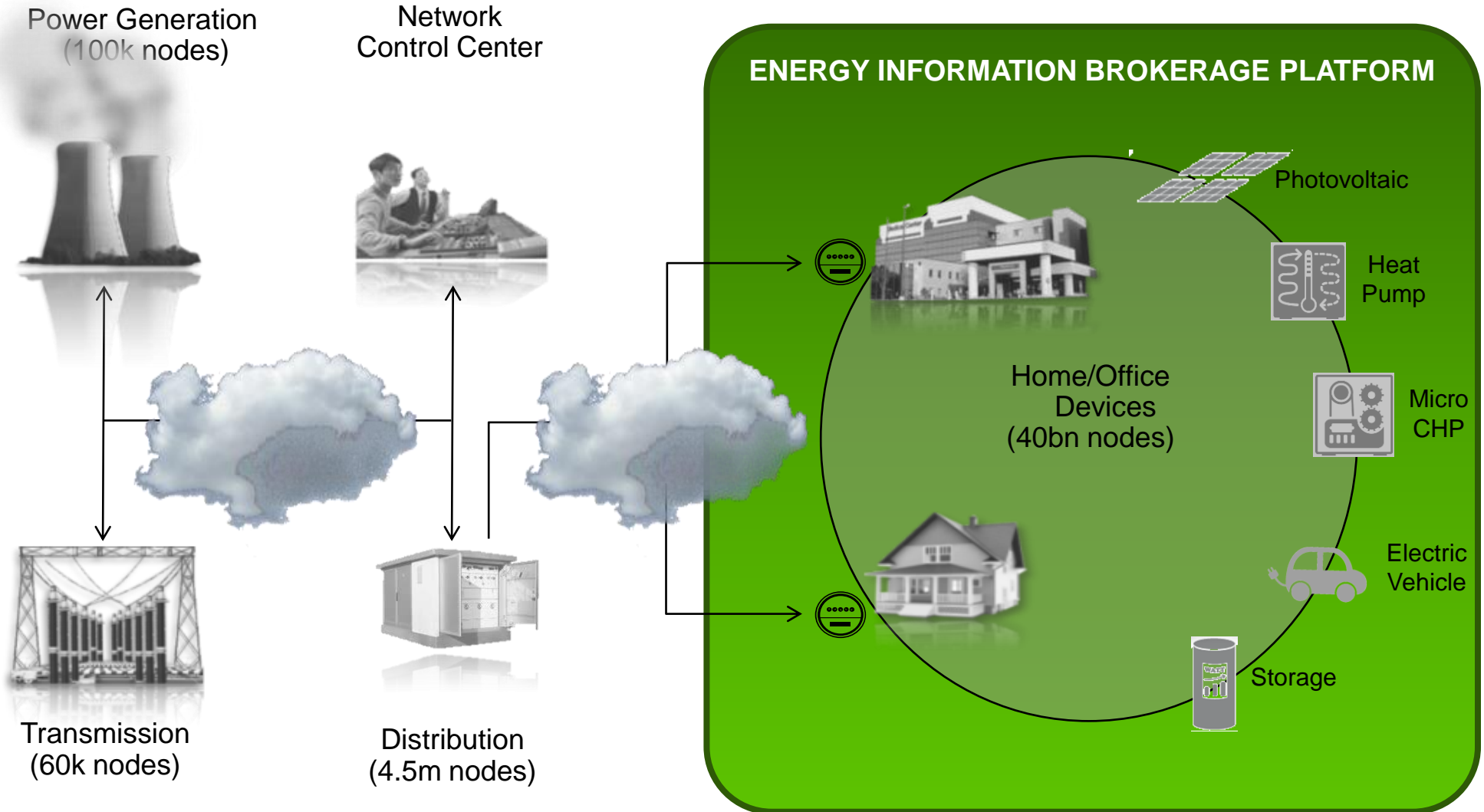


ENABLING ENERGY MANAGEMENT AS A SERVICE

Solutions

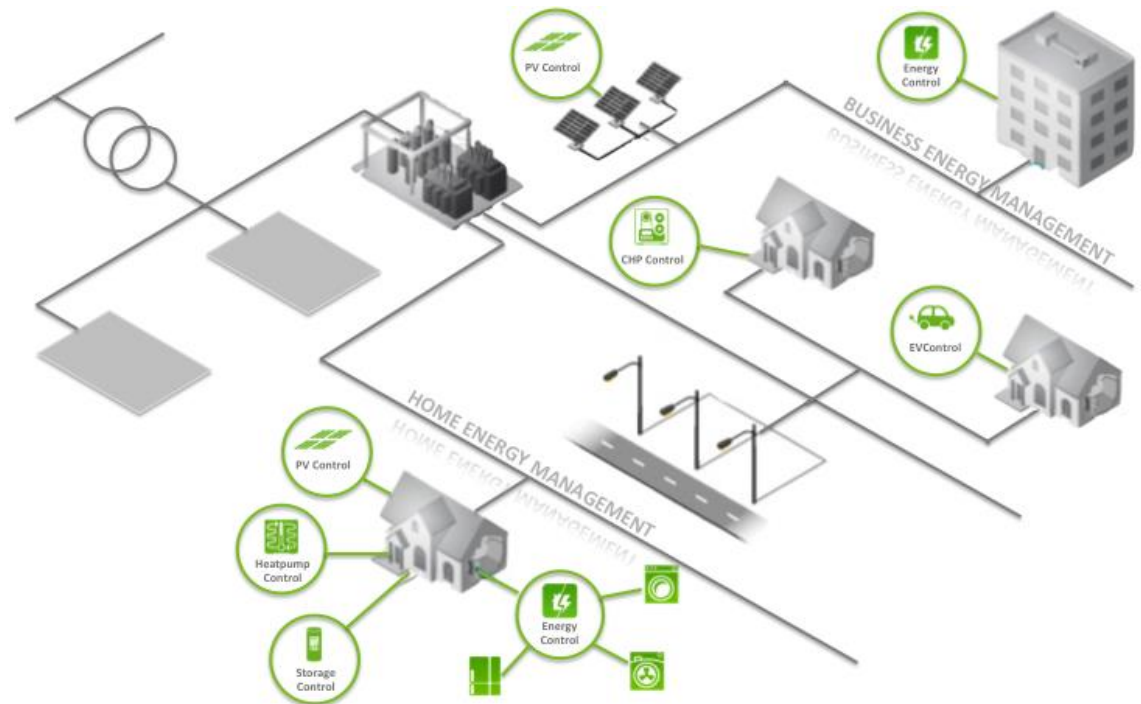
2015

An Operating System for the Energy Internet of Things – GreenCom's Energy Information Brokerage Platform

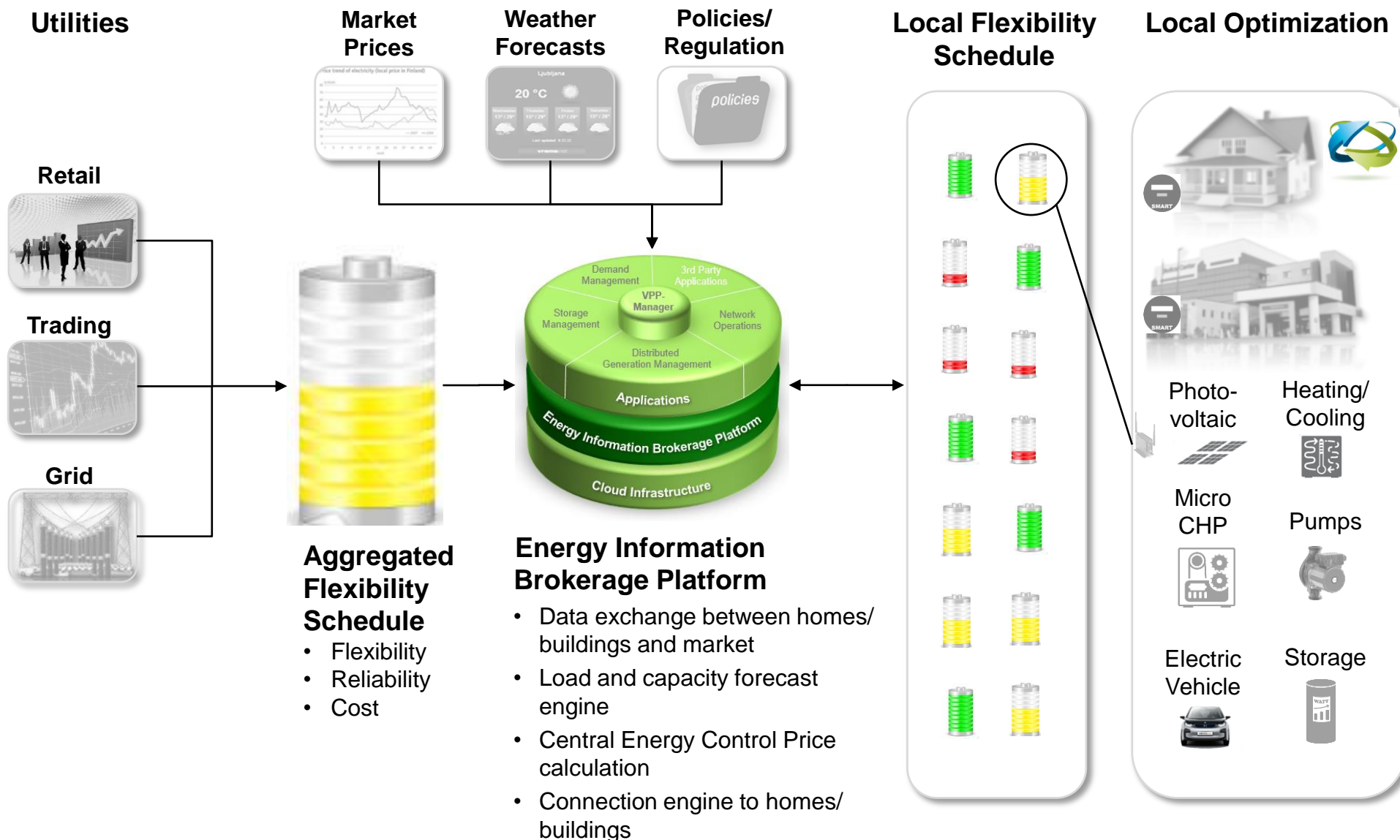


What we Do:

- White-label SaaS platform provisioning
- Enabling management of demand, supply and storage capacity within Virtual Power Plants for utilities and ESCOs
- „Activating“ utilities' and ESCO's customers through „Customer Engagement“ applications
- Enabling business models of the future for our utility and ESCO customers



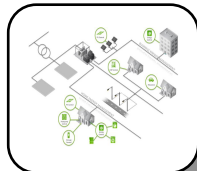
The Principle



Objectives

- Provide access to flexibility for retailers and aggregators to unleash value from their customer base
- Enable retailers and aggregators to manage millions of devices within a virtual power plant

Target Customers: Retailers, Traders and Aggregators



Key Features

Scalability

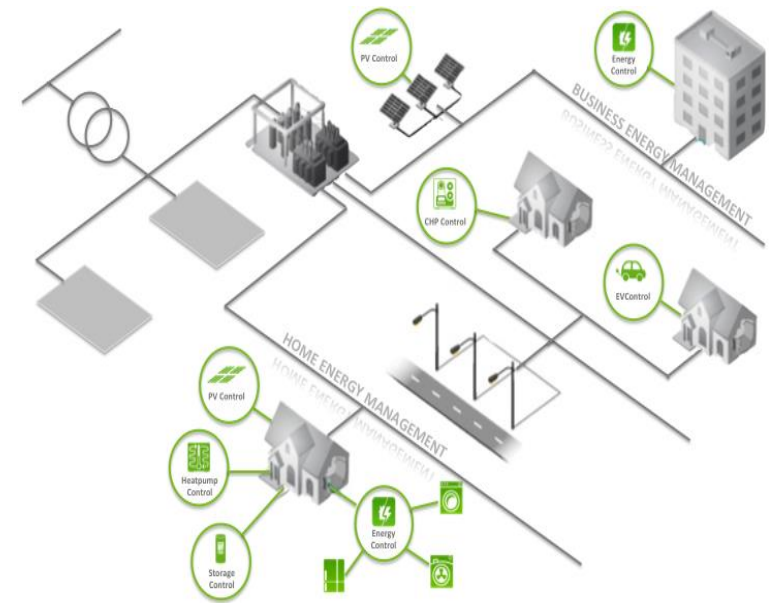
- Integration and automated management of millions of end devices
- High-performance analytics and forecasting of available flexibility from distributed generators, consuming and storage devices

Optimization Engine

- Optimized scheduling of load and distributed generation capacity
- Self-learning algorithms to forecast and continuously optimize device usage

Integration Capabilities

- Integration with existing trading systems for reserve capacity and spot market trading
- Integration with existing distribution management systems
- Interfacing with external data sources for weather and market data





Residential Customers

Heat Pump



1-10 kW

Electrical Water Heating



9-30 kW

Storage Heater



5-10 kW

Electrical Floor Heating



1-5 kW

Air conditioning



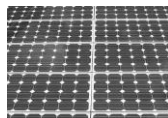
1-3 kW

Pool Pump



9-30 kW

Photovoltaic



1-10 kW

Micro CHP



1-10 kW

Stationary Storage



5-25 kWh

Electric Vehicle



20-80 kWh



Commercial Customers

Heat Pump



5-2,000 kW

Air-cooler



5-2,000 kW

Production Processes



5-15 kW

Air conditioning



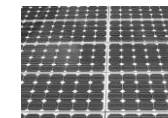
5-20 kW

Circulation Pumps



9-30 kW

Photovoltaic



10-1.000 kW

Mini CHP



10-100 kW

Stationary Storage



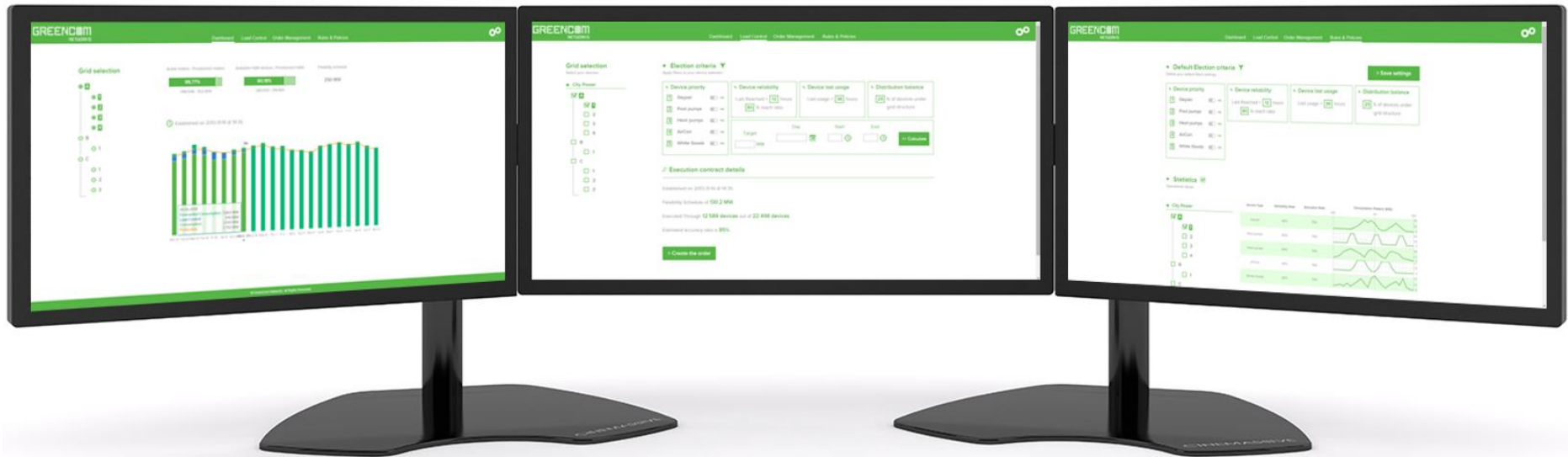
30-100 kWh

Electric Vehicle

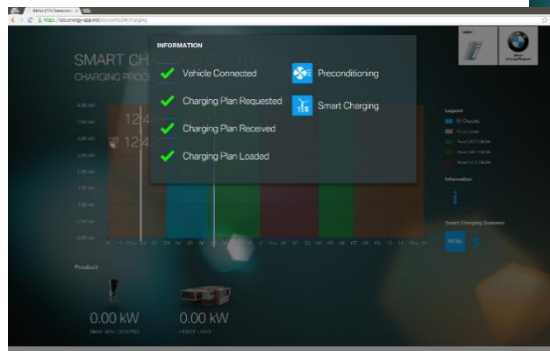
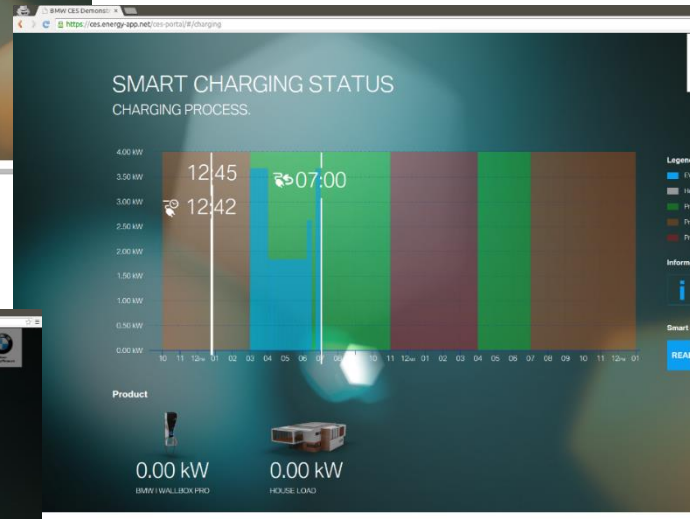
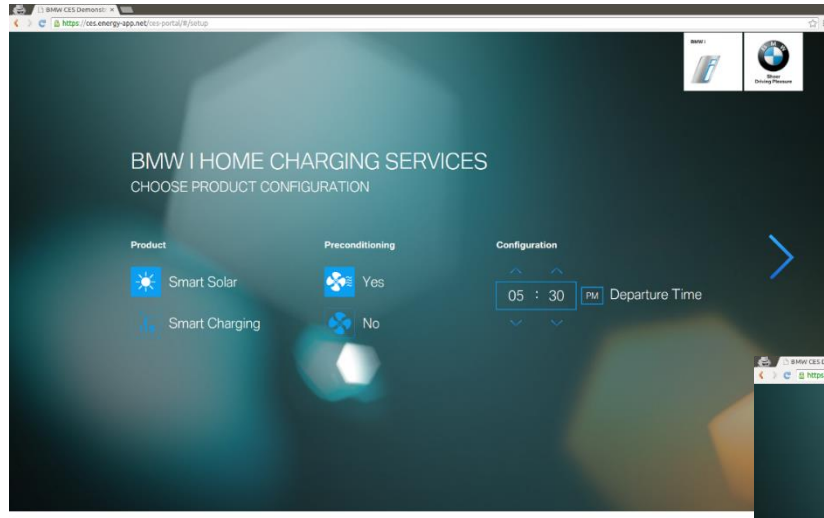


20-80 kWh

Example VPP-Manager South Africa – 250,000 homes and 20,000 office building will be connected



Example Management of electric vehicles - E-Mobility Solution Example BMW



Scalability requires performing management tools - Network Operations



◀ Back to search ↻ Refresh

Map

- ▼ P 5fb8fe77-686b-444b-8ff3-bf465412b217
 - ▼ D consumption
 - E energy
 - ▼ D feed-in
 - E energy
 - ▼ D forecast.consumption
 - E energy
 - ▼ D forecast.production.pv
 - E energy
 - ▼ D grid-supply
 - E energy
 - ▼ D production
 - E energy

System properties

Key	Value
created	
deviceId	consumption
firstUpdate	2014-06-27T13:30:00.000Z
lastActivity	2015-02-17T15:31:07.695Z
lastPreProcessedValue	806.7321251
lastUpdate	2015-02-17T15:30:00.000Z
lastValue	806.7321251
postProcessing	SUM
noDrivacell	ARCOLITE

Provider 5fb8fe77-686b-444b-8ff3-bf465412b217

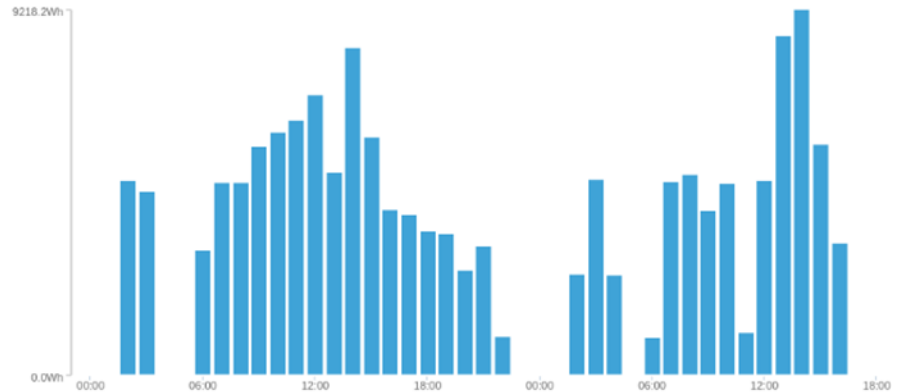
[Endpoint] 5fb8fe77-686b-444b-8ff3-bf465412b217 » consumption » energy

Delete JSON Add datapoint Delete datapoints

Prettypoints

From: 2015-02-16 To: 2015-02-17

RAW 1mn 2mn 5mn 10mn 15mn 30mn 1h 24h Week Month Year



The last 10 datapoints received

timestamp	value
2015-02-17T15:30:00.000Z	806.7321251
2015-02-17T15:15:00.000Z	1961.6687040

View points

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