system from a single vendor
- Leading warranty for enhanced peace of mind and easier maintenance



## Energy Optimization

- Real-time management system
- Seamlessly integrates with the storage system
- Optimizes energy consumption and storage



## Easier Installation and Fast Deployment

Pre-assembled cabinet for minimal on-site work and fewer installation faults



## Built-in Safety

- Integrated fire detection
- Double fire suppression mechanisms
- Built in AC + DC SPDs
- Proactive maintenance and alerts via SolarEdge ONE

# A Glance into the System

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# SolarEdge ONE : Energy Board

Provides our customers various dashboard views to maximize site performance and bill savings:

## Energy Overtime

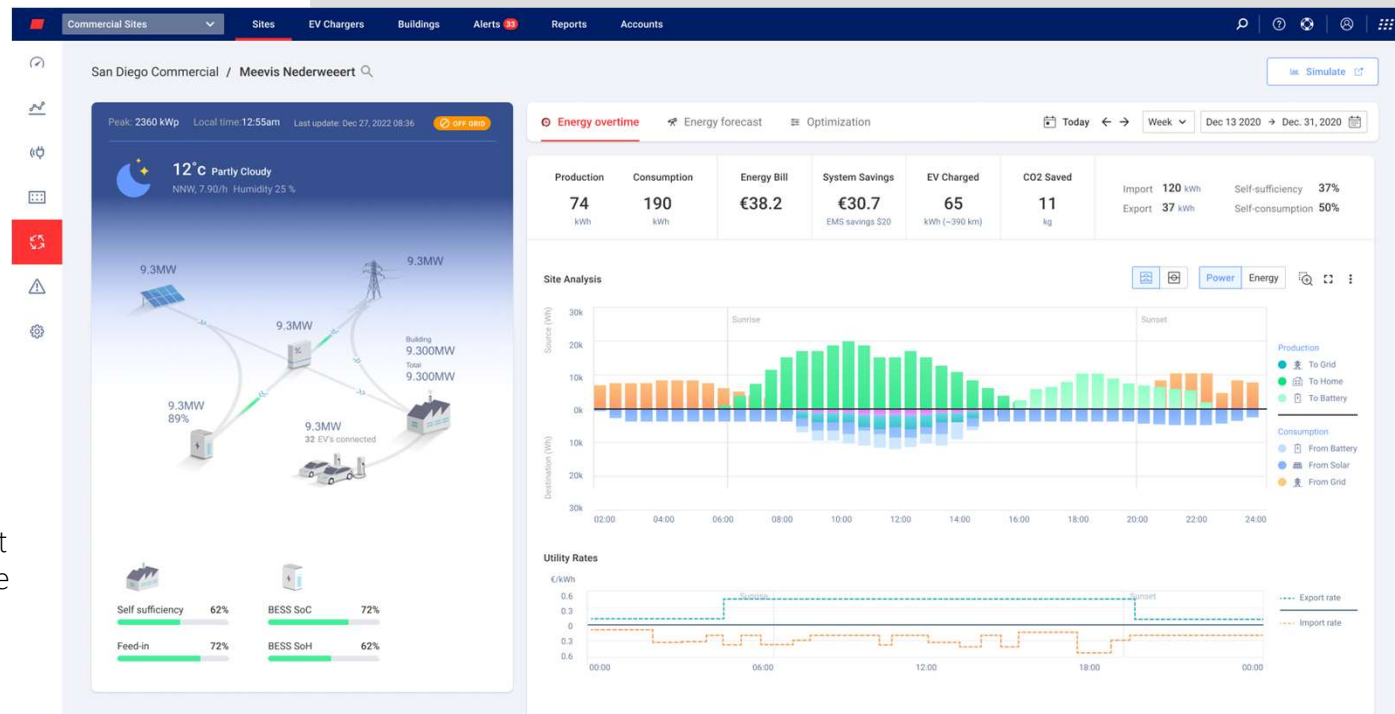
Easily access PV and storage performance and site power flow. Gain real-time insights into the site KPIs

## Energy Forecast

Generate various forecasts inc. PV production, weather forecast, irradiance, and make informed decisions

## Energy Optimization

Optimize financial performance based on current and future insights. Configure the battery storage system and adjust the system modes



\*Preliminary and subject to change



A large solar panel is positioned to resemble a mountain peak, rising from a thick layer of white and pinkish clouds. The sky above is a mix of deep blue and vibrant pink/purple, with bright sunbeams radiating from behind the solar panel. The overall scene is surreal and evokes a sense of clean energy and nature.

# Thank You

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