New Energy Landscape
Technology + Business Model Transforms Energy

#Microgrid #EcoStruxure
Schneider Electric in the US

Leading the digital transformation of energy management and automation in homes, buildings, data centers, infrastructure, and industries.

Schneider Electric USA Headquarters
800 Federal St, Boston ONE Campus
Andover, MA 01810 se.com/us

$7.7B in revenues, 2020 ~18,000 employees

Major U.S. sites
Dallas, TX, El Paso, TX; Boston, MA; Nashville, TN; West Kingston, RI; Lake Forest, CA;

300+ microgrids in the U.S.

Net Zero Carbon by 2025

#1 of Global 500 Most Sustainable Corporations-Global Knights 2020

Acknowledged in CDP’s “Global Climate 500 Performance Leadership Index” and “Dow Jones Sustainability Index”
Organizations of all sizes are under **growing pressure.**

<table>
<thead>
<tr>
<th>Cost</th>
<th>Sustainability</th>
<th>Reliability and Resilience</th>
<th>CapEx constraints</th>
<th>Risk management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transmission and distribution costs in the U.S. have <strong>increased 50%</strong> over the past decade.</td>
<td>Businesses are making their own commitments and state governments are setting mandates for 100% clean electricity, covering nearly <strong>one-third</strong> of the U.S.</td>
<td>Commercial and industrial companies are forecasted to see over <strong>$100 billion in annual losses</strong> from power outages through the end of the decade.</td>
<td>Reality has been <strong>reset. COVID-19 disruption to the global economy</strong> has been sweeping and uneven, with many businesses devastated and a few newly advantaged.</td>
<td>To emerge stronger from COVID-19, organizations must identify their most valuable, mission-critical assets and devote more resources to protecting them.</td>
</tr>
</tbody>
</table>

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**U.S. Energy Information Administration**  
**McKinsey**  
**American Society of Civil Engineers**  
**Deloitte**  
**PwC**

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Life Is On  
Schneider Electric
The technology solution: Microgrid
A local energy system with sources of generation, storage, and advanced automation and control …… usually connected to the central grid but able to function independently.

The business model solution: Energy as a Service

• Customers face accelerating energy challenges and often lack the resources to address these needs
• Energy as a Service delivers the energy outcomes customers need with no capital upfront or operational risks
• Accomplished through the design, build, ownership, operation, maintenance and financing of onsite microgrids
## Montgomery County - Energy as a Service Case Study

<table>
<thead>
<tr>
<th>Situation</th>
<th>Approach</th>
<th>Outcomes</th>
</tr>
</thead>
</table>
| After a series of wide-spread grid outages, Montgomery County set out to | Delivered via innovative, public-private Energy-as-a-Service model eliminating up-front costs  
| help mitigate the impact of future disasters to its over 1M residents.     | Infrastructure upgrades (low- and medium-voltage gear)  
|                                                                            | Integration of existing generation assets.  
|                                                                            | New Solar and Gas CHP generation  
|                                                                            | Advanced controls and monitoring  
|                                                                            | Advanced cybersecurity                                                                                                                          | Improved resiliency of county operations by upgrading existing aging electrical distribution infrastructure                                                                 |
|                                                                            |                                                                                                                                                                                                   | Provide the ability to island operations for >7 days without grid support                                                                                     |
| The community is committed to decreasing carbon footprint.                |                                                                                                                                                                                                   | Mitigated risk of escalating energy price over 15 years.                                                                                                       |
| The electrical infrastructure at the public safety headquarters was old and |                                                                                                                                                                                                   | Upgrade infrastructure including new electric vehicle charging without capex                                                                                   |
| needed to be replaced before failure.                                      |                                                                                                                                                                                                   | Reduce greenhouse gas and other emissions                                                                                                                  |
| The County has tight budget controls and access to capital is difficult.  |                                                                                                                                                                                                   |                                                                                                                                                             |

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Take Control of Your Energy

California University

PREPARED FOR
California University

YOUR ENERGY PARTNER
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What We’ve Learned About You

ESTIMATED ANNUAL ELECTRICITY COST

$1,200,000

<table>
<thead>
<tr>
<th>Total Annual Spend</th>
<th>$1,200,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Energy Spend</td>
<td>$780,000</td>
</tr>
<tr>
<td>Annual Peak Demand Spend</td>
<td>$450,000</td>
</tr>
<tr>
<td>Cost of Peak as %</td>
<td>38%</td>
</tr>
</tbody>
</table>

All of the information provided in this presentation is an estimate based on public data and will be validated following a detailed site analysis.

ESTIMATED OUTAGES/YEAR

5 Outages

GHG EMISSIONS FROM POWER GENERATION

2,700 Tons
$120,000 Saving

10% COST SAVINGS YEAR ONE

California University

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Internal
We Make The Complex Simple

Customer Site(s)  We Are the Developer & Operator

GreenStruxure

Schneider Electric Technology & Services
Engineering, Procurement & Construction
Solar, Storage, Gen Sets
Utility & Energy Service Providers
Financial Partnership
Long-Term Operations & Maintenance

ESA
Fleet Electrification Infrastructure Solution for Montgomery County
First-of-its-kind EaaS fleet electrification infrastructure project integrating solar PV, on-site generation, battery energy storage, microgrid controls, and electric bus chargers.

1. Advances the County’s sustainability commitments
   - 62% carbon reduction from buses eliminating lifetime ~155,000 tons of GHG
   - Enables e-bus deployment on longest routes for greatest impact
   - Maximizes onsite renewable energy generation with solar and BESS

2. Resilient system to enable full e-bus operations
   - 99.999% resilience & reliability of operations and sized to handle peak-demand
   - Seamless transition, digitized automation and control philosophy
   - On-site generation with storage enables ongoing autonomous operation

3. Turnkey Energy as a Service solution
   - Comprehensive risk mitigation and transfer throughout project lifecycle
   - AlphaStruxure financial approach eliminates upfront cost for the County
   - High-touch, collaborative design approach, project execution and service
   - Future-proofed digital architecture and monitored 24/7 by AlphaStruxure Network Operating Center

AlphastruXure
Thank you!

For more Information:

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### Next Steps

<table>
<thead>
<tr>
<th>1 Month</th>
<th>3 Months</th>
<th>9 Months</th>
<th>1 Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Preliminary Analytics, Term Sheet</strong></td>
<td><strong>Technical &amp; Economic Assumptions</strong></td>
<td><strong>Approval: Proposal &amp; ESA</strong></td>
<td><strong>Development &amp; Construction</strong></td>
</tr>
<tr>
<td>You agree this proposal helps you get the energy outcomes you need to run your business. You sign our term sheet to enable us to investigate and discuss further.</td>
<td>We validate all information with your teams and through a site assessment.</td>
<td>We submit a more detailed proposal and sign an Energy Services Agreement outlining all details.</td>
<td>We work with your teams, your utility, state/local government, regulators and others to develop and construct your onsite microgrid.</td>
</tr>
<tr>
<td>1 M O N T H</td>
<td>3 M O N T H S</td>
<td>9 M O N T H S</td>
<td>1 Y E A R</td>
</tr>
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</table>

We finalize, test, commission and begin operations.

You participate in the new energy transition and make a difference for your business, your people and our planet!
Montgomery County Microgrid

Business Model Evolution

**Key Stakeholders**
- County Personnel
- PEPCO utility
- MD Energy Association

**Prime Movers**
- Technology Provider
- System Integration
- Specify prime movers

**Investor/Owner**
- Monthly payments

**Value Proposition**
- Avoided Capex for repairing existing substation
- Reduced operating costs
- PEPCO and MEA CHP energy efficiency grants
- Increased sustainability
- Infrastructure Improvements
- More predictable longterm energy costs

**Master PPA**

**PSHQ Host Site**

**Monthly payments**

**Life Is On**