

An aerial night photograph of a city, likely New York City, showing a dense cluster of skyscrapers and a prominent circular plaza with light trails from traffic. The image is used as a background for the presentation slide.

# Sustainability Efficiency Resilience

**Don Wingate**

Vice President – Microgrid Solutions & Strategic Partners

Life Is On

**Schneider**  
Electric

# Schneider Electric provides energy and automation digital solutions for efficiency and sustainability



## Key figures for 2019

**5%** of revenues devoted to R&D

**€27.2 billion**

2019 revenues

**41%**

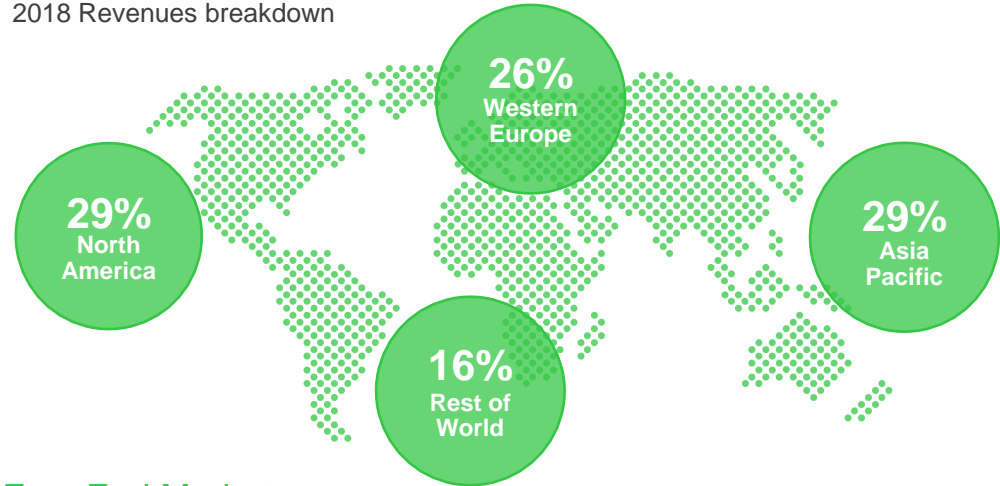
of revenues in new economies

**135,000+**

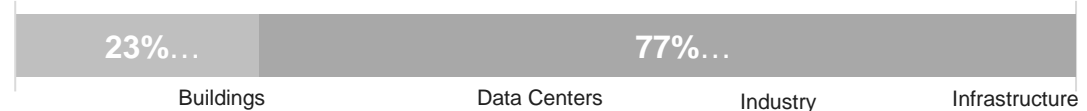
Employees in over 100 countries

## A well-balanced global presence

2018 Revenues breakdown



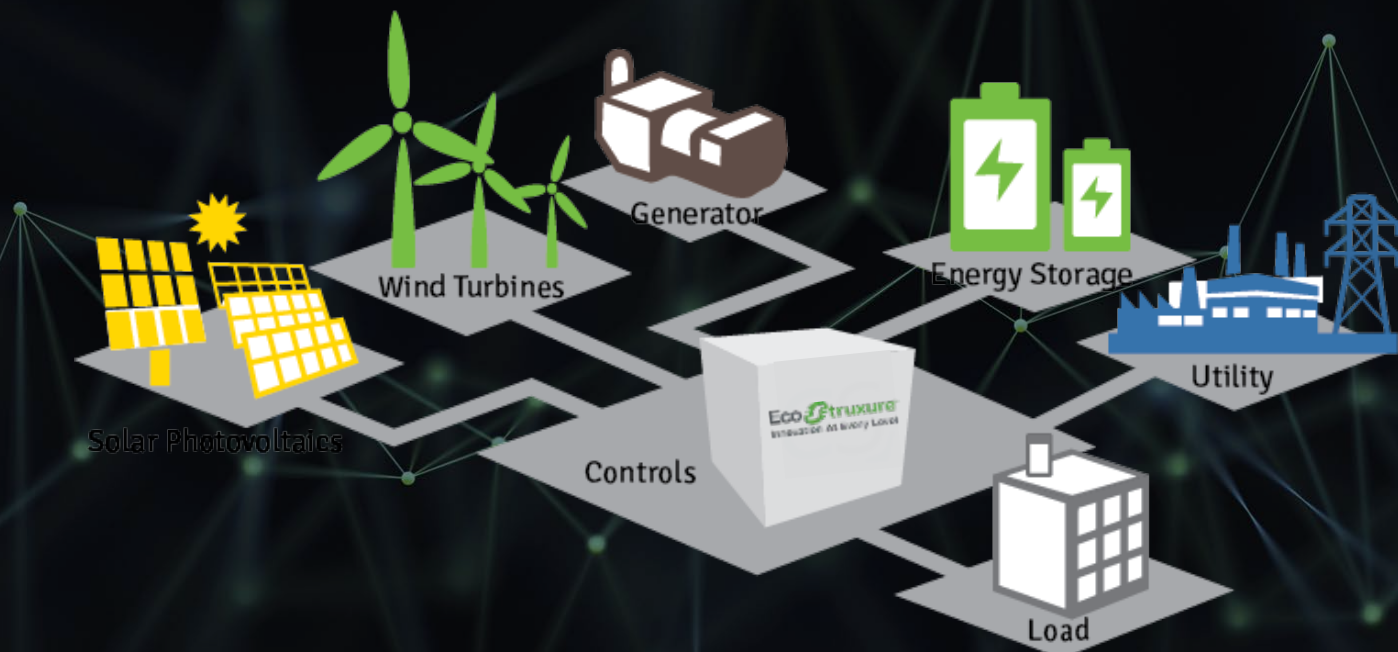
## Four End Markets:





# What is a Microgrid?

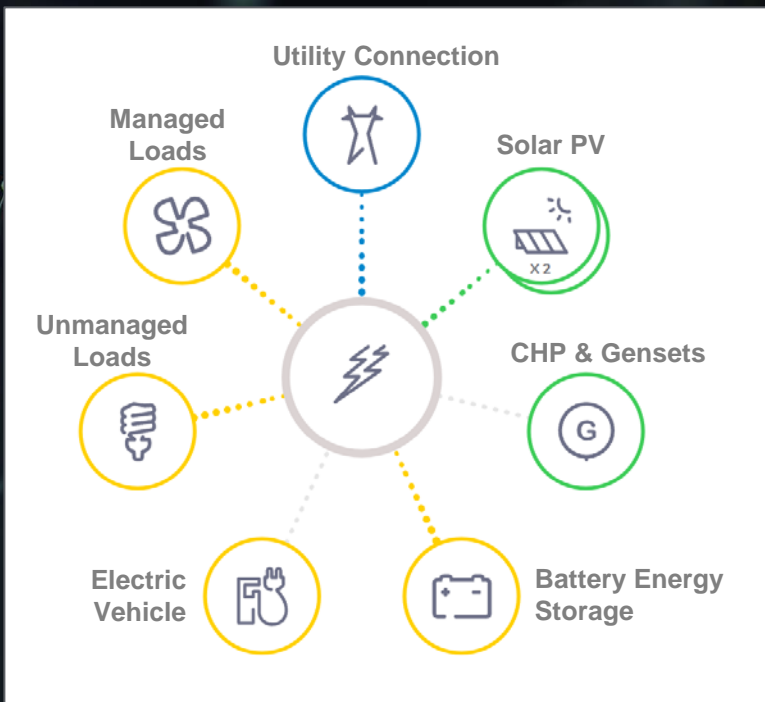
An integrated energy system consisting of interconnected loads and distributed energy resources...



...which as an integrated system can be controlled as a single entity and operate in parallel with the grid or in an intentional islanded mode.

# Microgrids - Solving for Integrated Outcomes

Historically passive consumers are thinking about energy in new ways



## Cost

- Lower / More Predictable Energy Costs
- Energy / Fuel Source Arbitrage
- Flexibility drives savings / incremental revenue



## Resilience

- Serve loads during times of grid stability
- Oasis for employees / customers – shelter in place
- Protect power sensitive / critical assets from poor power quality



## Sustainability

- Reduce carbon footprint
- Improve brand image
- Attract / Service carbon sensitive customers



Energy as a Service: reliable, efficient, clean energy  
Public/Private Partnership Model

# Sustainability & Resilience

# Key technology considerations for microgrid

## Integration



Architectures and systems that ease integration of energy assets



*Energy Control Center*

## Resilience



Edge automation that makes microgrids more resilient than the grid

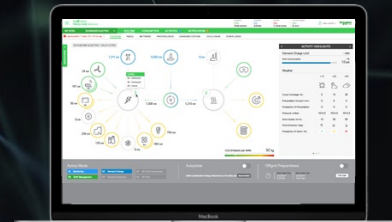


*EcoStruxure Microgrid Operation*

## Orchestration / Analytics



Best-in-class algorithms that make the most of local energy assets

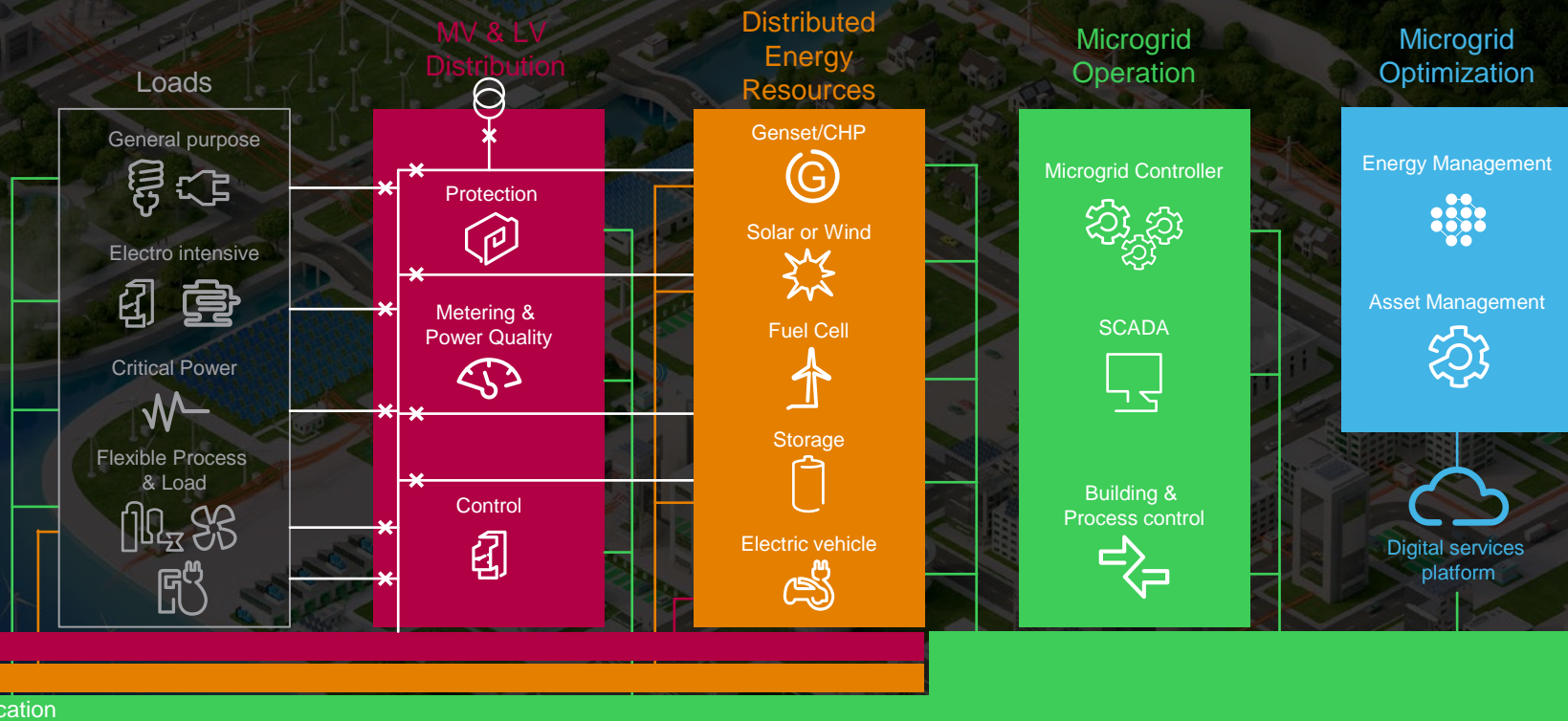


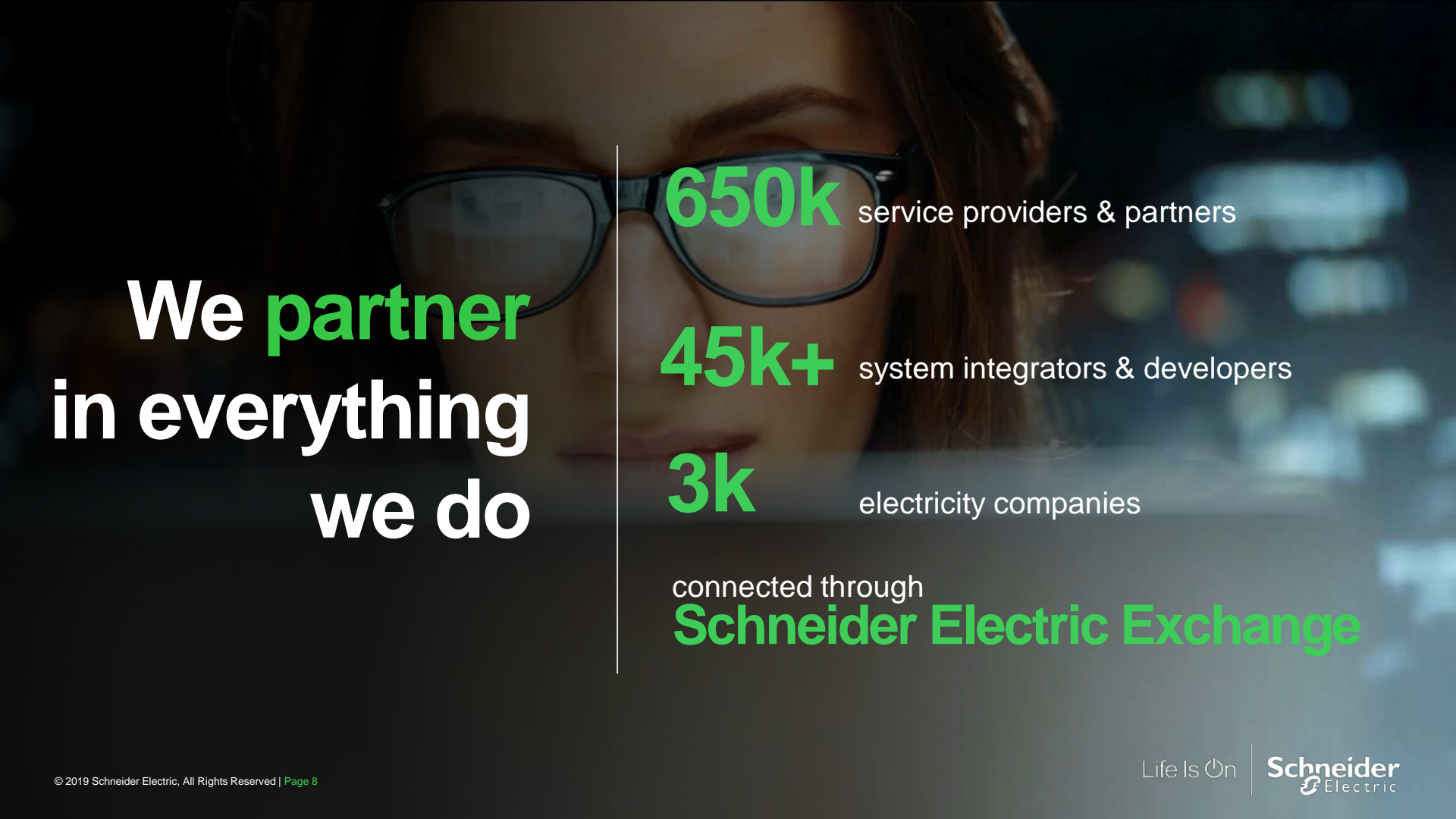
*EcoStruxure Microgrid Advisor*





# Microgrid Architecture – It's not that Simple the first time you do it





**We partner  
in everything  
we do**

**650k** service providers & partners

**45k+** system integrators & developers

**3k** electricity companies

connected through  
**Schneider Electric Exchange**



A young girl with dark hair, wearing a wide-brimmed hat and a blue long-sleeved shirt, is smiling and holding a fishing rod. She is wearing a tan fishing vest over her shirt. The background is a calm lake with a forested shoreline in the distance.

# SUSTAINABILITY

## The New Energy Landscape

01/2021

Don Wingate