

# ENERGY STAR® Performance Contracting Best Practices

The simple  
choice for  
energy  
efficiency.



August 2017

## Prepared for:

**U.S. Environmental Protection Agency**  
**ENERGY STAR for Commercial and Industrial Buildings**

## Prepared by:

The Cadmus Group LLC  
ICF International  
National Association of Energy Services Companies

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).



**Table of Contents**

Introduction..... 3

Common ESCO Market Barriers and ENERGY STAR Solutions ..... 4

Why ESCOs Use ENERGY STAR Tools ..... 6

    Portfolio Manager..... 6

    Cash Flow Opportunity Calculator ..... 8

Integrating ENERGY STAR Tools into an EPC Project..... 10

    Draft Generic ENERGY STAR Language for Responding to EPC RFPs, RFQs, and Contract Documents.. 10

Appendix – Finding and Understanding ENERGY STAR Tools ..... 12

    Tool #1: Portfolio Manager® ..... 12

    Tool #2: Cash Flow Opportunity Calculator ..... 13

    Tool #3: ENERGY STAR Certification ..... 14



## Introduction

The U.S. Environmental Protection Agency's (EPA) ENERGY STAR program is designed to help energy services companies as well as building owners and managers develop and implement comprehensive energy efficiency programs in their buildings. ENERGY STAR is a voluntary program that delivers environmental benefits and financial value through superior energy efficiency.

One key element in many comprehensive energy efficiency projects is an Energy Performance Contracting (EPC) project, in which a building owner hires an Energy Service Company (ESCO) to design, construct, and potentially facilitate financing for a comprehensive project that pays for itself from the resulting energy savings. EPC projects can incorporate a full range of technologies, including lighting, heating, air conditioning, building controls, water conservation, combined heat and power, demand response, renewable energy, and sustainable building operations. These projects can make a large contribution to reducing energy use in commercial buildings and EPA has a suite of tools to advance these initiatives.

Commercial buildings in the United States consume more than \$190 billion of energy each year. They account for 36% of all U.S. electricity consumption and are responsible for 18% of U.S. carbon dioxide emissions. **EPA studies have confirmed what ESCOs know from field experience – that at least 30% of the energy used in commercial buildings is wasted<sup>1</sup>.**

ENERGY STAR can help an ESCO prioritize project development targets and overcome common barriers to EPC project development and implementation. Effective EPC project development requires efficient targeting of ESCO sales and engineering resources. Leveraging ENERGY STAR tools can facilitate and expedite the EPC project development process.

This resource presents best practices for ESCOs implementing EPC projects by integrating publicly available, no-cost ENERGY STAR tools. Utilizing these online tools will make the results of EPC projects more actionable and understandable to building owners, tenants, policy makers, and the public.

The resource has four sections:

1. Common ESCO Market Barriers
2. Why ESCOs use ENERGY STAR tools
3. Integrating ENERGY STAR tools into an EPC project
4. Appendix describing the ENERGY STAR tools in more detail

---

<sup>1</sup> <https://energy.gov/eere/buildings/about-commercial-buildings-integration-program>

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).



## Common ESCO Market Barriers and ENERGY STAR Solutions

ESCOs experience common market barriers when developing and implementing EPC projects. ENERGY STAR helps remove market barriers. ESCOs can use ENERGY STAR tools to overcome the major market barriers outlined in the following section. The ENERGY STAR program offers:

1. An independent, third-party perspective
2. Comparative metrics to assess how a building is performing
3. Tools that help you achieve buy-in from all stakeholders
4. Recognition for superior energy management and performance

ENERGY STAR tools can help address the following challenges, including:

### Market Barrier: Customer Skepticism

ESCOs face the challenge of communicating the benefits of an EPC opportunity to a potential customer. Customers who feel that their facilities energy use is already well-managed may be skeptical of the potential savings estimates provided by the ESCO. ESCOs find it difficult to establish credibility with a skeptical potential customer.

#### *How can ENERGY STAR help overcome customer skepticism?*

##### *Assess Building and Portfolio Energy Performance*

EPA's ENERGY STAR energy performance scale estimates building and portfolio energy efficiency relative to similar buildings nationwide. ESCOs can communicate energy performance to decision makers using the simple 1—100 ENERGY STAR score for eligible building types. For building types that are not eligible to earn the ENERGY STAR score, ESCOs can use weather-normalized metrics, such as source and site energy use intensity (EUI). This can be used to communicate energy performance and compare the performance of buildings to the national median values of energy consumption in similar buildings as determined by the Commercial Building Energy Consumption Survey (CBECS). **A simple rule of thumb for analyzing EUI is that the lower the value, the better the energy performance.**

To curb customer skepticism, ESCOs can utilize metrics derived from EPA's ENERGY STAR Portfolio Manager® tool to provide an objective, externally-validated assessment of a building's energy performance that can help the customer understand the scale of the opportunity. Benchmarking energy use in Portfolio Manager makes the opportunity clear for the customer and the financial manager.

##### *Set Energy Performance Goals*

Goals for increasing energy efficiency and reducing greenhouse gas emissions can be set using Portfolio Manager. ESCOs can quickly and easily set targets for the 1—100 ENERGY STAR score, source EUI, site EUI, source energy use, site energy use, energy cost, and greenhouse gas emissions. ESCOs can use this information to communicate the relative impact of an energy saving project. ESCOs will be able to express these reduction goals in simple terms using the 1—100 ENERGY STAR score and weather-normalized energy metrics.

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).



## *Evaluate Progress*

Portfolio Manager can be used to track and report energy reductions and financial savings against goals, and to communicate EPC project results to project stakeholders in a form that is accessible, approachable, and complements detailed project measurement and verification (M&V) reports.

## **Market Barrier: Financial Indecision**

After the ESCO and the customer have established the technical elements of a project, there are often challenges when seeking approval from the customer's financial managers. These managers may be unfamiliar with energy-savings technologies and are puzzled by the relatively complex structure of an EPC as compared to a normal construction contract, which involves unfamiliar financial terms and potential risks. The instinctual response of many financial managers is to slow down the project and to underestimate the cost of project delays. Managers may not understand opportunity cost and may think that waiting for a future allocation from the capital budget is preferable to financing a project today. Financial managers may be concerned about their ability to later evaluate a project's effectiveness beyond taking the ESCO's word for it.

### *How can ENERGY STAR help overcome financial indecision?*

#### *Calculate Financial Value of Potential Efficiency Improvements*

EPA has ENERGY STAR financial tools that can be used to quantify and communicate the value of energy efficiency, compute potential financial returns, and emphasize the urgency of implementing the project. Portfolio Manager is a useful tool for showing financial managers the dollars and cents benefits of a project pre-and-post implementation.

## **Market Barrier: No Internal Recognition**

The risk versus reward calculation for facility managers thinking about an EPC project seems heavily weighted toward risk. Successful EPC projects often involve new technologies for equipment that are largely invisible to the occupants. If the EPC project works well, occupants may realize an improvement in comfort, but won't see or feel significant changes. Similarly, the energy and cost savings for the organization are real, but may also be unseen by building occupants. If there are problems, however, such as the lights going out and/or the building becoming intolerably hot or cold, occupant comfort is visibly compromised. Therefore, recognizing and publicizing a successful EPC project can be difficult.

### *How can ENERGY STAR help provide recognition?*

#### *Earn ENERGY STAR Recognition for Superior Energy Performance*

ENERGY STAR tools can be used to document and communicate project success to all stakeholders. ENERGY STAR partners can gain recognition through leadership awards, publicized case studies, and more. Buildings with a 1—100 ENERGY STAR score of 75 or higher may qualify for the prestigious ENERGY STAR certification.

Buildings that cannot earn a 1—100 ENERGY STAR score can use Portfolio Manager to identify percent reduction goals and provide recognition on those metrics. In addition, all building types can use Portfolio Manager to track and provide recognition on improvements over time. Even low performing buildings can set percent reduction goals and use the tracking and reporting features to identify and provide internal recognition to building staff, for example, on incremental improvements.

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).



Portfolio Manager provides a suite of easy-to-use reports that make communicating energy savings easy.

## Why ESCOs Use ENERGY STAR Tools

This section of the document describes how ENERGY STAR tools are typically used in an EPC project to overcome the barriers outlined in the previous section.

### Portfolio Manager

#### Assessing Building and Portfolio Energy Performance

ENERGY STAR Portfolio Manager, EPA's flagship energy management tool and metrics calculator, can provide eligible property types a score on EPA's 1—100 energy performance scale – where the higher a building's score, the more efficiently it uses energy relative to other buildings of its type. For building types that are not eligible to earn the ENERGY STAR score, ESCOs can use weather-normalized metrics, such as source and site EUI to assess performance and compare the performance of those buildings to the national median values of energy consumption in similar buildings as determined by CBECS.

Portfolio Manager can be used both in the early stages of EPC project development and in the long-term M&V of project results, as follows:

#### *Confirming Existing Conditions*

During the procurement/RFP phase, when both the facility owner and the ESCOs are trying to determine if there is a viable EPC project at the facility, the ESCOs will deliver an ENERGY STAR score or weather-normalized energy use intensity metric from Portfolio Manager as part of their Preliminary Technical Proposals. This score helps the ESCOs and the building owner or manager understand the magnitude of the energy savings opportunity at the facility, and may help to overcome owner resistance to the ESCOs' estimates of potential energy savings. Many building owners are surprised when an ESCO estimates that a facility can realize 25 or 30 percent energy savings. A low ENERGY STAR score or high weather-normalized energy use intensity metrics, which are independent confirmations of savings potential, can help the owner understand that the savings potential is real.

#### *Prioritizing Retrofit Opportunities*

If an ESCO delivers Portfolio Manager scores or weather-normalized energy use intensity metrics for a set of buildings in an owner's portfolio, the owner and the ESCO can readily prioritize the buildings in terms of their energy savings potential. A building with a relatively high ENERGY STAR score or low weather-normalize EUI can be moved down the priority list while a building with a low ENERGY STAR score or high EUI can receive immediate attention.

This type of prioritization allows the ESCO and the owner to prioritize the relative opportunities within their portfolio and develop the most cost-effective strategy for approaching the whole portfolio rather than individual projects.

As highlighted in Figure 1, a city with 12 fire stations was given a small budget to make energy efficiency improvements to the stations. The stations were all very similar, but after benchmarking, it became clear that certain stations were using significantly more energy than others. This information enabled the city to uncover inefficiencies and best practices they did not know about, identify know where to spend their money, and verify whether the changes they made were having an impact over time.

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).

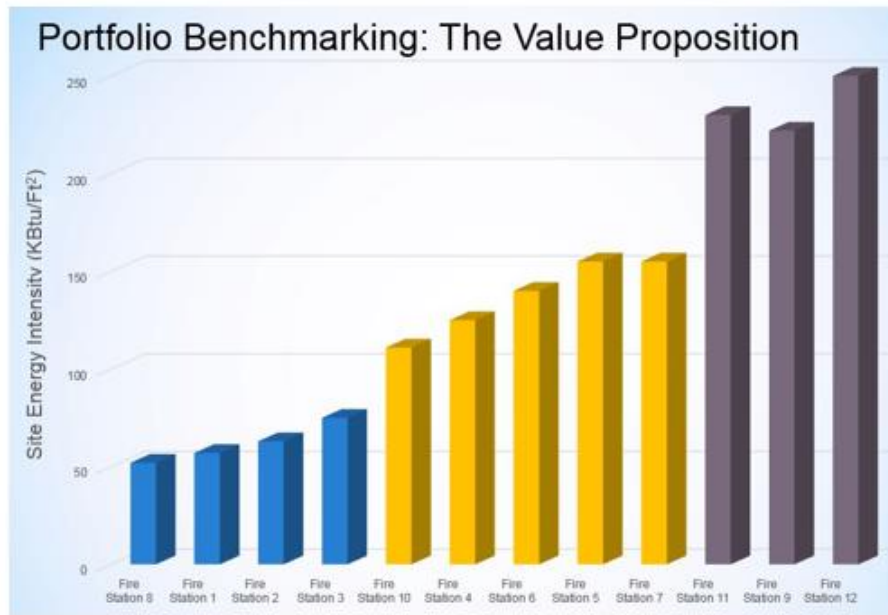


Figure 1: Portfolio Benchmarking

### Supporting the Sale

ESCOs incorporate ENERGY STAR metrics from Portfolio Manager into their EPC project sales proposals by attaching a copy of the Statement of Energy Performance (SEP), a formal report that documents the building's current energy performance. This resource reinforces the ESCO's case that the building needs a substantial EPC project and subdues the customer's skepticism of the savings potential.

### Setting Energy Performance Targets

The "Set Baseline or Target" function in Portfolio Manager is used in two ways to help ESCOs and facility owners to understand the potential of EPC projects:

#### Estimating Improvement in the ENERGY STAR Score or Weather-Normalized Energy Metrics

The first use of this function is to project the potential improvement in the ENERGY STAR score if a specific EPC project is implemented. During the Investment Grade Audit (IGA), an ESCO proposes a project and estimates the energy savings percentage the project will produce. That percentage is entered as the property's "Target Percent Better than Baseline," and Portfolio Manager produces a projected post-project ENERGY STAR metrics corresponding to the future reduced energy consumption.

#### Setting Improvement Targets

The second use of this function is to input the target ENERGY STAR score for a facility, and then let Portfolio Manager calculate the source and site EUI for that target ENERGY STAR score. The ESCO can then develop a cost-effective project to produce or exceed the target energy savings percentage.

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).



## Evaluating Progress

### *Tracking Building and Portfolio Improvement*

Portfolio Manager is also used to track the long-term performance of buildings where EPC projects have been implemented. Portfolio Manager does not substitute for a more comprehensive ESCO M&V plan, but rather complements it with an easy-to-understand ENERGY STAR score, or weather-normalized source EUI, demonstrating a building or portfolio's progress. For example, Portfolio Manager can be used by an agency that wants to demonstrate its progress toward meeting a local or state benchmarking requirement, or legislative or regulatory energy savings mandate, to public officials and the public. Detailed M&V reports are generally not very useful for this purpose because they contain a great deal of technical detail and are usually too complex for the intended audience. The ENERGY STAR score or weather-normalized source EUI, however, provide exactly the kind of metric that lends itself to reporting progress to these audiences.

## Getting Recognition for Achievements

### *Identifying Incremental Improvements*

ESCOs can utilize Portfolio Manager to provide internal recognition to staff contributing to buildings that have improved their energy use over time. ESCOs can easily set baselines and targets for EPC projects and use this data to identify improvements in energy use month-to-month and annually. For example, if a 10% reduction over the baseline year is achieved, internal recognition can be given to the building staff.

### *Earning ENERGY STAR Certification*

ESCOs can utilize Portfolio Manager to provide internal recognition to staff contributing to high-performing building in the top 25 percent of energy-efficient buildings in the nation, as measured by an ENERGY STAR score of 75 or higher. Buildings with an ENERGY STAR score of 75 or higher may qualify for ENERGY STAR certification. Many types of commercial and industrial buildings can receive an ENERGY STAR score based on a comparison of energy use with other, similar types of buildings.

## Cash Flow Opportunity Calculator

### Calculating Financial Value

The ENERGY STAR Cash Flow Opportunity Calculator (CFO Calculator) can be used to help the ESCO and facility staff persuade public sector decision-makers to approve a project in a timely fashion and create an appropriate sense of financial urgency. EPA developed the CFO Calculator to demonstrate how savings to an operating budget resulting from an energy efficiency project can be redirected to pay for the needed improvements without having to compete for scarce capital dollars. EPC projects are often delayed for months, or sometimes years, because financial decision-makers do not properly calculate and reflect the costs associated with delaying or not implementing technically sound energy efficiency projects.

### *Confirming Financial Viability*

One use of the CFO Calculator is to confirm that the proposed EPC project can, in fact, pay for itself from energy savings. The CFO Calculator requires a few simple inputs and then computes the amount of a project that can be paid entirely from energy savings. In short, the financial manager can use the calculator as an independent tool to verify proposed project's financial projections. The financial manager can compare the project value to the price of the project proposed by the ESCO and get a quick confirmation that the

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).





project will pay for itself from savings. By changing the inputs, the project amount paid from savings can be increased (or decreased), which provides a useful financial sensitivity analysis tool.

## *Estimating the Cost of Project Delay*

Another use of the CFO Calculator is to help the financial manager calculate the cost of delaying a project incurred by waiting for future capital budget funds or more favorable financing terms. Many public agency finance managers are averse to borrowing to pay for energy efficiency projects because they believe that paying interest significantly decreases the value of the project to the facility owner. The CFO Calculator is a financial tool to test that belief.

## *Waiting for Cash*

Many financial managers believe that it is a “no-brainer” to postpone the implementation of a performance contract to wait for a future cash appropriation: How can it possibly make more sense to borrow the project cost and pay interest for the term of the contract rather than wait for “free” money? The CFO Calculator demonstrates, by comparing the net present value of the cash flows, that for most projects it makes sense to finance the project and do it now, rather than wait for funds to become available in a future budget. In fact, this tool often shows that the energy inefficiencies incurred by waiting for just one year is greater than the entire financing cost over the term of the financing. The results are often counter-intuitive and the calculator is especially valuable for organizations that have a build-out program covering multiple years.

## *Waiting for a Lower Interest Rate*

Depending on market conditions, financial managers may feel motivated to delay a project’s implementation to wait for a lower interest rate (e.g., a bond or revolving loan fund) rather than accepting a currently offered third-party financing proposal. The CFO Calculator demonstrates that the differential in interest rates offered by bond issues or low interest loan pools may not economically justify waiting more than a few weeks to implement a project.

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA’s ENERGY STAR program has been America’s resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).



## Integrating ENERGY STAR Tools into an EPC Project

This section of this resource describes how an ESCO can develop and implement a project that makes full use of the ENERGY STAR tools described above – Portfolio Manager and the financial tools – by integrating the tools into each critical step of a project:

- The Request for Qualifications (RFQ) or Request for Proposals (RFP);
- The Investment Grade Audit (IGA) contract; and
- The Energy Services Agreement (ESA).

The next section provides draft generic contract language developed by NAESCO (the National Association of Energy Services Companies) that incorporates the use of ENERGY STAR tools when responding to typical procurement EPC projects, and recommends where this language can be inserted into typical contract documents. The recommendations are based on a review of a number of individual procurement and contracting documents, as well as a generic document set that has been developed by the Energy Services Coalition (ESC), a national organization whose members are comprised of ESCO personnel and state energy officials.

## Draft Generic ENERGY STAR Language for Responding to EPC RFPs, RFQs, and Contract Documents

NAESCO has drafted sample performance contract insert language, as outlined below. For each insert we have provided a functional specification followed by a draft text in italics.

### RFP Language

**Function:** Include in the proposal response to an RFP that the “ESCO” shall provide an ENERGY STAR score, or weather-normalized source EUI metric, and a target score or EUI as part of its preliminary technical proposal.

**Draft Text:** *“For each building covered in the Preliminary Technical Proposal, “ESCO” will provide a pre-retrofit ENERGY STAR score using EPA’s ENERGY STAR Portfolio Manager, the weather normalized energy use intensity (EUI) in kBtu/SF, and an estimated post-retrofit ENERGY STAR score target. If the building type is not eligible for a score in Portfolio Manager, then the weather normalized source EUI will suffice.”*

### RFQ Language

**Function:** Include in the response to an RFQ that the “ESCO” shall provide an ENERGY STAR score, or weather-normalized source EUI metric, and target score or EUI estimates as elements of the ESCO’s qualifications.

**Draft Text:** *“Using the EPA’s ENERGY STAR tools and resources for each eligible facility, “ESCO” will provide an estimated pre- and post-retrofit ENERGY STAR score using EPA’s ENERGY STAR Portfolio Manager and submit a completed Financial Value analysis using ENERGY STAR Financial tools as part of the Investment Grade Technical Energy Audit Report. “ESCO” will also submit an updated ENERGY STAR score for each eligible facility upon completion of each guaranteed year as part of the Guaranteed Energy Savings Agreement. Information regarding ENERGY STAR tools and resources, and a list of eligible facility types can be found at: [www.energystar.gov/buildings](http://www.energystar.gov/buildings).”*

*“The submission of ENERGY STAR scores (when available), or the weather normalized source EUI, plus an energy improvement score target, from ENERGY STAR Portfolio Manager is an important qualification of our response.”*

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA’s ENERGY STAR program has been America’s resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).



## IGA Language

**Function:** Include in the Investment Grade Audit contract that the “ESCO” shall provide a revised ENERGY STAR score and target score estimate as part of its Investment Grade Audit.

**Draft Text:** *“For each eligible building, “ESCO” shall provide a pre-retrofit ENERGY STAR score using EPA’s ENERGY STAR Portfolio Manager, the weather normalized energy intensity in kBtu/SF, and an estimated post-retrofit ENERGY STAR score. If the building type is not eligible for a score in Portfolio Manager, then the normalized source EUI will suffice.”*

**Function:** Include in a Public Sector Investment Grade audit contract that “ESCO” shall provide a completed Cash Flow Opportunity Calculator (CFO Calculator) for the project, with variables inserted that represent the most likely options available to the customer.

This will enable the “ESCO” and the customer to have an agreed-upon format for discussing project financing options and the potential costs of project delays. The CFO Calculator will be provided in both hard copy and electronic format, so that the agency can run its own analyses on financing options in the agreed format.

**Draft Text:** *“ESCO will submit a completed Cash Flow Opportunity spreadsheet using the EPA’s ENERGY STAR Cash Flow Opportunity Calculator (CFO Calculator) for the total project which shall include all facilities to be improved. A copy of the CFO Calculator Excel Workbook can be found at the following URL: [www.energystar.gov/CFOfcalculator](http://www.energystar.gov/CFOfcalculator).”*

## ESA Language

**Function:** Specify in the contract documents and appropriate contract schedules that the ESCO will provide another ENERGY STAR score after the building has operated for a full year with the project retrofits in place, and for as many subsequent years as the customer chooses. ESCO will assist the customer to apply for ENERGY STAR building certification for applicable buildings.

**Draft Text:** *“For each building included in the project, “ESCO” will provide an updated ENERGY STAR score (when available), or weather-normalized source Energy Use Intensity metric, to be included in the Measurement and Verification report at the conclusion of each year of project operation (alternately, at the conclusion of each of the first xx years of project operation). Also, for applicable buildings, “ESCO” includes the cost to provide services and complete the annual application for building ENERGY STAR certification, if eligible.”*

**Function:** Specify where the ENERGY STAR tools can be found on the ENERGY STAR website.

**Draft Text:** *“The ENERGY STAR tools, information regarding ENERGY STAR and Portfolio Manager, and a list of eligible facility types can be found at: [www.energystar.gov/buildings](http://www.energystar.gov/buildings).”*

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA’s ENERGY STAR program has been America’s resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).



## Appendix – Finding and Understanding ENERGY STAR Tools

This section of the resource describes in further detail the ENERGY STAR tools referenced above, which can be used in concert with most EPC projects:

1. Portfolio Manager
2. The Cash Flow Opportunity Calculator
3. ENERGY STAR Certification

The tools described in this document are just a few of the full suite of tools and resources that EPA's ENERGY STAR program has designed and made available at: [www.energystar.gov/buildings](http://www.energystar.gov/buildings).

No-cost training is available through EPA's ENERGY STAR program on the use of all ENERGY STAR tools and resources. These trainings are available at: [www.energystar.gov/buildings/training](http://www.energystar.gov/buildings/training).

### Tool #1: Portfolio Manager®

A summary of the key functions of EPA's Portfolio Manager tool that ESCOs will utilize are outlined below. For more information and to access Portfolio Manager tool, visit: [www.energystar.gov/benchmark](http://www.energystar.gov/benchmark).

Portfolio Manager, EPA's flagship energy management tool and metrics calculator, is used to track monthly energy consumption and cost data. The straight-forward platform enables ESCOs and building owners to identify energy and utility cost savings over time, assess energy, water, and waste consumption, and track greenhouse gas emissions for a portfolio of customer buildings in a secure online tool. Portfolio Manager can help an ESCO to prioritize project development targets and overcome common barriers to EPC project development and implementation.

Effective EPC project development requires efficient targeting of ESCO sales and engineering resources. Portfolio Manager helps an ESCO organize a portfolio's energy and water data, and track key consumption, performance, and cost information portfolio-wide. Using Portfolio Manager, an ESCO can benchmark facilities relative to other similar buildings and their past performance, and see trends in source energy use, ENERGY STAR score, water use, and costs.

### Compare Facility Energy Performance

Many building types can earn a 1—100 ENERGY STAR score, a comprehensive snapshot of your building's energy performance. It assesses the building's physical assets, operations, and occupant behavior in a quick and easy-to-understand number. A score of 50 is the median. Therefore, if your building scores below 50, it means it's performing worse than 50 percent of similar buildings nationwide, while a score above 50 means it's performing better than 50 percent of its peers. And a score of 75 or higher means it's a top performer and may be eligible for ENERGY STAR certification.

Buildings types unable to earn an ENERGY STAR score can assess their property by comparing to the national median for various metrics, including weather-normalized source EUI. For every property type, Portfolio Manager shows national median values for energy use, cost, and greenhouse gas emissions.

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).



## Verify and Track

Portfolio Manager can also verify and track building performance over time. An ESCO can generate a Statement of Energy Performance (SEP) for each building, documenting important energy information and building characteristics, which will enable the ESCO and/or the building owner to:

- Provide documentation of project savings in a form less technical and more accessible than a typical ESCO project M&V report
- Communicate Energy Performance to tenants/owner/customers
- Apply for ENERGY STAR building certification
- Satisfy LEED: EB O+M requirements
- Support mortgage, sale, and/or lease transactions
- Document performance in EPC projects
- Measure environmental emissions

ESCOs can also generate and download the Energy Performance Report which displays a summary of the energy performance, including important property details and metrics, for a portfolio of buildings.

## Set Performance Baseline and Target

This function, accessible via the Goals tab in Portfolio Manager, is used to set performance targets for an EPC project by enabling the ESCO to quickly determine the relationship between the percent of energy saved in a building and the ENERGY STAR score and/or weather-normalized source EUI of a building.

Once a building has been benchmarked in Portfolio Manager, and a current score established, establishing target metrics (ENERGY STAR score, target percentage better than baseline, and target percentage better than median) can estimate a resulting new ENERGY STAR score by entering a specified percent reduction in energy use.

## Tool #2: Cash Flow Opportunity Calculator

A summary of the key functions of the Cash Flow Opportunity Calculator (CFO Calculator) that ESCOs will utilize are outlined below. For more information and to download the CFO Calculator, visit: [www.energystar.gov/CFOcalculator](http://www.energystar.gov/CFOcalculator).

The CFO Calculator is an Excel tool designed to help public sector financial decision-makers address three critical questions when evaluating EPC projects:

- How much new energy efficiency equipment can be paid for from the anticipated project savings?
- Should this project be financed now, or is it better to wait and use cash from a future budget?
- Is money being lost by waiting for a lower interest rate for project financing?

The CFO Calculator helps ESCOs make a convincing argument to customer financial officers to move ahead with an EPC project. The answers to the last two questions are often surprising and counter-intuitive to financial decision-makers, because the costs of delaying a project while waiting for future budget allocations or lower interest rates are much higher than many people anticipate.

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).



## Tool #3: ENERGY STAR Certification

A summary of the key functions of the ENERGY STAR recognition that ESCOs can utilize are outlined below. For more information, visit: [www.energystar.gov/Recognition](http://www.energystar.gov/Recognition).

America's desire for energy efficient buildings is growing, and superior energy management — identified by the ENERGY STAR certification — is a critical element of green buildings. ESCOs can offer to assist their customers (building owners and managers) in achieving ENERGY STAR recognition as an additional incentive to implementing EPC projects.

Buildings in the top 25 percent of energy-efficient buildings in the nation, as measured by an ENERGY STAR score of 75 or higher, may qualify for ENERGY STAR certification. Many types of commercial and industrial buildings can receive an ENERGY STAR score based on a comparison of energy use with other, similar types of buildings.

Commercial building types eligible to receive a score represent over 70% percent of U.S. commercial floor space. As of 2017, buildings that can earn the ENERGY STAR include offices, bank branches and financial centers, courthouses, data centers, hospitals, hotels and motels, K-12 schools, multifamily housing, retail stores, supermarkets, senior care communities, warehouses, and worship facilities. EPA is always working to develop score models for additional segments of the commercial building market. To identify which building types are currently eligible to receive a score, visit: [www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/identify-your-property-type-0](http://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/identify-your-property-type-0).

Types of industrial buildings that can earn the ENERGY STAR are plants for auto assembly, cement, commercial bread & rolls, container glass, cookies & crackers, flat glass, frozen fried potato processing, juice processing, pharmaceuticals, wet corn milling, and along with integrated paper mills, pulp mills, and petroleum refineries.

For more information on certification for commercial buildings visit: [www.energystar.gov/BuildingCertification](http://www.energystar.gov/BuildingCertification) and [www.energystar.gov/Plants](http://www.energystar.gov/Plants) for more information on certification for industrial plants.

## How will earning the ENERGY STAR distinguish an organization?

Buildings that earn the ENERGY STAR are the top performers for energy efficiency nationwide and use about 35 percent less energy than average buildings. More than 29,000 buildings totaling more than 4 billion square feet in all 50 states have earned the prestigious ENERGY STAR certification. Earning ENERGY STAR certification is evidence of an organization's social responsibility to the community and its commitment to reduce its impact on the environment. EPA helps highlight achievements within an organization and to the public. Each year in January or early February, EPA releases information about buildings that have earned the prestigious ENERGY STAR certification to the press and includes these buildings in its own media activities. Within the ENERGY STAR buildings program, it is also possible to earn public recognition as an ENERGY STAR Partner, or to earn a nationally recognized [Partner of the Year Award](#).

ESCOs that are ENERGY STAR partners also benefit from recognition by displaying the ENERGY STAR partner logo on their websites and in project write-ups. For more information on partnership, visit [www.energystar.gov/JoinBuildings](http://www.energystar.gov/JoinBuildings).

ENERGY STAR® is the simple choice for energy efficiency. For more than 20 years, EPA's ENERGY STAR program has been America's resource for saving energy and protecting the environment. Join the millions making a difference at [energystar.gov](http://energystar.gov).