

AlphaStruxure
The trusted partner in energy transformation

Energy Transformation, Minus the Risk

Decarbonize operations with
Energy as a Service Microgrids

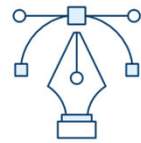
IEEE Miami Tech Conference
December 9, 2022



AlphaStruxure

AlphaStruxure enables organizations to achieve ambitious, tailored energy transformations — without the CapEx or complexity.

Design



We design and engineer tailored energy infrastructure to achieve your goals for greenhouse gas reduction, resilience, reliability, and cost stability.

Finance



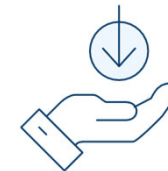
Direct access to strategic capital from Carlyle removes funding roadblocks and reduces financial risk to accelerate your energy transformation.

Build



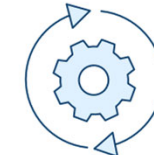
Partnering with industry experts, we manage the construction of your energy infrastructure to ensure an efficient, safe, and streamlined build process.

Own



We are accountable for the energy infrastructure across its lifecycle, and therefore hold a long-term interest in your success.

Operate



Operation of assets through the **Integrate** digital platform and Microgrid Network Operating Center (NOC) to deliver long-term outcomes.

Maintain



As experts in the evolving technology landscape, we deliver zero CapEx asset optimization and upgrades.

Unique joint-venture combines Carlyle's capital backing with Schneider Electric's 185+ year legacy and its track record as the #1 microgrid technology provider, with over 300 successful projects across North America.

CARLYLE

Schneider
Electric

Meet the microgrid technology powering the energy transition



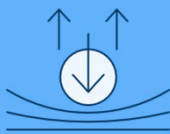
Integrate by AlphaStruxure
End-to-end, multi-microgrid digital platform and network operations center

Microgrid

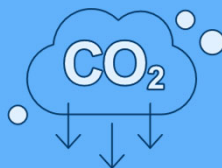
Local energy systems with sources of generation, storage, and advanced automation and control — can function independently from the grid, delivering:



Energy cost certainty & optimization



Enhanced resilience & reliability



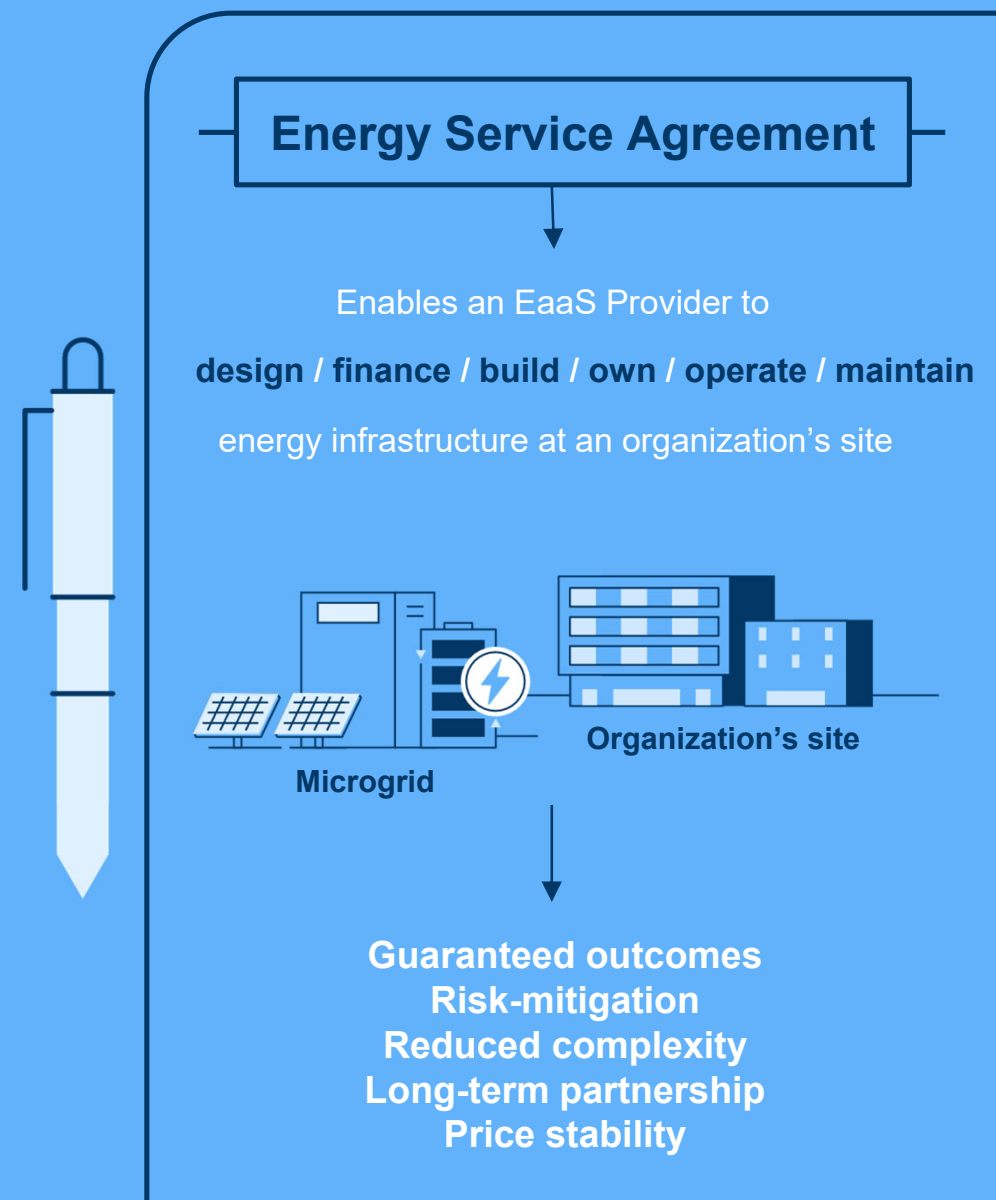
Accelerated emissions reductions



The Energy as a Service advantage

Energy as a Service (EaaS) defined:

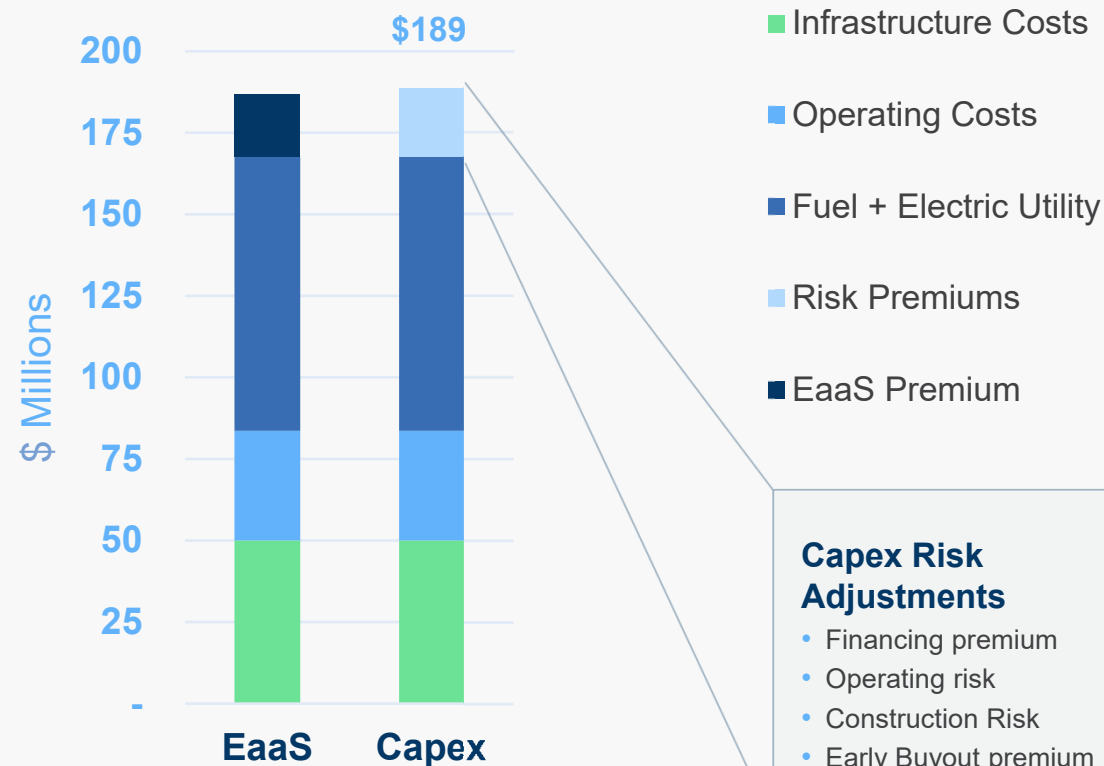
- Deploys **custom-designed, on-site energy infrastructure** — such as a microgrid — without the need for up-front capital investment.
- **Unburdens organizations** from designing, financing, owning, installing, and managing their own energy infrastructure so they can focus on core business needs.
- Helps businesses **achieve long-term outcomes** around resilience, reliability, greenhouse gas reduction, and cost-stability simply, efficiently, and with price certainty guaranteed.



What zero CapEx means for your business

Protect capital while achieving long-term outcomes

\$50M Sample Project 20yr Present Value
EaaS vs. Capex (r = 8%)



- Capex Risk Adjustments**
- Financing premium
 - Operating risk
 - Construction Risk
 - Early Buyout premium

Capex

- **You** design, build, own, operate, and maintain on site energy infrastructure
- Use of **internal capital** to finance the project competes with funding core business needs
- Additional **staffing needed** to build, own, operate and maintain infrastructure

You bear the risk:

- **Design and construction risks:** sizing and selection of DERs, material, labor and time related cost overruns
- **Owning & operating risks:** equipment failures, unplanned maintenance, asset upgrades
- **Performance risks:** performance shortfalls
- **Cost volatility:** unpredictable future electricity costs

EaaS

- EaaS provider **designs, builds, owns, operates, and maintains** on site energy infrastructure
- **Zero-capex financing** with set pricing avoids self funded project balance sheet impact
- **Long-term contract** provides price certainty for energy costs
- **EaaS provider bears** design, construction, owning, operating, and performance risks
- **Performance guarantees** on resilience, reliability, greenhouse gas reduction, and cost stability

Energy Service Agreement (ESA) main terms

Capital (\$)

100% provided by AlphaStruxure

Operating Term

15 – 25 years, beginning at COD (excludes 180-day decommissioning period).

System Output

All system output (thermal, electrical) is generated for the benefit of the **Client**.

Payment / Fees

Energy Fee: Fixed \$/MWh of electricity and/or \$/klb thermal output delivered with minimum quantity requirement.

Resilience Charge: Fixed \$/Month in consideration of the sustainability, resilience, and reliability provided by the system.

Termination

Client can terminate the ESA for an uncured Default and can then acquire the system at its fair market value.

Early Buyout (EBO)

EBO rights are available during the term of the ESA, allowing **Client** to buyout the system at set points in time.

Customer Purchases

Fuel procurement is paid for by **Client**.

Defined Customer KPI's

Guaranteed system performance supported by liquidated damages. Default provisions are mutually agreed to ensure high-level performance.

CASE STUDY

Brookville Smart Energy Bus Depot

Montgomery County, MD

Challenge:

- Transition **70 buses** from diesel to electric
- Contribute to the County's goal to reach **net-zero emissions by 2035**
- Maximize on-site renewable energy
- Ensure uninterrupted transit bus services under any power circumstances

Solution:

- Integrated **6.5 MW Microgrid** with on-site generation, electric bus charging, and multiple energy sources
- Solar canopies and battery energy storage
- Delivered with no upfront capital investment via the Energy as a Service business model
- Long-term partner to design, build, own, and operate the on-site infrastructure



Results

70 electric buses will eliminate:

78K+ tons of carbon dioxide over 12 years of driving over 10K miles per day

160K+ tons of greenhouse gas emissions (GHGs) over 25 years



100% Operating Capacity in the event of extreme weather events or power outages



Operational flexibility with full control over dispatch and bus routing



Long-term cost predictability of energy supply
Avoid utility tariffs and demand charges

Customer Testimonial



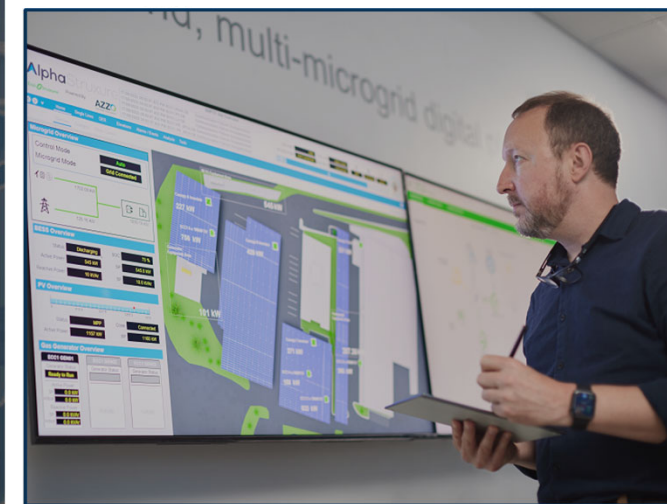
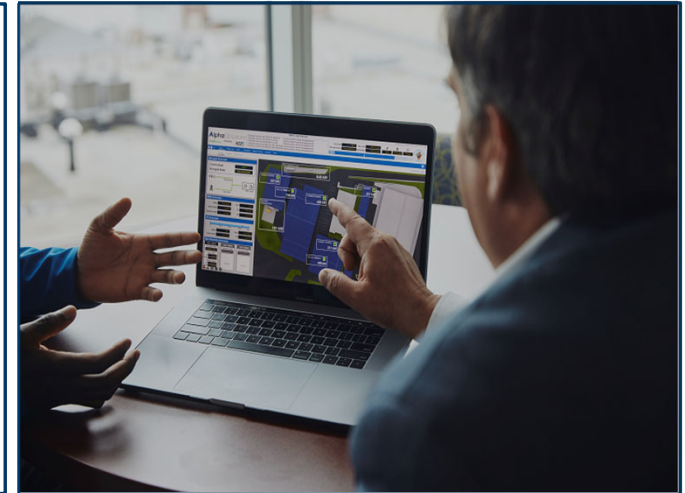
"Working with AlphaStruxure solved a multitude of problems for the County. First and foremost, it brings in expertise to help us achieve our goals and build complex infrastructure. Secondarily, it creates a long-term partnership, where we have the right experts in place."

Chris Brown, Chief, Office of Energy and Sustainability,
Montgomery County, Maryland

Integrate™

24/7 multiple-site management for consistent performance

Cloud-based platform with visibility into key performance metrics



24/7 Network Operators predict and respond in real-time

Automates onboarding of multiple sites



“

A zero-waste, zero-emissions, and zero-carbon future is within our grasp. The technology to decarbonize at any scale already exists. With the right partner and business model, organizations can accelerate decarbonization efforts further, faster.

JUAN MACIAS
CEO, AlphaStruxure

AlphaStruxure



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