DIGITAL
Power Distribution Redefined
Life Is On
Schneider Electric

ECOSTRUXURE
A new world of Energy is emerging
All Electric, All Renewable
Life Is On
Schneider Electric

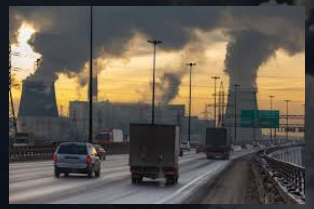
… reducing carbon intensity and driving efficiency gains

Our legacy energy system

Power Generation

~60% losses

Combustion Motors



~70% losses

~70,000TWh **waste =** 60%

of total primary energy*

÷ 2

A new energy world

\+ **No** losses

~15% losses

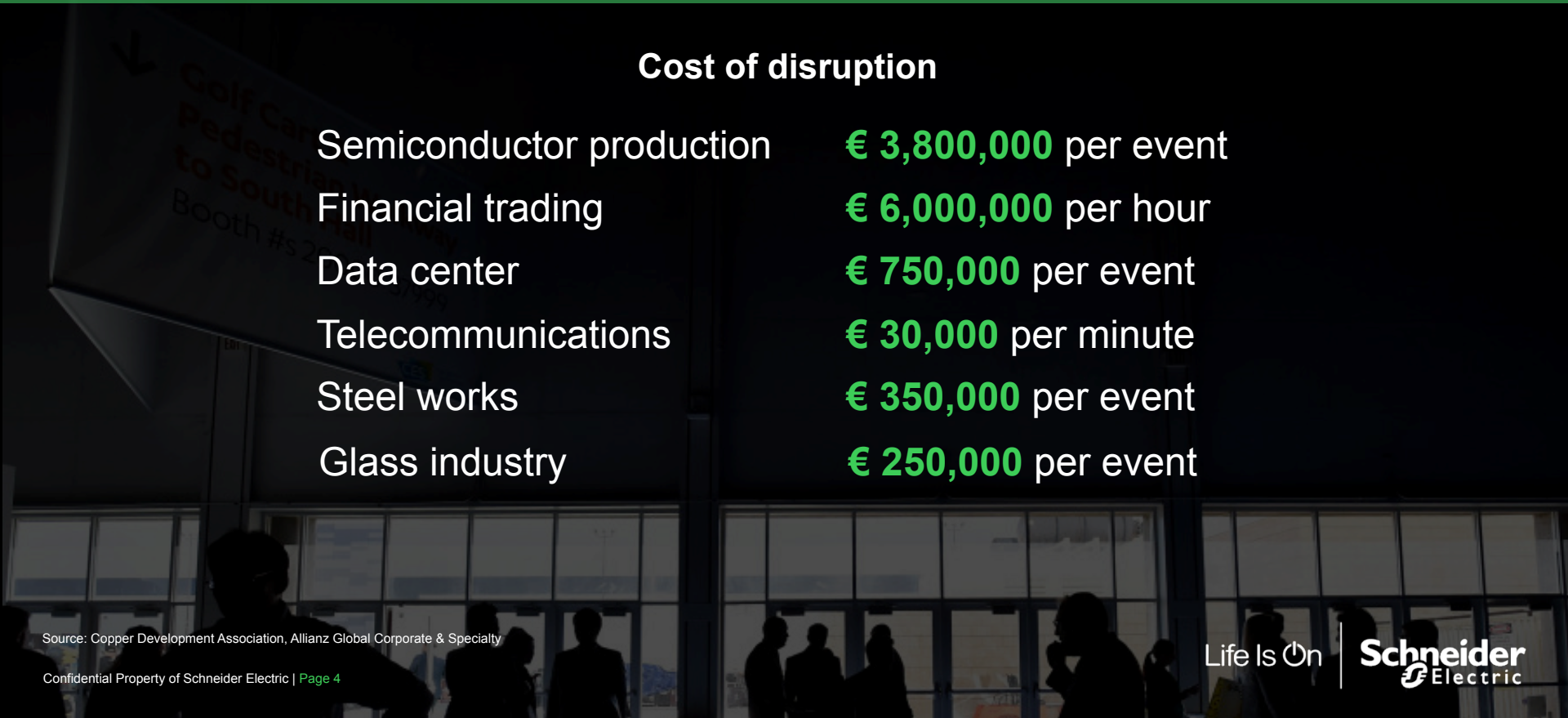
~25,000TWh **waste =** 30%

of total primary energy*

* Schneider Electric estimate, based on technical potential

Life Is On Schneider Electric

Leading to 100% electric power uptime requirements



Cost of disruption

Semiconductor production	**€ 3,800,000** per event
Financial trading	**€ 6,000,000** per hour
Data center	**€ 750,000** per event
Telecommunications	**€ 30,000** per minute
Steel works	**€ 350,000** per event
Glass industry	**€ 250,000** per event

Source: Copper Development Association, Allianz Global Corporate & Specialty

Life Is On Schneider Electric

Leading to unprecedented change in operational complexity

Decentralized Power Capacity

Up to **45%**

(Australia, by 2040)

Source: Bloomberg New Energy Finance; New Energy Outlook 2017.
Note: Decentralization ratio is the ratio of behind-the-meter (small scale renewable, storage & demand response) capacity to total installed capacity.

Exponential Digital Growth

2017 → 2021

1.1 → **3.3**

Zetabyte per year → **Zetabyte** per year

Source: Cisco White Paper: The Zettabyte Era, June 2017

Life Is On | Schneider Electric

Leading to a massive need for competencies at scale

50%

of construction cost is engineering

1:5

Capex:Opex ratio over building lifecycle

Opportunities observed last 5 years track record with our customers*

Engineering work optimization 35%

Commissioning costs optimization 29%

Energy Efficiency 30%

Asset utilization 22%

* Average values

Life Is On Schneider Electric

Life Is On Schneider Electric

Our practical answer

Power Distribution's Digital Backbone

Life Is On Schneider Electric

Power Distribution's digital backbone

1

Simplify Complexity

2

Enable An Energy Management Ecosystem

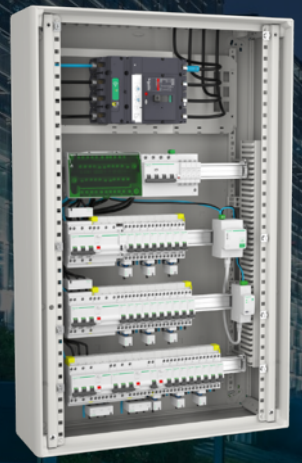
3

Unleash Expertise At Scale

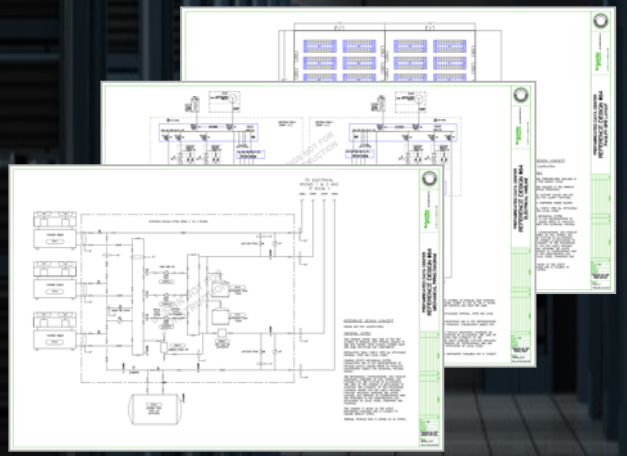
Life Is On Schneider Electric

1 Simplify Complexity

Power Distribution
Simply Integrated And Connected



Reference Architectures
Deep Domain Expertise

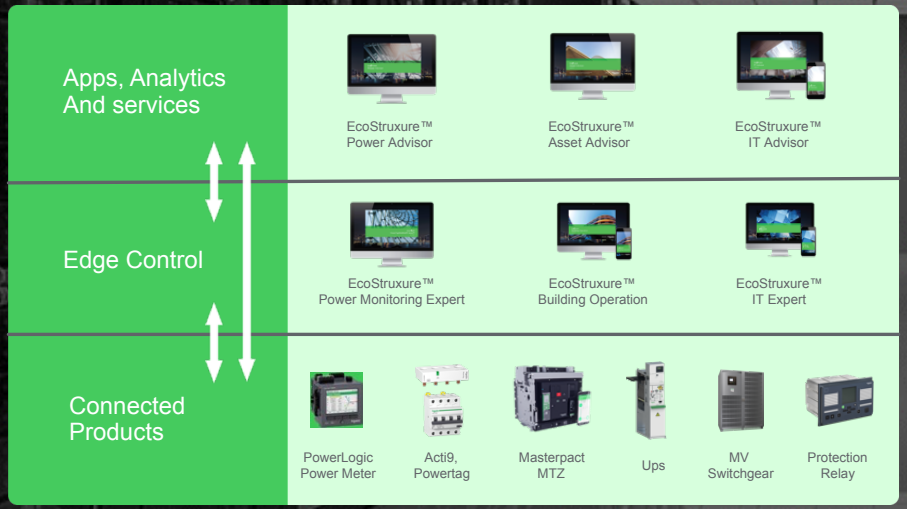


Life Is On | Schneider Electric

interxion™

EcoStruxure™ Innovation At Every Level

for Data Center colocation



99.999% Reliability

Delivered in **2** months (3x faster than usual)

90% energy from renewable sources

"Leveraging our partnership with Schneider Electric we were able to design and deploy a data center in the incredible time period of just two months, surprising a lot of people."

Fabrice Coquio, Managing Director Interxion France

Life Is On Schneider Electric

2 Enable an Energy Management Ecosystem

EcoXpert™

One Program.
One Network.
Endless Opportunities.

3,500 partners

Double-digit
Partner Growth YoY

Collaborative Platform

+650k
registered
partners

Digital Lifecycle Tools

Capex | Opex

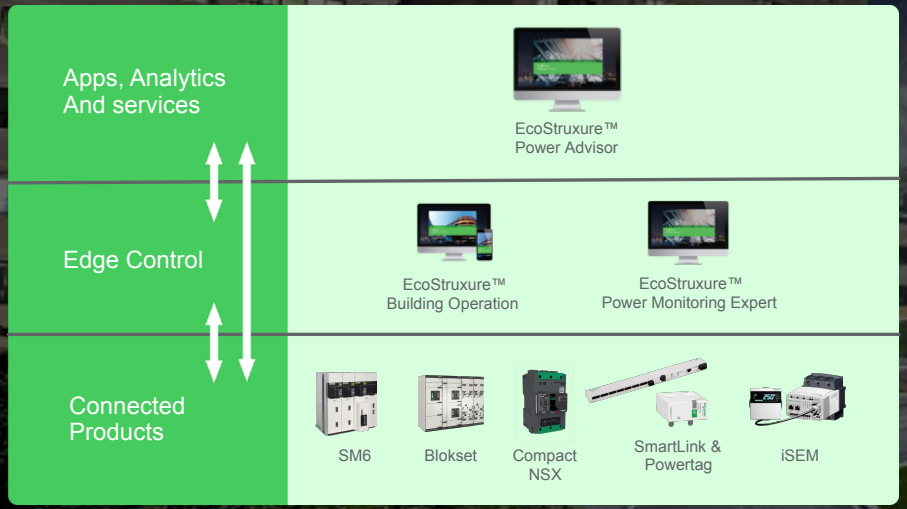
A full suite of **lifecycle tools**

Life Is On | Schneider Electric

DREAMTECH, Korea

EcoStruxure™ Innovation At Every Level

Power



~100 k€

savings per year (Energy & Maintenance)

ROI in **2 years**

"It allows us to integrate disparate systems while reducing energy and maintenance cost. We will soon receive green standard certificate for energy and environmental design"

Dreamtech representative

EcoXpert™ Certified by Schneider Electric

Life Is On Schneider Electric

3 Unleash Expertise at Scale

Powered by **Artificial Intelligence**

Asset Management

~22%

Uptime, Utilization
Asset Performance optimization

Energy Management

~30%

Uptime, Costs
Energy Efficiency on average

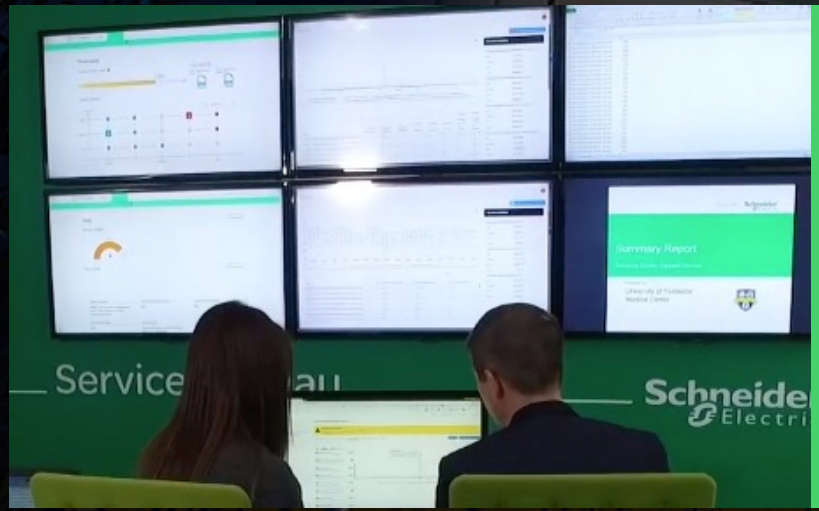
Life Is On Schneider Electric

EcoStruxure Asset Advisor
a predictive eye on critical equipment

EcoStruxure™ Innovation At Every Level

"IKEA Kwangmyong has introduced smart power management services to lower the rate of power failures keeping stores open for business."

IKEA's representative



The Results:
Life Is On with...

Life expectancy of critical power assets extended by

15%

Life Is On Schneider Electric

EcoStruxure Power Advisor
an enquiring eye on the electrical network

EcoStruxure™ Innovation At Every Level

"Power Advisor improves our system performance and reliability by identifying electrical network issues across 600+ meters. Addressing our data quality issues will drive better operational efficiency and more accurate energy management."

Facility Management Mining & Metals Factory, China

The Results:
Life Is On with...

€15M

annual savings

from reduced peak demand and maintenance costs

Life Is On Schneider Electric

EcoStruxure Resource Advisor
a sharp eye on energy

EcoStruxure™
Innovation At Every Level

"The sectors that I tend to serve are the sectors that have the largest environmental footprint. I have to set priorities carefully and Schneider Electric helps me do that."

Don Anderson,
Chief Sustainability Officer, Blackstone Group

The Results:
Life Is On with...

$60M

savings over 4 years
realized for client portfolio

Life Is On Schneider Electric

EcoStruxure™ Innovation At Every Level Power

EcoStruxure™ Architecture

Apps, Analytics & Services

- EcoStruxure Asset Advisor
- EcoStruxure Power Advisor
- EcoStruxure Facility Advisor
- EcoStruxure Resource Advisor

Edge Control

- EcoStruxure Facility Expert
- EcoStruxure Power Monitoring Expert
- EcoStruxure Power SCADA Operation
- EcoStruxure Substation Operation

Connected Products

PowerLogic

Acti9, Powertag (IEC)
Square D QO (NEMA)

Enerlin'X
Com'X

Masterpact MTZ

Smart Panels (IEC)
Smart Systems (NEMA)

Galaxy
UPS

Premset

Easergy P3

SM6

End-to-end Cybersecurity

Cloud and/or On Premise

Life Is On Schneider Electric

EcoStruxure™ Power
Innovation At Every Level

New in 2018

EcoStruxure™ Architecture

Life Is On Schneider Electric

Uniquely positioned with a comprehensive digital power strategy

A new all-electric, all-renewable world driving efficiency

100% electric power uptime

Step change in operational complexity

Challenging competencies & collaboration

1 Simplify Complexity

2 Enable an Energy Management Ecosystem

3 Unleash Expertise at Scale

Life Is On Schneider Electric

Life Is On Schneider Electric

Life Is On
Schneider
Electric