

ENERGY SERVICE AGREEMENTS (ESAs)



An Energy Service Agreement (ESA) is a pay-for-performance, off-balance sheet financing solution that allows customers to implement energy efficiency projects with zero upfront capital expenditure. Through the ESA, the ESA provider pays for all project development and construction costs. Once a project is operational, the customer makes service charge payments for actual realized savings. The price per unit of savings is a fixed output-based charge that is set at or below a customer's existing utility price, resulting in immediate reduced operating expenses.

ESAs offer promise for retail energy retrofits because they limit risk while still providing an avenue for short-term energy and cost savings.

Why should you use it?

- Your company wants to pursue portfolio wide installations or retrofits, but does not have cash for capital investments.
- Your company is risk adverse and wants a third-party to take on underperformance risk and provide project management.
- Your company is looking for a financing mechanism with a contract term as short as 5 years and the option to buy out annually.

annually. This project is the first in a planned, multi-site ESA program that will include a diverse mix of site-specific, efficiency technologies and upgrades.

Companies like [Metrus Energy](#), [SClenergy](#), and [Siemens](#) offer ESAs and they report working with Big Lots, DSW, Big 5 Sporting Goods, 99 Cents Only Stores, BAE Systems, Hyatt Hotels, and other Fortune 500 companies.

Who has used it in the past?

The ESA is a proven structure that has been utilized to implement [numerous multi-million dollar retrofit projects at Fortune 500 and major institutional facilities](#). Overall, more than one hundred projects have been completed using the ESA structure. Although retailers are just beginning to explore the option, many other corporations have already taken advantage of the benefits an ESA can offer.

Construction is currently underway for a [\\$4.2 million efficiency project at a Fortune 500 manufacturing facility](#) financed under Metrus Energy's ESA. This retrofit includes lighting, variable frequency drives and controls that will yield \$550,000 in savings

What are the advantages?

- **Avoided Capital Outlay** – ESA provider pays for all upfront project costs, enabling customers to conserve capital funds for investment in their core business.
- **ESA Payments Treated as an Operating Expense** – The ESA is designed to be an off-balance sheet financing solution with regular payments that are similar to a standard energy utility bill or PPA.
- **Energy Savings Pay for Projects** – The ESA enables customers to redirect a portion of their current utility spending to pay for efficiency improvements; ESA payments are based on realized energy and operational savings.



This resource was completed with support from the Department of Energy's Office of Energy Efficiency and Renewable Energy and the Better Buildings Initiative to highlight innovative proven energy solutions from market leaders in the Retail sector. Find more ideas at the Better Buildings Solution Center at betterbuildingsolutioncenter.energy.gov

- **Reduced Operating Costs** – ESA payments are set below the current utility price.
- **Enhanced Reliability of Operations** – ESA providers pay for periodic maintenance services to ensure long-term reliability and performance of the project equipment.
- **Flexible & Scalable Financing** – Under an ESA, as new opportunities for savings are identified they can be funded as they emerge, and rolled out to additional buildings across facilities. ESA providers can bundle together multiple sites that have smaller sized project opportunities (\$500,000 or less) into a single ESA financing package (e.g., bundle 10 sites with \$500,000 projects into a single \$5 million ESA).

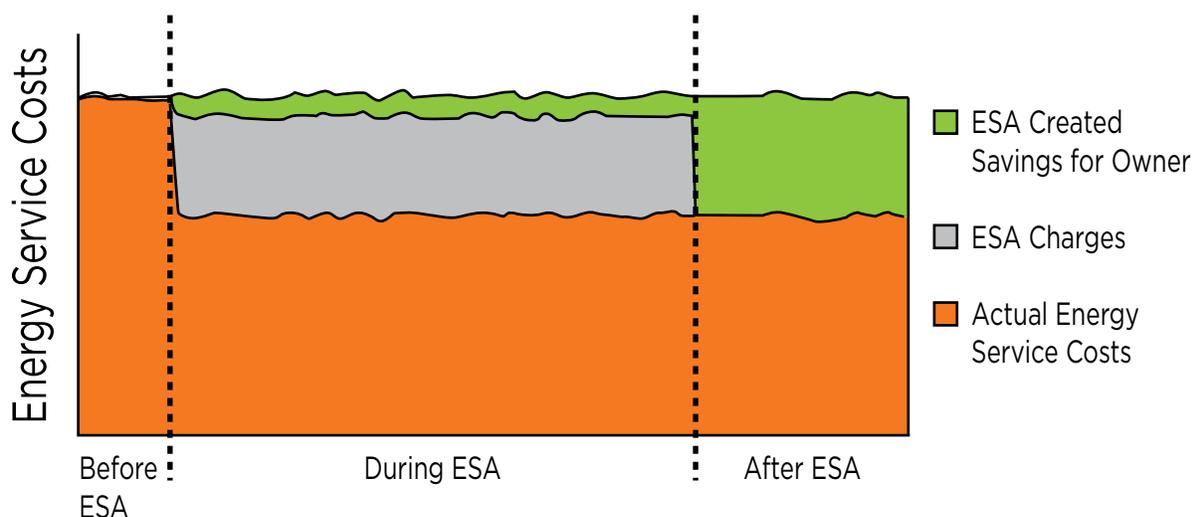
What are the downsides?

- Providers tend to look for larger project sizes (\$1 million and above).
- ESAs are only viable in leased space when the contract term matches the lease term.
- Transaction costs can be high if each deal is heavily negotiated; typical deals have a negotiation period of 9-24 months.

Who should you talk to next?

- Talk to your internal finance team to learn about the company’s history and comfort working with energy service providers.
- Reach out to energy service providers like [Metrus Energy](#), [SClenergy](#), and [Siemens](#) to learn more about how an ESA can help you meet your project goals.

Profile of an Owner’s Energy Service Costs



Source: Associated Renewable

ESAs IN THE MARKET

In an Energy Service Agreement (ESA), a single provider develops, finances, and owns energy efficiency measures and equipment installed in a customer's facilities during a contracted period (typically 5-15 years). An ESA customer enjoys lower utility bills throughout the contract term, but does not own installed equipment unless they buy out the contract or purchase the equipment at fair market value at the end of the ESA contract.

An ESA can be thought of as an energy efficiency version of a Power Purchase Agreement (PPA) commonly used to finance the installation of renewable energy systems.

The customer does not take project performance risk since they only pay for savings actually achieved. Instead, the ESA provider takes the project performance risk and gets paid less if the project savings are less than expected.

A Fortune 50 company in the Midwest used an ESA to make [\\$3.1 million worth of efficiency upgrades](#). The ESA provider, Metrus Energy, partnered with Siemens Industry, Inc. and Bank of America Merrill Lynch on the project. Benefits to the customer included no cost for the efficiency upgrades, annual cash savings, equipment resiliency, and a reduced carbon footprint. Construction was completed in April of 2015 and is producing \$500,000 in savings annually, which yields a simple payback period of 6.2 years. Annual energy savings due to lighting

upgrades, building automation system and controls, chiller replacement, and demand control ventilation, total more than 3.8 million kWh and 31,000 therms of natural gas annually. Further, the energy savings result in avoided emissions of 3,615 tons of carbon dioxide, which is equivalent to eliminating the electricity use of 500 homes each year and removing 760 vehicles from the road annually.

BAE Systems, an international global aerospace company and client of Metrus Energy, has incorporated ESAs into its overall energy reduction plan. Thus far, [BAE has used ESAs in five of its buildings](#) totaling \$10 million worth of efficiency improvements. As of February 2016, BAE has saved a total of \$4.1 million, equivalent to \$1.65 million annually. This project is a good example of the scalability of an ESA as BAE's projects are operational in three states.

Generally, an ESA is an effective tool for retailers looking to stabilize utility costs and make progress on their corporate social responsibility goals without making a large capital outlay. While ESAs offer long-term benefits due to the ability to buy out the contract and take ownership of installed equipment, their primary benefit is the flexible nature of the contract structure. An ESA would allow retailers to reduce energy consumption in stores, warehouses, distribution centers, and corporate offices with minimal management and little to no upfront costs.

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