

### Agile strategies for optimized grid operation in a consumer-centric energy world





Agility is the ability to adjust rapidly to changing market conditions, capitalize on emergent business opportunities, and reduce costs or increase revenue streams in the process. In the wake of decarbonization, decentralization, and digitalization, it is the basis for grid operators' and utilities' future business success.

The Siemens booth at EUW 2018 presents combined solutions for electrification, automation, and digitalization that pave the way for multilayered, distributed, and connected grids, this way enabling the required degree of agility.

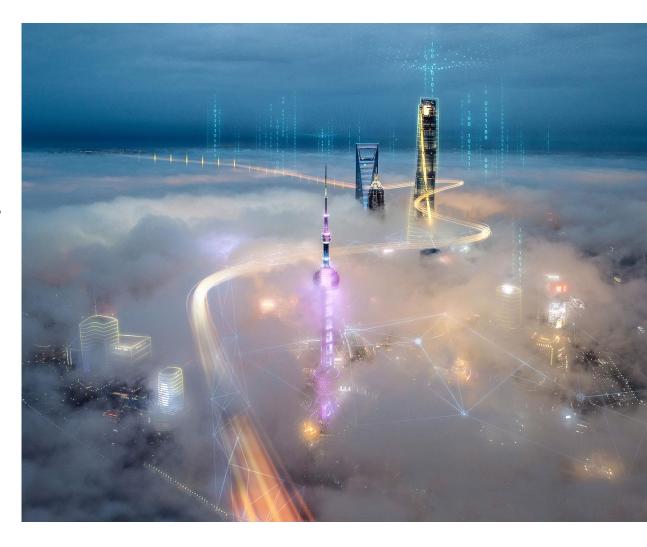
# Find the answer in Vienna

#### Siemens highlight: Internet of Energy – Powered by MindSphere

SIEMENS
Ingenuity for life

- See how Siemens' comprehensive range of software and digital services help monetize the revolutionary impact of the Internet of Things. It covers a broad range of use cases and application scenarios and enables agile development and fast time to market for innovative services.
- Discover new levels of efficiency in utility operations through use cases that cover applications such as meter data management, asset condition monitoring, and power quality.
- Learn how open interfaces and encrypted data communication enable the development of customized applications and make it possible to quickly and safely connect equipment to the digital world.

www.siemens.com/mindsphere-applicationcenter/energy-management

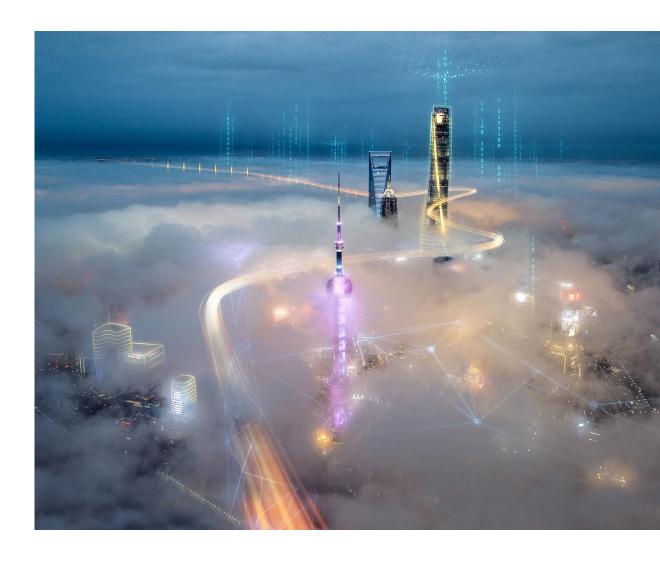


#### Siemens highlight: Electrical digital twin

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Ingenuity for life

- Learn how digital twins for single products and entire utility IT systems help efficiently optimize planning and operations for increased power quality, supply security, and grid resilience at minimal cost.
- See how Siemens' vendor-neutral, standardsbased digital twins create a single source of truth for model data across an entire utility IT landscape and put an end to data silos that are difficult to handle and compromise system performance.
- Discover how it becomes possible to determine real-time performance, operating conditions, and changes throughout the product life cycle using sensor data, simulation, and analytics.

www.siemens.com/electrical-digital-twin



#### Siemens highlight: Substations with the future built in

SIEMENS
Ingenuity for life

- Discover the meaning of the claim that digital substations from Siemens come with the future built in and how Siemens products and solutions support the entire life cycle from forward planning to optimized operation and improved service.
- See how the heart of the power supply system can be efficiently automated, monitored, and protected using digital technology and, on top of that, be turned into the heart of energy data communication as well.
- Learn how substations with the future built in help increase business agility and operational efficiency while, at the same time, bolstering grid availability and reliability and optimizing the management of investments throughout the entire life cycle.

www.siemens.com/digital-substation



#### Siemens highlight: Local rebalancing

SIEMENS
Ingenuity for life

- Learn why intelligent, automated management and control mechanisms as well as reliable load and generation forecasts are essential for distribution grids in highly decentralized energy infrastructures that are increasingly challenged by infeed from intermittent renewable sources.
- Discover Siemens' scalable systems for the automation, display, and control of all elements in power grids.
- Get an overview of innovative solutions for the management of demand response and virtual power plants as well as trendsetting energy storage solutions that help balance generation and load.

https://www.siemens.com/global/en/home/products/energy/topics/agility-in-energy.html



## Products and solutions on display in Vienna Highlight topics



#### **IoE – powered by MindSphere**

- EnergyIP Analytics
- Energy IP Distributed Energy Optimization
- Energy IP Substation Device Management
- SIPROTEC and SICAM connectivity
- Distribution grid analytics
- Shaping digitalization together -MindSphere Application Center
- From metering to IOT utilizing a common platform and data model (Omnetric)
- IT/OT integration (Omnetric)
- Integration services and innovative solution with MindSphere (Omnetric)

#### Substations with future built in

- SICAM Grid Pass
- Process bus solution with SIPROTEC 5
- SICAM A8000 series
- Distribution grid control distribution automation box
- SGW1050 substation IoE gateway
- RUGGEDCOM, focus on RSG908C, RSG910C, RST2228, RST2228P

#### Local rebalancing

- Intelligent grid automation, Self-optimizing Grid
- Energy IP Demand Response & VPP
- Distributed energy systems and Energy configurator
- Fluence storage solutions
- Buildings as part of the grid

#### **Digital twin**

- Grid simulation and planning software
- Streamlined renewables integration analysis using GIS data (with Bentley)

#### Products and solutions on display in Vienna



#### **Intelligent grids**

- Spectrum Power ADMS with ANM
- Energy IP LV OMS
- Microgrid solutions
- End-to-end solutions for eMobility charging infrastructure
- Medium-voltage switchgear showcase 8DAB
- Sensformer® born connected
- Interactive transformer model
- SIEAERO OHL inspection
- Digitalized asset management
- MVDC and mobile STATCOM
- Frequency and voltage support for dynamic grid stability – SVC PLUS
- Grid integration of PV

#### Metering operations to billing

- Meter-to-cash as a service
- Metering Operation Center
- Energy IP Meter Data Management
- Energy IP Prepay

#### **Additional topics**

- Enter the network of expertise -Siemens Power Academy
- Joining forces for joint success –
   Siemens Partner Management
- R&D project "Smart City Aspern"



# More information about EUW 2018: www.siemens.com/euw

All documents, press pictures and further material: <a href="https://www.siemens.com/press/EUW2018">www.siemens.com/press/EUW2018</a>

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