

RESILIENT

Schneider Electric: *New Energy Landscape*

Getting from Here to There: The New Role of Distributed Energy in Transportation

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Schneider Electric Microgrids Business



- Transportation Change is un-stoppable
- Infrastructure Needs are complex
- Business Models emerging – P3's
- Microgrids for Supply Side Imperative



EV commercial fleet adoption is real

Tesla lands Fedex order for its electric big rig trucks

Wayne Risher, USA TODAY NETWORK - Tennessee | Published 3:07 p.m. ET March 28, 2018



San Francisco commits to all-electric bus fleet By 2035; MUNI Board approves pilot program

16 May 2018

PepsiCo orders 100 of Tesla's all-electric Semi trucks

By Reuters

December 13, 2017 | 9:25am



Mayor Mark Farrell and the San Francisco Municipal Transportation Authority, which operates MUNI (the city's public transit), announced San Francisco's commitment to have an all-electric bus fleet by 2035. SFMTA will only purchase electric buses starting in 2025 to meet the goal for 2035.

UPS expands its zero-emissions fleet with 50 Workhorse electric trucks



U.S. rental truck firm Ryder makes first big electric van order

The aim of Schneider Electric is to provide sustainable, resilient, and economical Energy for commercial, private fleets

New Energy Landscape in 2019



Successful microgrid activation showcases innovation; supports reliable, efficient, clean energy at Montgomery County, Md., critical facilities



Schneider Electric Building Microgrid at Port of Long Beach

Schneider Electric announced Wednesday that it has a \$5.2 million contract to design, engineer and build a new microgrid at the Port of Long Beach in southern California. The port also is going to get ...



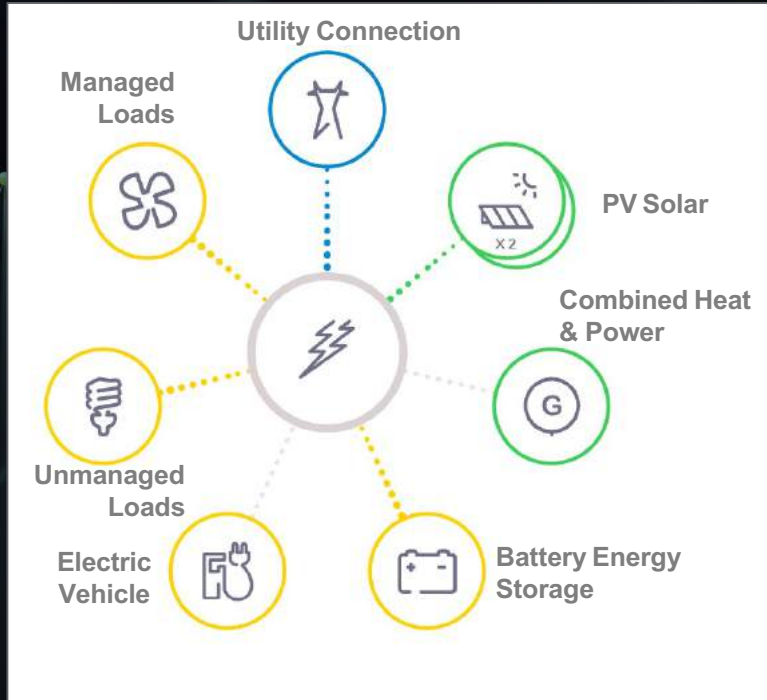
JFK Airport Terminal One Redevelopment, will leverage Schneider Electric's solutions to improve the sustainability of the terminal and enhance the reliability of the airport's energy supply through a state-of-the-art microgrid.



Lone Star Ports Harbor Island Crude Export Terminal – SE providing prime power and sustainable energy in a unique public private partnership

Demand Side Digitization

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

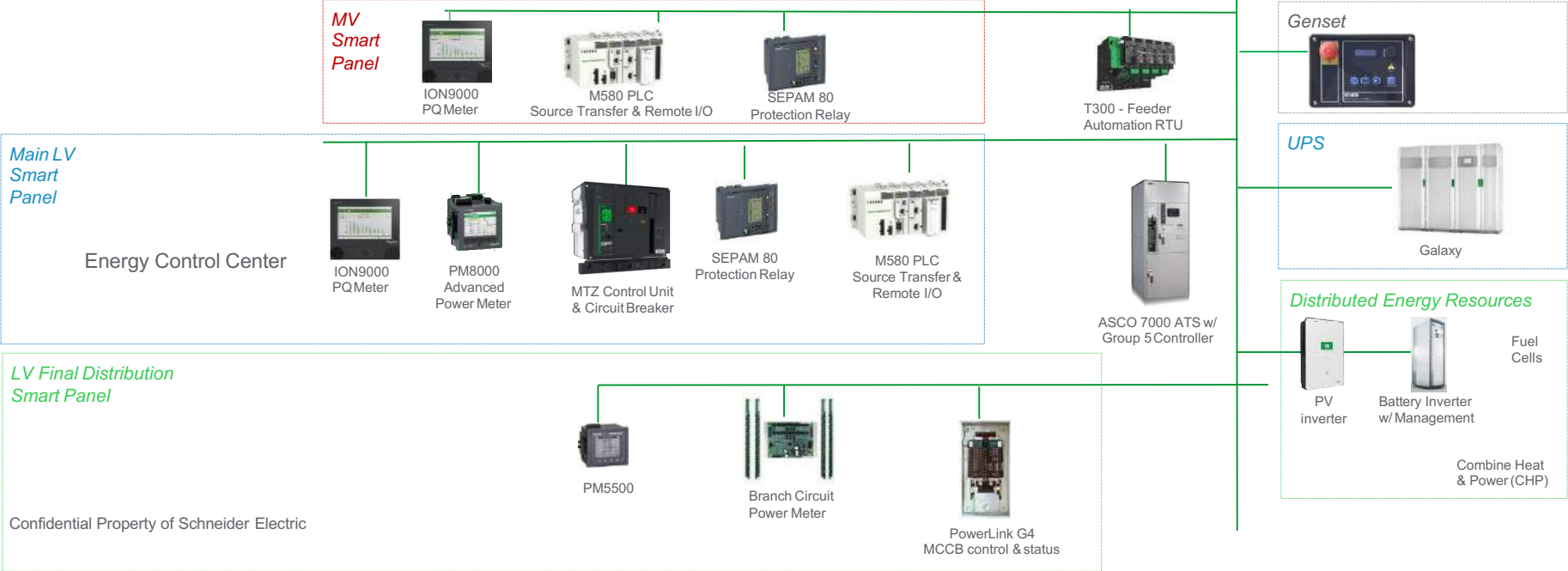
- Reduce carbon footprint
- Improve brand image
- Attract / Service carbon sensitive customers

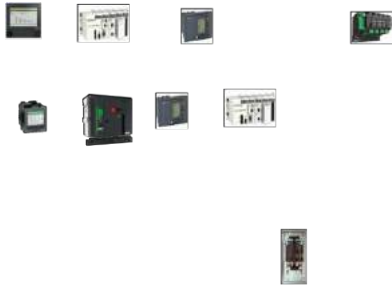
BUT IT CAN BE COMPLECATED – MUCH OF THE EXISTING INFRASTRUCTURE IS UNABLE TO SUPPORT THE NEW ENERGY NEEDS

Services Applications EcoStruxure Microgrid Advisor (EMA) 

Edge Control EcoStruxure Microgrid Operation (EMO)  Power SCADA Operation  Power Monitoring Expert 

Connected Product





CTO - Configured to Order
ETO - Engineered to Order



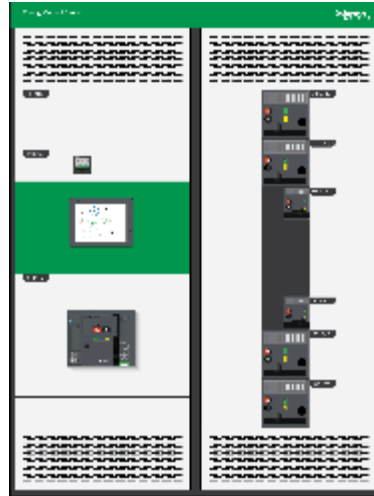
“Microgrid in a Box”

Energy Control Center

Simplifying implementation of microgrids and integrating DER's

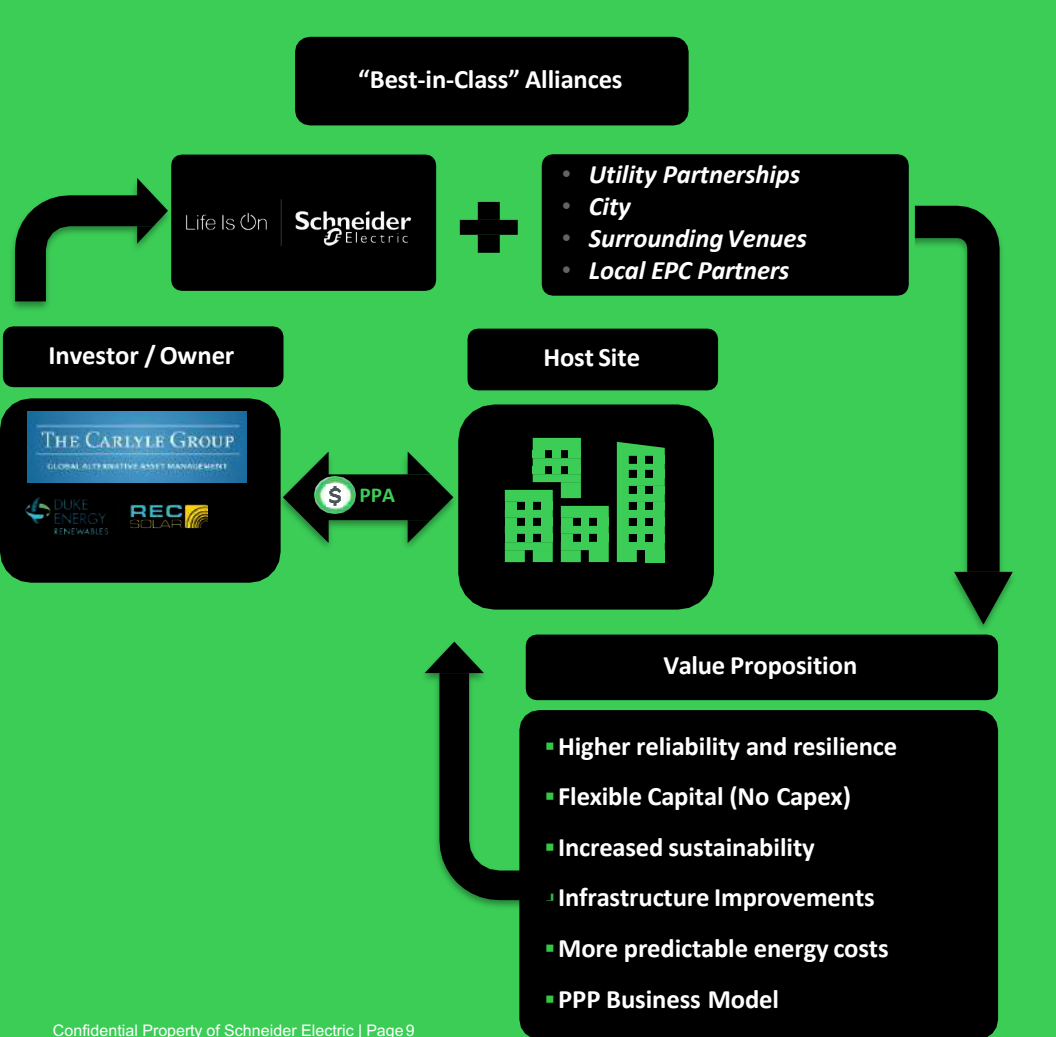
Our solution to simplify Optimization and Control of On-site Distributed Energy Resources

Pathway to resilience, sustainability and efficiency



Life Is On

Schneider
Electric



Capital Availability

- The Carlyle Group’s stability (\$205 billion AUM & 30 years) underpins the ability to provide strategic capital
- Willing to put significant capital at risk to fund energy infrastructure initiatives



Structuring Capabilities

- Complex deal structuring with long term view in mind
- Flexible, innovative structuring approaches to meet all stakeholder’s objectives



Performance Standards

- Features incorporated in funding programs to align interests of project participants while holding DEN and Schneider Electric accountable for performance



Industry Expertise

- Schneider’s experience and expertise facilitates a unique ability to understand the needs of all project constituents

Schneider Electric – Microgrid Competency Center

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