



***METRUS  
ENERGY***

# Making Energy Efficiency a Resource

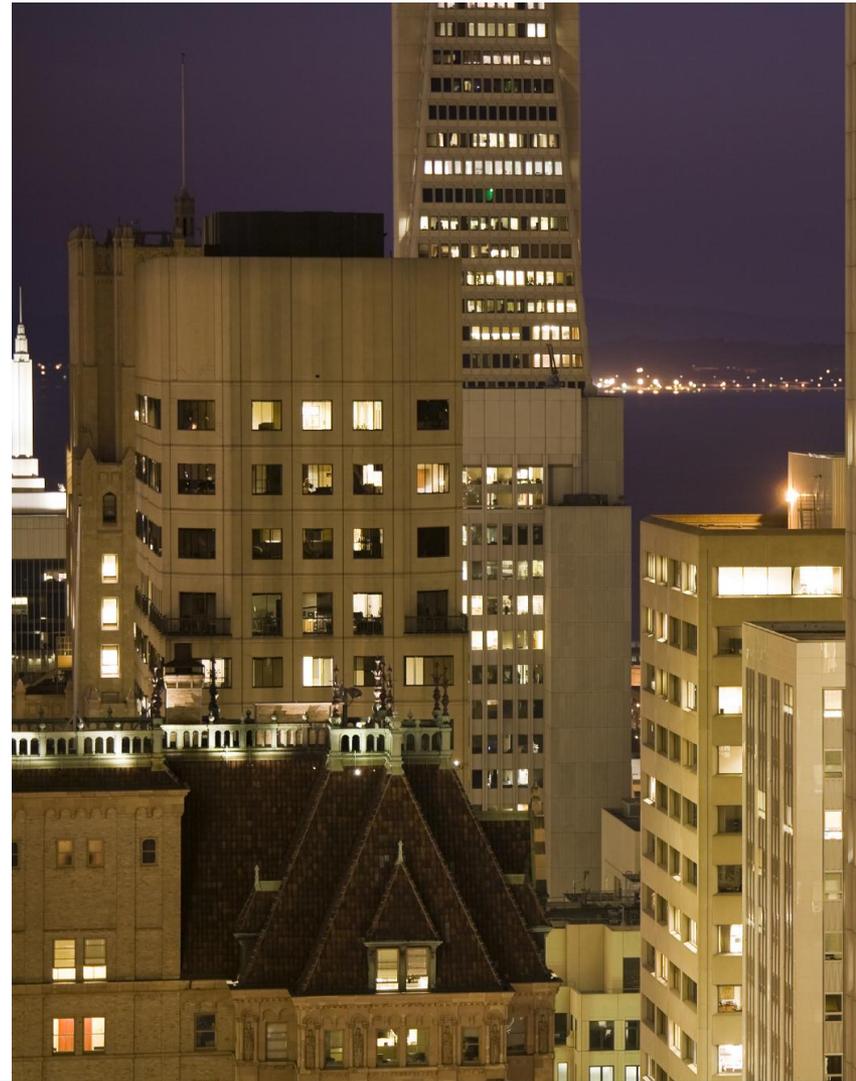
Financing Solutions for Large Industrial Customers

ACEEE EE Finance Forum - Boston, MA



# Metrus Energy: Saved Is Earned

- **THE COMPANY:** Metrus Energy is a developer, owner and financier of energy efficiency retrofit projects and a pioneer in private sector energy efficiency finance
- **THE MARKET:** \$250 billion investment market over the next decade for energy efficiency projects at private sector facilities
- **THE BARRIERS:** 1) First-cost hurdles; 2) Scalability of financing solutions, 3) Market undervaluing efficiency as a resource
- **THE SOLUTION:** Metrus' Efficiency Services Agreement (ESA) is a proven solution that eliminates all upfront costs by enabling customers to pay for efficiency upgrades by redirecting their current utility spending





# Metrus' Efficiency Service Agreement

Metrus' ESA eliminates upfront project costs, handles maintenance and monitoring, and functions as a dynamic energy efficiency procurement vehicle over the term of the contract

## DEVELOP PROJECT

- Identify savings opportunities
- Develop entire services program
- Engage energy services partner

## FUND & IMPLEMENT

- Fund 100% of project cost
- Utilize best practices
- Minimize business disruptions

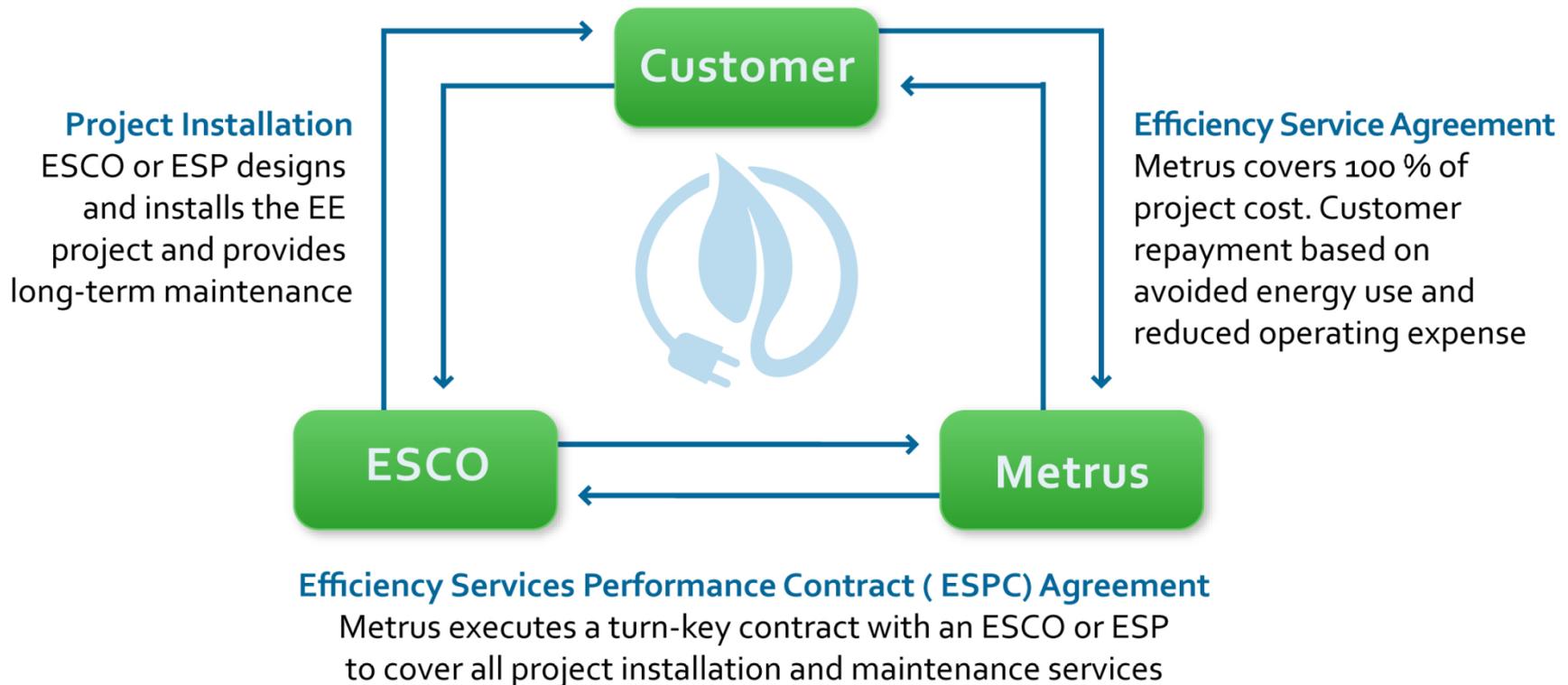
## ONGOING SERVICES

- Monitor ongoing performance
- Maintain project equipment
- Identify new energy savings



# Metrus' Efficiency Service Agreement

Metrus' ESA structure turns efficiency into a resource by removing all first-cost barriers and charging only for realized energy savings





# Typical Project Profile & Scope



## Typical Project Scope

- Building automation & controls
- Lighting retrofits & controls
- Compressed air (leak detection & repair)
- Heating, ventilation, & air conditioning
- Chiller replacement & system improvements
- Boiler replacement & system improvements
- Pumps, fans, motors, drives
- Cogeneration

## Typical Project Profile

- Private sector commercial, industrial, healthcare and higher education
- Multiple energy efficiency measures are blended into single project scope of work
- Total project size is typically \$1-5 million
- Average simple payback on a project is usually between 3 and 7 years
- Project term is typically 7 to 10 years



# Value Proposition

Benefit	Description
<b>Avoid Capital Outlay</b>	Metrus pays for all design and implementation costs, enabling customers to conserve capital for core business investments
<b>Use Savings to Pay for the Project</b>	ESA service payments are based solely on the realized energy and operational savings created by the project
<b>Reduce Operating Expenses</b>	ESA service payments are set below the current utility price, which immediately improve the bottom line
<b>Enhance Reliability of Operations</b>	Under the terms of the ESA, Metrus pays for periodic maintenance services to ensure long-term reliability and performance of the project equipment
<b>ESA Payments are an Operating Expense</b>	The ESA is designed to be an off-balance sheet financing solution with regular payments similar to a standard utility bill
<b>Reduce Exposure to Utility Uncertainty</b>	During the term of the ESA, service payments escalate at a fixed annual rate below historical utility price increases
<b>Expand Feasible Project Scope</b>	By circumventing the traditional capital budgeting process, Metrus unlocks longer (3+ year simple payback) projects with higher upfront costs and deeper operational benefits



# Customer Case Study: **BAE SYSTEMS**

Metrus Energy has developed and financed approximately \$8 million in energy efficiency improvements for global aerospace and defense contractor BAE Systems as a part of ongoing multi-facility energy efficiency initiative.

	Merrimack, NH	Greenlawn, NY	Nashua, NH	NH Headquarters
<b>Facility</b>	<ul style="list-style-type: none"> <li>467,000 ft<sup>2</sup> mixed-use office, manufacturing, environmental testing</li> </ul>	<ul style="list-style-type: none"> <li>492,000 ft<sup>2</sup> mixed-use office, manufacturing, environmental testing</li> </ul>	<ul style="list-style-type: none"> <li>686,000 ft<sup>2</sup> mixed-use office, manufacturing, environmental testing</li> </ul>	<ul style="list-style-type: none"> <li>509,000 ft<sup>2</sup> mixed-use office, manufacturing, environmental testing</li> </ul>
<b>Project Scope</b>	<ul style="list-style-type: none"> <li>Lighting Retrofits</li> <li>Building Automation</li> <li>Air Compressor Replacement</li> <li>Transformer Replacement</li> <li>Demand Control Ventilation</li> <li>Operational Best Practices</li> </ul>	<ul style="list-style-type: none"> <li>Lighting Retrofits</li> <li>Building Automation</li> <li>Boiler &amp; Chiller Replacement</li> <li>Demand Control Ventilation</li> <li>Variable Frequency Drives for AHU &amp; Water Pumps</li> </ul>	<ul style="list-style-type: none"> <li>Lighting Retrofits</li> <li>Boiler Plant Improvements</li> <li>VAV &amp; Control Upgrades</li> <li>Energy Policy</li> <li>Building Envelope</li> </ul>	<ul style="list-style-type: none"> <li>Lighting Retrofits</li> <li>Boiler Replacements</li> <li>Variable Frequency Drives &amp; Motors</li> <li>Energy Policy</li> <li>Building Envelope</li> </ul>
<b>Project Cost</b>	<ul style="list-style-type: none"> <li>~ \$1.0 million</li> </ul>	<ul style="list-style-type: none"> <li>~ \$2.2 million</li> </ul>	<ul style="list-style-type: none"> <li>~ \$2.3 million</li> </ul>	<ul style="list-style-type: none"> <li>~ \$2.2 million</li> </ul>
<b>Annual Savings</b>	<ul style="list-style-type: none"> <li>&gt; \$200,000 in Utility Savings</li> <li>&gt; 1.1 million kWh of Electricity</li> <li>&gt; 31,000 therms of Natural Gas</li> <li>Various Non-Energy Operational Savings</li> <li>~ 400 tons of CO<sub>2</sub></li> </ul>	<ul style="list-style-type: none"> <li>Total Expected Annual Savings &gt; \$300,000</li> <li>&gt; 300,000 kWh of Electricity</li> <li>&gt; 125,000 therms of Natural Gas</li> <li>Various Non-Energy Operational Savings</li> <li>~ 800 tons of CO<sub>2</sub></li> </ul>	<ul style="list-style-type: none"> <li>Total Expected Annual Savings &gt; \$310,000</li> <li>&gt; 700,000 kWh of Electricity</li> <li>&gt; 125,000 gals Fuel Oil</li> <li>Various Non-Energy Operational Savings</li> <li>~ 950 tons of CO<sub>2</sub></li> </ul>	<ul style="list-style-type: none"> <li>Total Expected Annual Savings &gt; \$310,000</li> <li>&gt; 875,000 kWh of Electricity</li> <li>&gt; 135,000 gals Fuel Oil</li> <li>Various Non-Energy Operational Savings</li> <li>~ 1,150 tons of CO<sub>2</sub></li> </ul>
<b>Term</b>	<ul style="list-style-type: none"> <li>Simple Payback: &gt; 5 years</li> <li>ESA Term: 10 Years</li> </ul>	<ul style="list-style-type: none"> <li>Simple Payback: &gt; 7 years</li> <li>ESA Term: 11 Years</li> </ul>	<ul style="list-style-type: none"> <li>Simple Payback: &gt;6 years</li> <li>ESA Term: 10 Years</li> </ul>	<ul style="list-style-type: none"> <li>Simple Payback: &gt;6 years</li> <li>ESA Term: 10 Years</li> </ul>
<b>Ongoing Services Provided</b>	<ul style="list-style-type: none"> <li>Metrus covers over \$60,000 in annual project O&amp;M and M&amp;V services</li> </ul>	<ul style="list-style-type: none"> <li>Metrus covers over \$35,000 in annual project O&amp;M and M&amp;V services</li> </ul>	<ul style="list-style-type: none"> <li>Metrus covers over \$37,000 in annual project O&amp;M and M&amp;V services</li> </ul>	<ul style="list-style-type: none"> <li>Metrus covers over \$50,000 in annual project O&amp;M and M&amp;V services</li> </ul>



# Contact Information

## Metrus Energy

[www.MetrusEnergy.com](http://www.MetrusEnergy.com)

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