



European Union Energy Day

Clean energy solutions for the buildings
of the future

Astana EXPO, 24 July 2017

#EUenergyday



Euenergyday.eu





Clean Energy Solutions for Cities

Smart Cities Infrastructure

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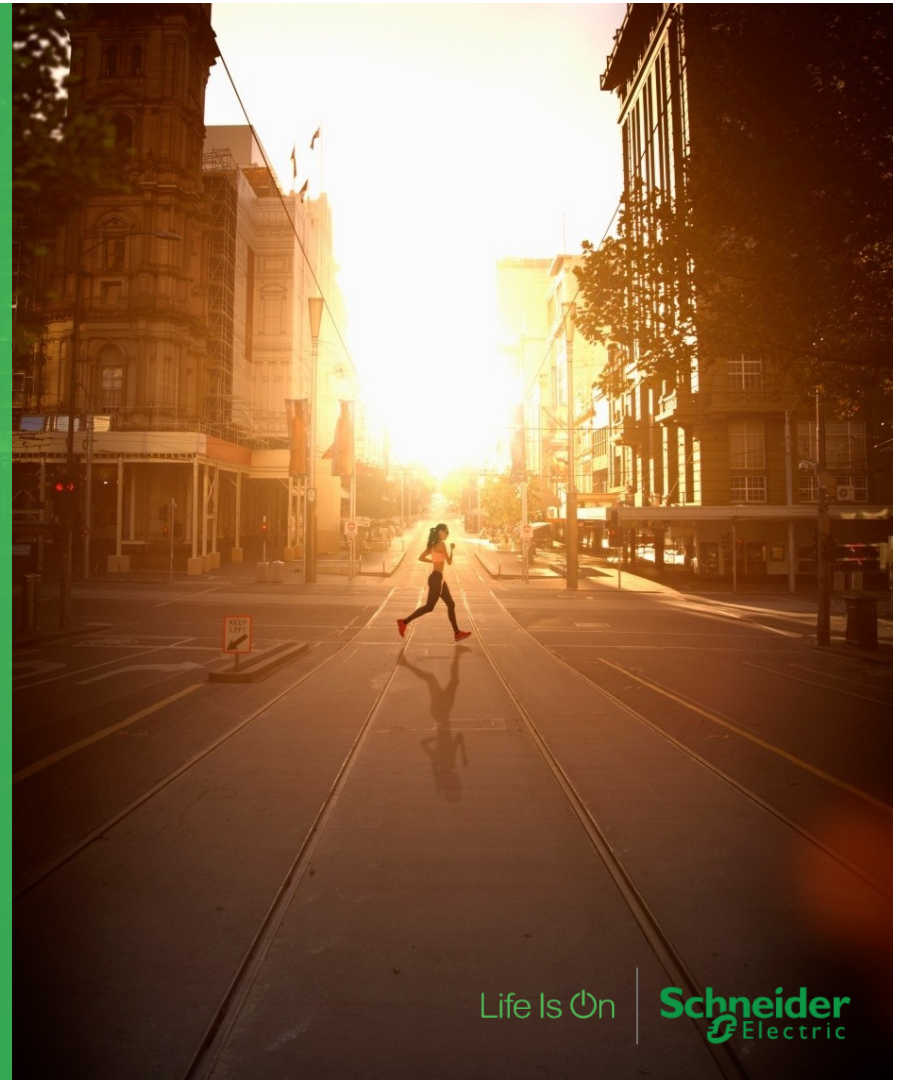
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European Union Energy Day
Clean energy solutions for the buildings of the future

[#EUenergyday](https://twitter.com/EUenergyday)

**We believe every citizen
deserves a city that is:**

**Efficient
Sustainable
Resilient**



Life Is On

Schneider
Electric

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



Life Is On

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Cities face many challenges

Stress

Infrastructure

Cost

Environment

Competitiveness

Citizen Expectations

Improving infrastructure allows cities to drive their *unique* agenda

Boost competitiveness

Creating jobs

Increasing attractiveness for residents, citizens, and visitors

Making the city efficient, sustainable & resilient



Improving efficiency of underlying urban infrastructure

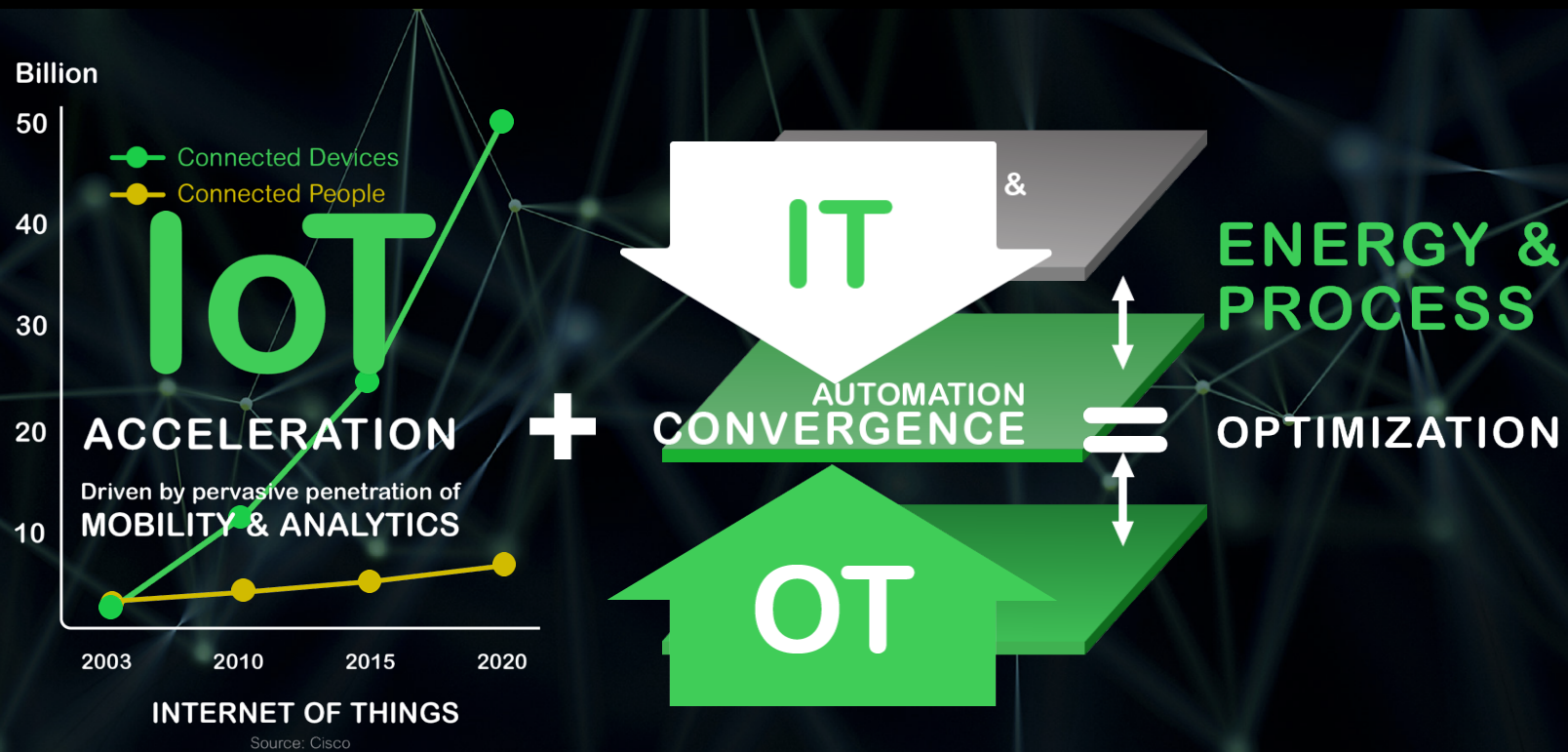
Improving public services (schools, safety, transportation)

Providing new, innovative services

Life Is On

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Efficiency gains will come from IT/OT convergence





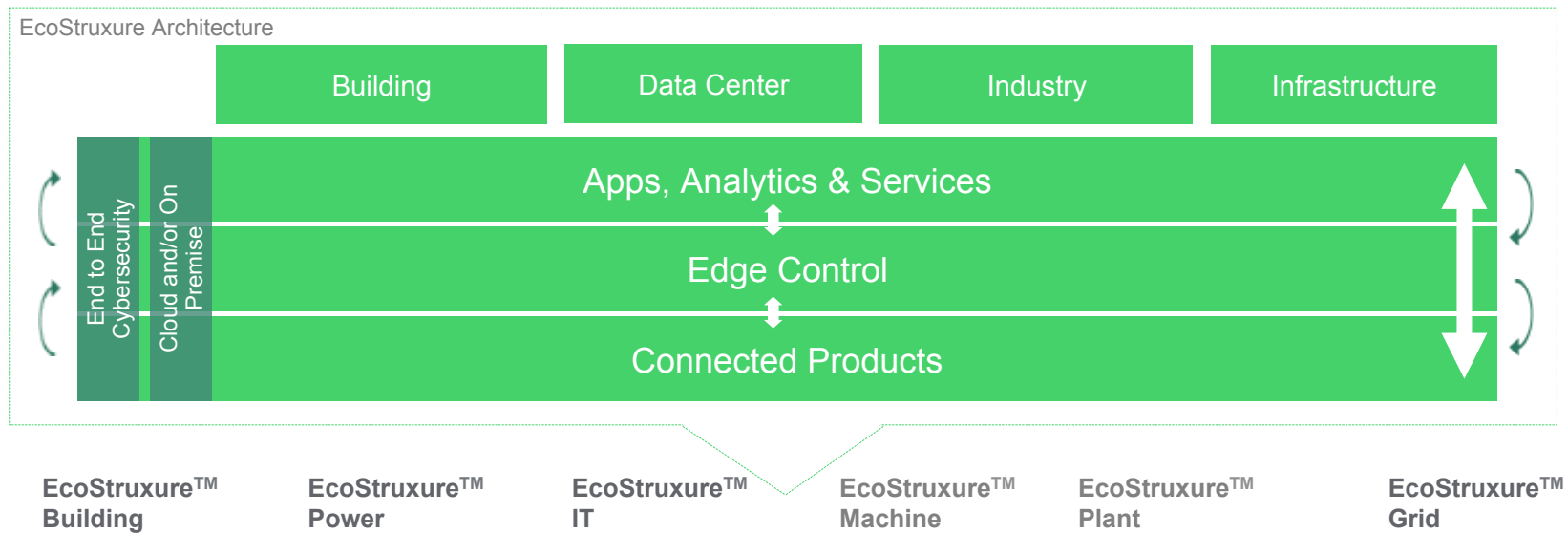
At Schneider Electric

We help cities strategically approach infrastructure technology to improve efficiency, sustainability, and resilience.

Life Is On



One EcoStruxure architecture, serving 4 End Markets with 6 Domains of Expertise





Smart Integration

Energy and Sustainability Management
City-wide Infrastructure Automation
Weather Forecasts



Smart Cities Infrastructure Solutions



Smart Energy

Ports
Electric Utilities
Gas Utilities
Prosumers



Smart Water

Water Utilities
Parks and Gardens



Smart Built Environment

Tech Parks
Offices
Data Centers
Homes
Hospitals
Schools
Airports
Hotels
Shopping Malls
Stadiums
Railway Stations
Tunnels

From downtown to suburb, we deliver urban efficiency today

Smart Integration

- Energy and Sustainability Management
- City-wide Infrastructure Automation
- Weather Forecasts

Smart Energy

- Ports
- Electric Utilities
- Gas Utilities
- Prosumers

Smart Water

- Water Utilities
- Parks and Gardens

Smart Built Environment

- Tech Parks
- Offices
- Data Centers
- Homes
- Hospitals
- Schools
- Airports
- Hotels
- Shopping Malls
- Stadiums
- Railway Stations
- Tunnels



We help cities strategically approach infrastructure technology to improve efficiency, sustainability, and resilience.



Achieve up to 30% efficiency savings of the city's underlying urban infrastructures

- Better information sharing across departments
- Increased control over city systems and connected devices
- Reduced incidents, outages & losses



Build a sustainable future by reducing environmental impact

- Increased attractiveness for business and resident growth
- Reduced carbon emissions & energy consumption
- Operational cost savings



Boost resilience to respond to operational disruptions or natural events

- Enhanced ability to respond to disruptions
- Improved agility to flex with citizen needs and city priorities
- Increased global competitiveness

Improve cities' efficiency, sustainability, and resiliency



Smart Integration



Smart Energy



Smart Water



Smart Built Environment

Smart Integration

We help cities achieve comprehensive situational awareness, integrated management of operations across every domain, and clear visibility of results.

Smart Energy

We enable cities to integrate renewables and optimize their production and consumption of energy.

Smart Water

We implement smart water networks to improve the efficiency, longevity, and reliability of the water infrastructure.

Smart Built Environment

We help cities achieve maximum energy savings through building and home efficiencies in addition to improving usage visibility.

Schneider Electric Smart City solutions address today's challenges:

- Urban population growth
- Ensuring sustainable living conditions
- Interconnecting of data and city systems
- Managing CO₂ emissions and environmental impact
- Financial restraints and complexity

Urban efficiency is a journey to excellence. We collaborate with:

- City government as the leader
- Citizens at the center
- Technology as an enabler
- Businesses as a partner

A proven expert in city efficiency, with thousands of projects in 250+ cities worldwide.

“What the partnership with Schneider Electric gives us is a level of technology and expertise that you just can't get off the street. The value of that partnership along with the savings from energy management is far above my expectations.”

- Jeff Guy, Chief Financial and Administrative Officer, Dallas Museum of Art



Carson City, Nevada

Integrated municipal infrastructure for improved city services

Customer Challenge

- Deliver affordable and reliable transportation, power, water, and wastewater services
- Reduce administration and overhead costs
- Increase the city's operations reliability and disaster recovery processes

The Solution

- Wonderware® System Platform
- Wonderware InTouch® HMI
- Wonderware® Historian
- Wonderware® SmartGlance™

Customer Benefits

- Reduction in operations staff hours
- Shorter work week
- Management of city's solar plants and water/wastewater facilities

The Results : Life is On with...

15%

reduction in operations staff hours

Leveraging the latest virtualization technologies, including iPads and smart phones, to achieve a high level of operational readiness



- increase operational and management efficiency
- increase situational awareness

“What we’ve created here is a smarter Carson City.

One with a complete solution that involves the Wonderware System Platform running the Wonderware mobile reporting application with SmartGlance on virtual machines. The solution provides our team with communications over wireless platforms that include both standard and mobile monitoring and control.”

*James Jacklett
Operations Manager, Control System
Carson City Public Works*



Anglian Water, UK

Water Loss Solution detects leaks for system reliability and operational efficiency

Customer Challenge

- Maintain position as leading innovator in leakage control and water resource protection
- Detect leaks quicker and improve response times
- Reduce the cost of outsourced leak detection
- Regulatory compliance
- Reduce the cost of ownership

The Solution

- Water Management Suite
- Struxureware™ SCADA Expert ClearSCADA

Customer Benefits

- Improved decision-making
- Improved water loss management
- More efficient and effective operations

The Results : Life is On with...

500,000

connected telemetry data points

25 years of data to inform decision-making



Struxureware SCADA Expert ClearSCADA



Water Management Suite

“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
Dir. of Information Services, Anglian Water



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thousands of projects in **250+** cities worldwide
use products and solutions from Schneider Electric

Life Is On

