

Energy Finance for Real Estate

New Tools.
New Capital.
New Markets.

An Urban Land Institute Policy and Practice Forum

Organized by:

The ULI Climate Change, Land Use, and Energy
(CLUE) Initiative

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Principal Support



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Coordinating Organizations

The Clinton Climate Initiative
Initiative for Responsible Investment at Harvard University
ULI New York District Council
ULI Daniel Rose Center for Public Leadership in Land Use
ULI Center for Capital Markets and Real Estate



EFFICIENCY SERVICES AGREEMENT

use efficiency savings to pay for your
facility improvement projects

BAE Systems Project Case Study

June 2010



Summary

1. Metrus offers customers the “Efficiency Services Agreement” (ESA), which is used to finance and implement facility improvement projects
2. Metrus pays for all project costs (design, construction, & operation)
3. Metrus engages energy services company to design and implement project
4. Customer makes periodic “service payments”, which are based on the actual efficiency performance and cost savings that a project creates
5. ESA is a proven contractual structure



Project Scope of Work



PROJECTS CAN INCLUDE A WIDE RANGE OF ENERGY EFFICIENCY MEASURES

- Building automation & controls
- Lighting retrofits & controls
- Compressed air (leak detection & repair)
- Utility tariff rate optimization
- Heating, ventilation, & air conditioning (HVAC)
- Chiller replacement & system improvements
- Boiler replacement & system improvements
- Pumps, fans, motors, drives
- Cogeneration (onsite generation of electricity)

TYPICAL PROJECT PROFILE

- (1) Multiple energy efficiency measures are blended into single project scope of work
- (2) Total project size is typically \$2-4 million
- (3) Average simple payback on a project <6 years



Profile of a Typical Customer



Type of Business Industrial, commercial, private healthcare, and private higher education

Utility Bill Customer typically has annual energy costs of more than \$1 million

Key Project Drivers Facility improvements are needed, energy efficiency can be improved, or customer has corporate social responsibility targets

Accounting Customer values an off-balance sheet solution to fund and implement efficiency improvements

Facility Ownership (1) Customer facility is owner-occupied or (2) customer lease has 5+ remaining years and mortgagee waiver is possible



Customer

- BAE Systems (industrial manufacturing)
- 450,000 sq. ft. facility in Merrimack, New Hampshire

ESCO

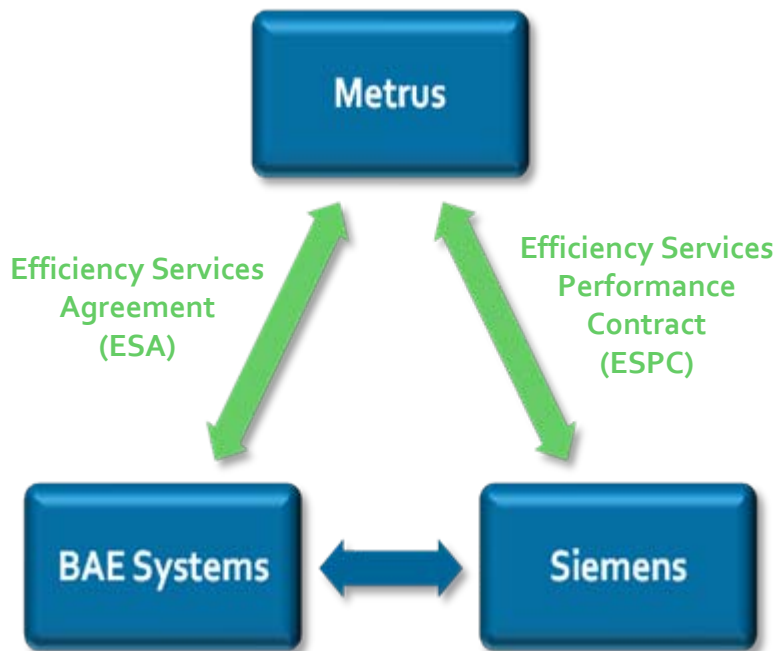
- Siemens Industries (Siemens Building Technologies)

Efficiency Services Agreement

- 10-year ESA term
- ESA service charge includes both energy and non-energy savings
- Covers maintenance and potential repair/replacement on selected equipment
- Periodic buyout options throughout ESA term

Efficiency Services Performance Contract

- Fixed price, turn-key, project design and installation
- Siemens will provide ongoing maintenance and measurement & verification (M&V) services





ESA Case Study (2 of 2)



Project Scope (total size > \$1M)

- Lighting retrofit and controls
- Demand control ventilation
- Air compressor replacement
- Energy policy for IT Department (controls for workspace)
- Transformer replacement

Project Performance (>\$ 200,000 in annual utility expense)

- Average Annual Electricity Savings = >1M kWh
- Average Annual Natural Gas Savings = >30k therms
- Various Annual Non-Energy Savings
- Annual Emissions Reduction = >400 tons of CO₂

ESA Benefits

- No capital investment by BAE; quarterly ESA payments for realized savings
- Enhanced reliability in the performance of key energy consuming equipment
- Programmatic approach to implement efficiency upgrades across BAE Systems' entire facility portfolio