# Schneider Electric's EcoStruxure: welcome to the future !

A new level of optimization with IoT & Industry 4.0

#### Razvan COPOIU South & Eastern Europe Vice President

International Electric and Automation Show, Bucuresti

19-22<sup>nd</sup> of September 2017 Confidential Property of Schneider Electric



**Megatrends** are provoking a **rise** in Energy Demand

#### URBANIZATION

#### people in cities by 2050

Source: United Nations, DESA

DIGITIZATION 50B

connected things by 2020

Source: Cisco

#### INDUSTRIALIZATIO

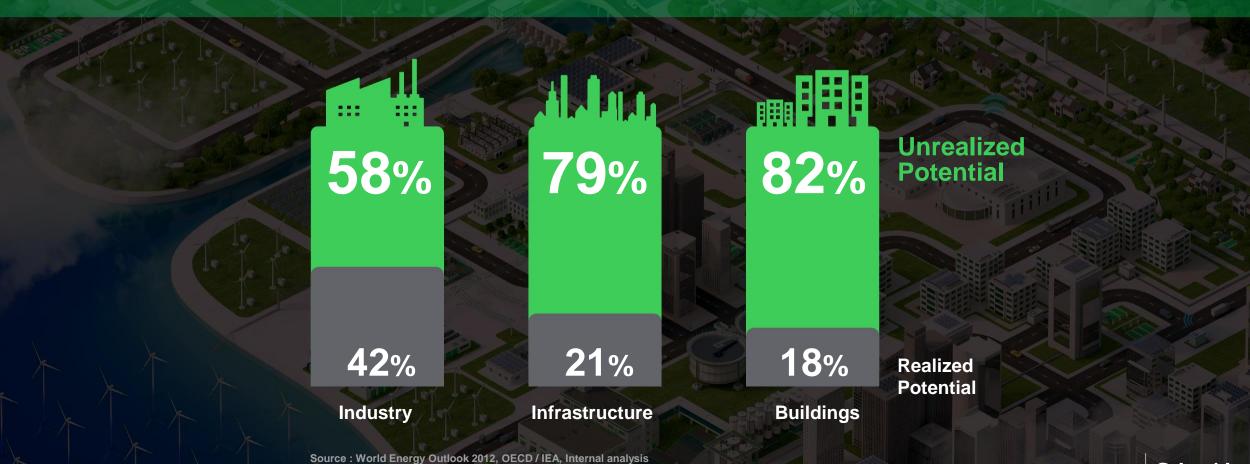


Energy consumption by 2050

Source: IEA



#### We have massive untapped efficiency potential



Life Is On Schneider

#### Schneider Electric the Global Specialist in Energy Management and Automation

# €24.7Bn

FY 2016 revenues

# ~ 5%

of revenues devoted to R&D

people in 100+ countries

**KAOK** 

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We see the Industrial Internet of Things / Industry 4.0 as an "evolution" not a "revolution"

And we have the full end to end & complete solutions for Automation & Control Systems













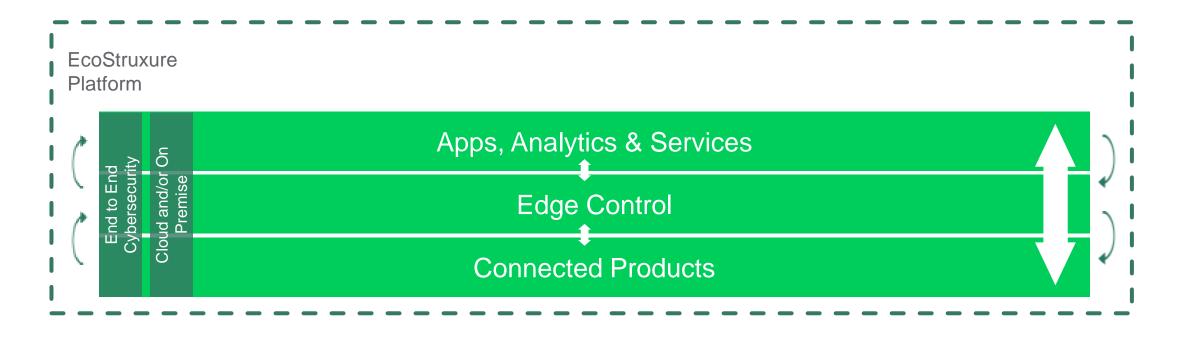
### What has changed - Industry 4.0



Pervasive and Affordable Communication Rich UI Recognition of Operator Massive Aggregation of Data Stakeholder sharing Concentration of Specialist New functionalities Artificial Intelligence optimizing performance at all levels



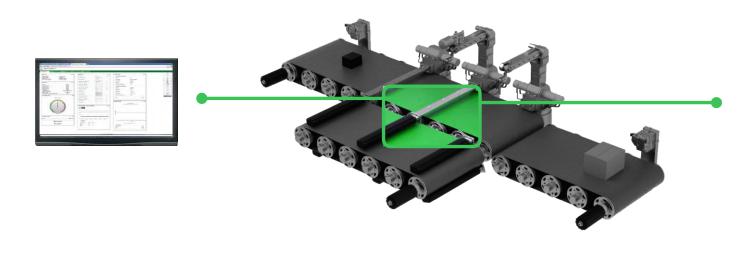






## Innovation at Every Level: Connected Products

Improved Asset Performance With Altivar Process



The first range of services oriented drive

### A range of variable speed drives for smart machines

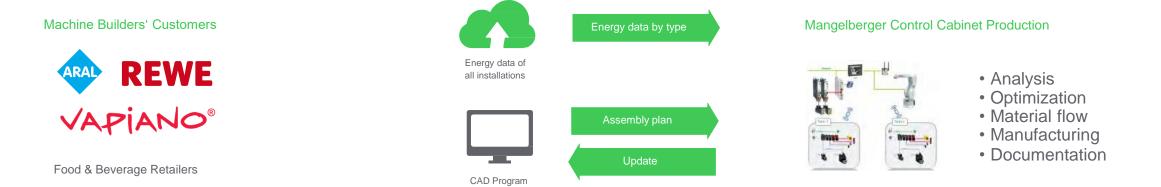


Achieve Maximum Flexibility Extended Machine Availability Full Connectivity & Integration



## Innovation at Every Level: Edge control

Smart Machines that Optimize design and production with insights from End User Energy data



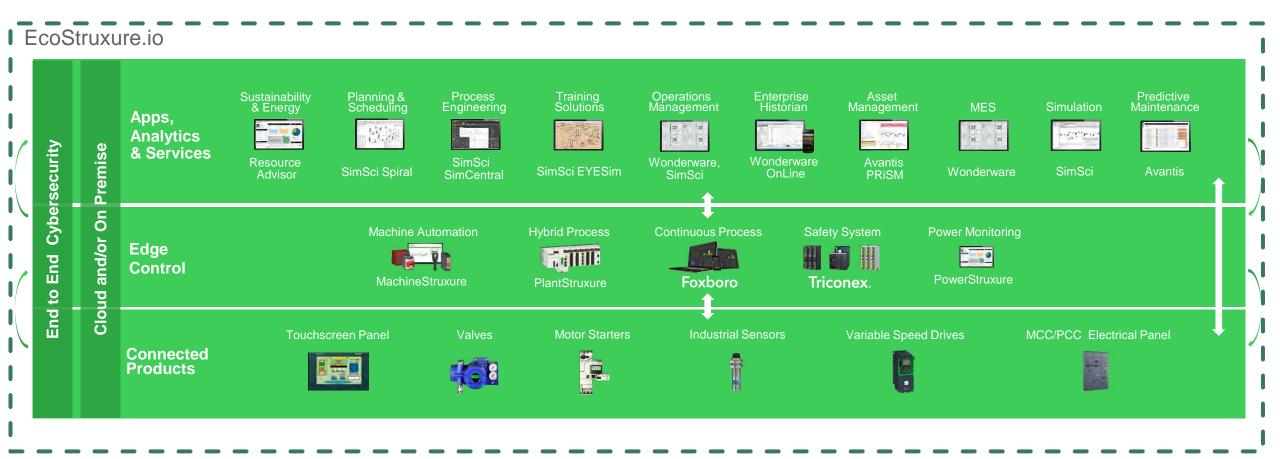




## **Innovation at Every Level: Apps and Analytics** Augmented Operators with increased efficiency, error free operations and greater autonomy









#### Cities need to leverage technology to be more attractive and competitive for employers and citizens



#### Cities face many challenges



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Mobility

Efficiency

Sustainability

Resiliency

Reliability

The 5 major imperatives for smart cities

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# MOBILITY



#### IoT-enabled solutions drive Mobility & Situational Awareness



"The ability for our engineers and operators to use tablets and smart phones for controlling city services has greatly increased situational awareness and allowed us to become more efficient."

Darren Schulz, Deputy Public Works Director Carson City, Nevada

WonderWare™ In Touch™, Historian, SmartGlance™





# EFFICIENCY



#### IoT-enabled solutions drive Building efficiency



## Moorfields Eye Hospital NHS

"We adopted new technologies to integrate legacy systems across the facility and provide one interface to the facility management team, allowing them to monitor and control the infrastructure throughout the hospital."

Chris Harding, Director of Estates and Facilities, Moorfields Eye Hospital



# SUSTAINABILITY

#### IoT-enabled solutions drive Water network optimization



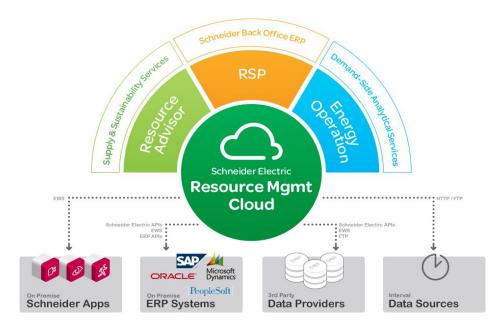
Wireless leak detection sensors feed an Integrated Leak Detection Management System

"Telemetry is incredibly important to us. We've got a very large geographical area...and several thousands assets spread across that and we have to monitor them and to make sure they are working and working effectively"

Chris Boucher, Director of Information Services, Anglian Water



#### IoT-enabled solutions drive Sustainability strategy



"We looked for a way to effectively track our energy use, greenhouse gas emissions, and related conservation projects."

Mayor Thomas M. Menino, Boston, Massachusetts, September 2013



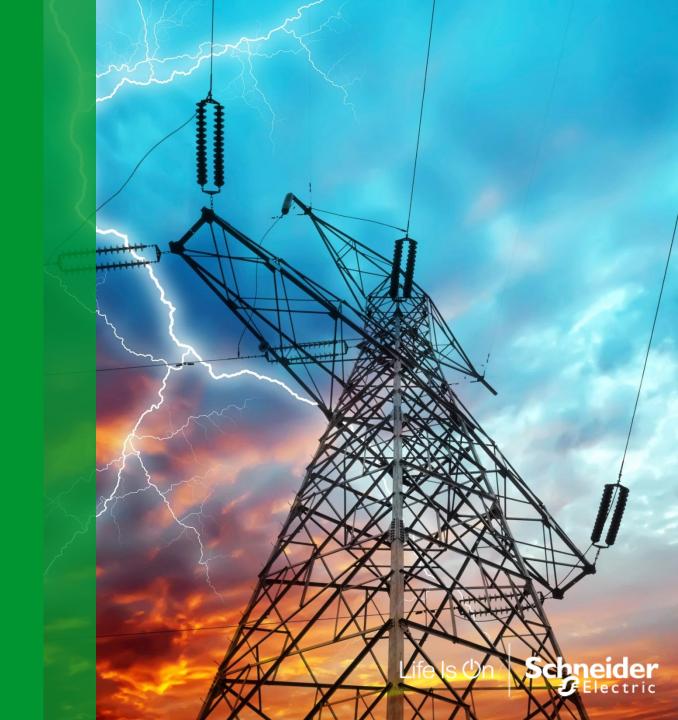


#### IoT-enabled solutions speed recovery from natural disasters



"Fairfield's microgrid project is an example of how a municipality can help protect public safety and minimize hardships to their residents and businesses during power outages."

Katie Dykes, Deputy Commissioner Connecticut Department of Energy and Environmental Protection



# REIABLITY



#### IoT-enabled solutions drive safer and more reliable airport operations



"The centralization of operations that we get with Wonderware helps manage around 700,000 signals and is essential for a critical infrastructure like this. We can now quickly respond to incidents and also be proactive in optimizing management."

Jordi Asensi, Head of Systems and Database Management AENA Barcelona Airport



# **EVlink**

### **by Schneider Electric**





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#### **EVlink Parking**



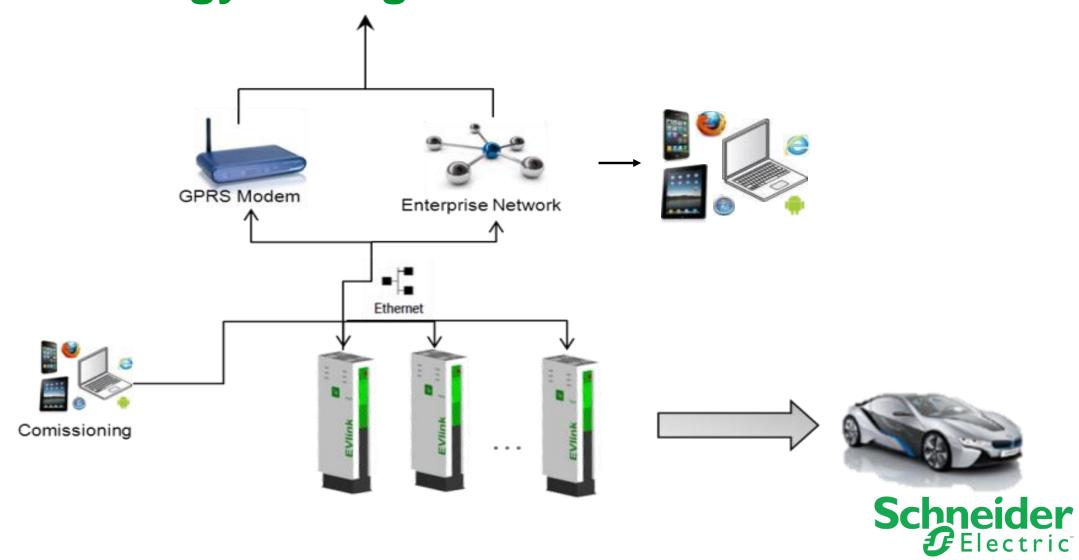
### EVlink product portfolio

Overview



\* Not a Schneider Electric product, partnership for Fast Chargers

## **EVlink Energy Management**





# SCHNEIDER INNOVATION AT EVERY LEVEL





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