The Anatomy of EaaS: How Efficiency-as-a-Service is Changing the Finance Game

Wednesday, May 19th
2:00 – 3:15 EST
Joe Indvik
RE Tech Advisors
1. Efficiency-as-a-Service (EaaS) Overview
2. EaaS Provider Presentations
3. Provider Interview
4. Audience Q&A
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#DOE
Today’s Presenters

Julia Berg
Redaptive

Aaron Block
Allumia
Where does EaaS fit in the financing universe?
The Better Buildings Financing Navigator is an online tool that helps public and private organizations find financing solutions for energy efficiency and renewable energy projects.

The Navigator at a glance:
- Explore options and find solutions
- Dozens of case studies, fact sheets, resources
- Connect with Financial Allies
- 25,000+ users since launch

Available at: https://betterbuildingssolutioncenter.energy.gov/financing-navigator
What is Efficiency-as-a-Service (EaaS)?

- Off-balance sheet, third-party ownership model with no money down
- Pay-for-performance services contract
- Provider handles installation and ongoing maintenance

Source: Better Buildings Financing Navigator EaaS Factsheet

*Disclaimer: This presentation was prepared for educational purposes only, and is not meant to provide tax, legal or accounting advice. Please consult your accounting, legal and/or tax advisors before making any major financing or accounting decisions.*
Flavors of EaaS

Services Contract

Energy Services Agreement (ESA)

Sustainable Energy Services Agreement (SESA)

Technology Subscription Agreement

Managed Energy Services Agreement (MESA)

Lumens-as-a-service

Lighting-as-a-service
EaaS is frequently confused with Energy Savings Performance Contracts (ESPCs)

<table>
<thead>
<tr>
<th>Category</th>
<th>ESPC</th>
<th>EaaS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Ownership During Term</td>
<td>Customer owned</td>
<td>Service provider owned</td>
</tr>
<tr>
<td>Accounting Implications*</td>
<td>Typically on-balance sheet</td>
<td>Typically off-balance sheet</td>
</tr>
<tr>
<td>Project Size and Contract Length</td>
<td>Typically used for <strong>larger projects</strong> (&gt;1 million) with <strong>longer contract terms</strong> (10-20 years).</td>
<td>Can be used for <strong>both</strong> for large projects (&gt;1 million) and smaller projects (as low as $25,000) and can support <strong>shorter terms</strong> (5-20 years).</td>
</tr>
<tr>
<td>Standardization</td>
<td>Highly standardized, with long operating history and federal procurement adoption.</td>
<td>Less standardized, with a wider variety of approaches and service providers available.</td>
</tr>
</tbody>
</table>

Source: Better Buildings [EaaS vs ESPC Fact Sheet](#)

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The EaaS market has grown rapidly

- Navigant Research has consistently projected sustained market growth for the EaaS mode.
- Better Buildings Financial Allies providing EaaS have reported an aggregate 2.5x increase in annual deployments since joining.

Note: units are in $billions
There are many ways to structure EaaS (fact sheet coming soon!)

**Contracting**
- Design & Audit
- Approval & Security
- Contract Standardization

**Services**
- Definition of Services
- Payment Variability
- Measurement & Verification

**End of Term**
- Options
  - Purchase equipment at fair market value
  - Purchase at bargain value
  - Extend the service contract
  - Terminate and reclaim equipment
  - Terminate and abandon equipment
Efficiency as a Service

An introduction to Redaptive’s Efficiency as a Service platform and how it can provide significant emissions and cost savings to your company.
Topics

- Redaptive Overview
  - Customer results

- Efficiency as a Service (EaaS)
  - How it works and why customers are signing up

- The Value of Scale
  - What makes this model different

- Transparency and Performance Monitoring
  - Eliminating risk with transparency at every step

- Adoption at Scale
  - HVAC Optimization Program at Fortune 25 Bank
Adoption at Scale.

Redaptive specializes in portfolio optimization for Fortune 500 clients with large real estate portfolios spanning nearly any sector.
Redaptive secures $20M Series B funding

Redaptive secures $150M Series C funding

Redaptive surpasses 1,000 meters deployed globally

Redaptive launches first HVAC Optimization Program (Fortune 25 financial institution client)

Redaptive launches first net-zero carbon footprint program

Cumulative Bookings

Began deploying LED retrofit programs in EaaS platform

First Nebula Meter Installed.


100 M

410 M
Deterrents to Energy Efficiency Programs

Energy efficiency opportunities exist in abundance.

REASONS EFFICIENCY FAILS BY FORTUNE 500 EXECUTIVES

1. Lack of Technical Expertise to Evaluate or Execute
2. Insufficient Payback / ROI
3. Lack of Awareness
4. Uncertainty in Savings Performance
5. Lack of Funding

1 Johnson Controls Energy Efficiency Indicator Survey
We’ll Design It, Develop It, Deploy It, Measure It

Why working with a trusted partner is the key to success

Turnkey Solution

Funded with Savings:

Scope Development
Economic Profiling
Investment Grade Audits
Project Funding
Deployment
Performance Measurement

Program Design
Advanced energy modeling
Program economic visibility
Strategic ECM prioritization

Financial Advantage
Reduce OPEX spend
No required upfront capital
NPV advantage compared to CAPEX

Risk Transfer
Project cost overrun
Equipment uptime guarantee
Eliminate budget, schedule, quality, safety risk

Execution Excellence
Delivered procurement and installation
Eliminate execution burden
Increase deployment velocity and scale
A Strategic Portfolio Agreement Captures The Value of Scale

Eliminating capital and deployment resource constraints enables customers to rapidly capture the full value of inefficiencies.

<table>
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<th></th>
<th>Illustrative Capex Program</th>
<th>Illustrative EAAS Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total # of Buildings Addressed</td>
<td>28</td>
<td>314</td>
</tr>
<tr>
<td>Facility Optimization Investment</td>
<td>$1,740,000</td>
<td>$20,900,000</td>
</tr>
<tr>
<td>Customer Capital Deployed</td>
<td>$1,740,000</td>
<td>$0</td>
</tr>
<tr>
<td>Annual Energy Savings</td>
<td>$241,000</td>
<td>$2,894,000</td>
</tr>
<tr>
<td>Annual Maintenance Savings</td>
<td>$182,000</td>
<td>$1,666,000</td>
</tr>
<tr>
<td>Program NPV</td>
<td>$1,300,000</td>
<td>$8,560,000</td>
</tr>
</tbody>
</table>
End to End Transparency and Performance Monitoring

Eliminating risk with transparency at every step.

- Pre-Deployment Transparency
- Contract Flexibility
- Post-Deployment Performance Transparency
Redaptive and CBRE partnered to develop and deliver an HVAC Optimization Program spanning 15 months to replace and/or retrofit approximately 593 high risk-of-failure assets at 234 retail banking locations to:

► Reduce long-term OPEX run-rate generating approximately $8M gross savings over a 10-year period;
► Reduce unplanned downtime and costly emergency replacements;
► Mitigate cost exposure due to R-22 refrigerant ban effective January 1, 2020; and,
► Recycle all removed equipment and reduce carbon footprint.

The non-CAPEX financing solution enabled large-scale, high-velocity program deployment while providing the client performance risk transfer and early buy-out flexibility.
What is Efficiency-as-a-Service to Allumia?
Efficiency-as-a-Service is more than finance. Efficiency-as-a-service is simplicity.
A simple customer experience

Relax
We handle everything: design, install, maintenance.

Upgrade
zero upfront costs.

Save
We only get paid when the customer saves.
A simple customer experience

- No-cost Upgrades
- Immediate savings
- Metered performance
- Ongoing Maintenance
Simple Savings

Revenue grade metering installed at the circuit or device level
Simple payments

- **Current Costs**
  - Monthly Lighting Bill

- **Service Period**
  - Allumia Bill
  - Monthly Lighting Bill
  - Savings

- **After Service**
  - Monthly Lighting Bill
  - Savings

Shared Savings

Your Savings
Who’s using it

EaaS works for everyone from the federal government to your local YMCA
A missed opportunity for efficiency

$130 Billion
C&I Building Energy Waste

$28 B Solar Development

$16 B Wind Development

$3B Battery Storage
What to look for in EaaS

Provider manages the details
- Contractors & payments
- Documentation and Paperwork

Provider takes performance risk
- Long-term maintenance included
- Pay *after* you’ve received value

Transparency in savings
- Metered > modeled
- Clear expectation setting

Accounting Treatments
- EaaS can be off balance sheet
- This is easy to say, and not a given

Remember: you’re buying outcomes, not inputs. EaaS let’s you focus on doing what you do best.
Phase 3: Guided Interviews

Submit Questions
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Additional Resources

Better Buildings Solution Center: Financing Navigator
Link

Better Buildings Solution Center Fact Sheet: EaaS vs ESPC
Link
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Additional Questions?

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