

Appendix 7-1

Portfolio Manager Items for GHG Evaluations

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Current Facility

Portfolio Manager

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You have successfully deleted Electric Grid Meter from your property.

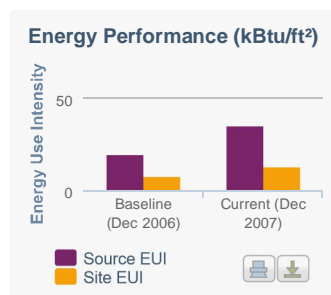
Proposed Falmouth WWTF

154 Blacksmith Shop Road, Falmouth, MA 02540 | [Map It](#)

Portfolio Manager Property ID: 3187857 | Primarily: [Wastewater Treatment Plant](#)

Year Built: 2003

- [Summary](#)
- [Details](#)
- [Meters](#)
- [Goals](#)
- [Design](#)



Generate & Download Performance Reports for this Property

[Statement of Energy Performance \(SEP\)](#)

[Score Card](#)

[Data Verification Checklist](#)

Total Project Investment

\$0.00

Total Estimated Savings

\$0.00

Third Party Certifications

You can track your third party certifications, such as LEED and Green Globes. This information will automatically be included in your Sustainable Buildings Checklist.

Sustainable Buildings Checklist

ENERGY STAR Score (1-100)

[Current Score:](#)

13

[Baseline Score:](#)

N/A

Current Baselines & Targets

Selected **Baselines:**

Energy: Not Set
Water: Not Available

Earliest **Baselines:**

(calculated by Portfolio Manager)

Energy: Dec 2006
Water: Not Available

Target:

Not Set

Design Target:

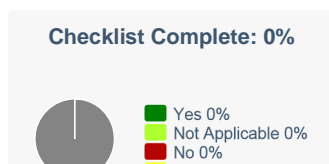
Not Set

Metrics Comparison for Your Property & Your Target

Metric	Baseline (Dec 2006)	Current (Dec 2007)	Target*	Median Property*
ENERGY STAR score (1-100)	Not Available	13	Not Set	50
Source EUI (kBtu/ft ²)	19.8	34.8	Not Set	22.2
Site EUI (kBtu/ft ²)	8	12.9	Not Set	8.2
Source Energy Use (kBtu)	5391788.1	9455422.5	Not Set	6038422.2
Site Energy Use (kBtu)	2169517.7	3507000.7	Not Set	2230408.2
Energy Cost (\$)	0	0	Not Set	0
Total GHG Emissions (MtCO ₂ e)	Not Available	325.2	Not Set	206.82310248

* To compute the metrics at the target and median levels of performance, we will use the fuel mix associated with your property's current energy use.

Energy Projects (0)



Checklist completion percentage includes "Yes" and "Not Applicable" responses.

Name	Date Implemented	Estimated Savings	Action

Nothing to display

Third Party Certifications

You have not added any third party certifications for this property.

[Add or Edit Third Party Certifications](#)

Sustainable Buildings Checklist

This Checklist evaluates sustainability in existing buildings. It was first developed for US federal building managers for compliance with the Federal Guiding Principles for High Performance Sustainable Buildings. It is also a valuable tool for evaluating the sustainability of non-government buildings.

Target Date of Compliance:

Not Set

Actual Date of Compliance:

Not Set

[Start the Checklist](#)

You have chosen to delete this project ({}). If you continue, this project will be permanently deleted. Are you sure you want to continue?

[Continue](#) [Cancel](#)

Leaving Portfolio Manager

[Continue](#) [Cancel](#)

Permissions - When you share a property with another person who uses Portfolio Manager, you determine the specific information that the individual can view and the specific actions that the individual can perform on your property. These permissions are organized into four categories:

- **Read Only Access** provides the ability to view all information about your property, but not to make any additions or changes. For example, the person could view your energy consumption information but could not make corrections or add new monthly energy use.
- **Full Access** provides the ability to view and make edits to your property. With Full Access, a person can do all of the same things you can. This includes deleting a property.
- **Custom Access** allows you to select more granular permissions for each person you are sharing with. These permissions are broken down into sets based on the types of information associated with your property and the corresponding actions associated with each, including adding, editing and deleting. For example, "Meter Information" includes access to all meters for the property including basic meter information, how the meter is associated with the property and energy consumption information. You can select "None", "Read Only Access" or "Full Access" for each of these sets. By default, all selections are set to "Read Only Access".
- **Exchange Data** allows you to select an organization, registered to use web services, to exchange data with your Portfolio Manager account. You will be able to specify specific permissions regarding whether the organization will be able to view or modify property, building, and meter level information. You may also be required to provide additional information to the organization so that they can process your request for data exchange services.

Did you know that property design projects can earn ENERGY STAR certification for meeting energy efficient criteria? [Learn more about Designed to Earn the ENERGY STAR certification](#). Did you know that your design can earn ENERGY STAR certification? [Update your design's planned use information](#) to see if you are eligible to apply for Designed to Earn the ENERGY STAR. Your design does not meet the requirements to calculate a score. [Learn more about ENERGY STAR scores](#). Glossary.reclaimedWater.title - Glossary.reclaimedWater.textENERGY STAR Score - The ENERGY STAR Score is a measure of how well your property is performing relative to similar properties, when normalized for climate and operational characteristics.

The ENERGY STAR scores are based on data from national building energy consumption surveys, and this allows Portfolio Manager to control for key variables affecting a building's energy performance, including climate, hours of operation, and building size. What this means is that buildings from around the country, with different operating parameters and subject to different weather patterns, can be compared side-by-side in order to see how they stack up in terms of energy performance. The specific factors that are included in this normalization (Hours, Workers, Climate, etc) will depend on the property type.

The 1-100 scale is set so that 1 represents the worst performing buildings and 100 represents the best performing buildings. A score of 50 indicates that a building is performing at the national median, taking into account its size, location, and operating parameters. A score of 75 indicates that a property is performing in the 75th percentile and may be eligible to earn [ENERGY STAR Certification](#).

ENERGY STAR Scores are [available for many property types](#).

The 1-100 scale is based on the country in which your property is located. Properties in the US are compared to the national population of properties in the US. Similarly, properties in Canada are compared to the national population of properties in Canada. At this time there are no ENERGY STAR scores specifically developed for other countries. Therefore, properties located in other countries will be compared to the US national population, by default. Source EUI - See Source Energy.Site EUI - See Site Energy.Site Energy Use - See Site Energy.Source Energy Use - See Source Energy.GHG Emissions - Greenhouse Gas (GHG) Emissions are the carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) gases released into the atmosphere as a result of energy consumption at the property. GHG emissions are expressed in carbon dioxide equivalent (CO₂e), a universal unit of measure that combines the quantity and global warming potential of each greenhouse gas. Emissions are reported in several different categories:

- **Direct Emissions** – Direct Emissions are emissions associated with onsite fuel combustion (e.g. combustion of natural gas or fuel oil). Direct emissions are available as a total amount in metric tons (MTCO₂e) or as an intensity value in kilograms per square foot (kgCO₂e/ft²).
- **Indirect Emissions** – Indirect Emissions are emissions associated with purchases of electricity, district steam, district hot water, or district chilled water. These emissions occur at your utility's plant, but they are a result of your property's energy consumption and therefore contribute to your overall GHG footprint. Indirect emissions are available as a total amount in metric tons (MTCO₂e) or as an intensity value in kilograms per square foot (kgCO₂e/ft²).

- **Biomass Emissions**– Biomass Emissions are emissions associated with biogenic fuels such as wood or biogas (captured methane). The only biomass fuel currently available in Portfolio Manager is wood. Biogenic fuels are combusted onsite, but do not contribute to direct emissions. Biomass emissions are available as a total amount in metric tons (MTCO_{2e}) or as an intensity value in kilograms per square foot (kgCO_{2e}/ft²).
- **Total Emissions** – Total Emissions is the sum of Direct Emissions and Indirect Emissions. This sum is available as a total amount in metric tons (MTCO_{2e}) or as an intensity value in kilograms per square foot (kgCO_{2e}/ft²).

Energy Cost - The energy cost is the annual cost associated with the selected 12 month time period for a property or building. Energy cost is available for each individual energy type and also as an aggregated value across all energy types. Metric Date - All Metrics are computed on an annual basis, meaning they represent 12 full calendar months of data. The date associated with a given metric is the last day of the 12-month period to which it applies. For example, a date of 12/31/2012 would be used for metrics that represent the calendar year of 2012.

There are three particular dates of interest for a property:

- **Earliest Date** – The Earliest Date is the date that marks the first 12 month period for which you have complete data. Please note that the earliest date may differ from your Baseline Date. Your earliest date is determined by Portfolio Manager and simply indicates the earliest possible date for which you have 12 months of data. The Baseline date is determined by you, according to your management goals. Please note that a different earliest date is determined for your energy and water meters.
- **Baseline Date** – The Baseline Date marks the 12-month period selected as the Property's baseline for comparison. For example, a baseline date of 12/31/2005 means that your baseline is the calendar year of 2005. You can set a different baseline date for energy and for water.
- **Current Date** – The Current Date marks the most current date for which there are 12 full months of data. For example, if your Current Date is 12/31/2012, then you have complete meter data for the 12 months ending December 2012. A different current date is determined for energy and water, based on the most current meter data.

Target Values - Target Values are the performance metrics associated with an established target (goal) for your property. Portfolio Manager has both a regular target and a target for the property design:

- **Target** – This is the target for comparison relative to actual operation. Once your target is established, metrics such as *Site EUI*, *Source EUI*, *GHG Emissions*, and *Energy Cost* are evaluated for your target conditions. This will enable you to compare your actual energy use with your target and track your progress. This target can be expressed in one of three ways:
 - Target ENERGY STAR Score
 - Target Percent Better than National Median
 - Target Percent Better than Property Baseline
- **Design Target** – This is the target for comparison relative to your design plans (estimated design energy and design property use details). Once your design target is established metrics such as *Site EUI*, *Source EUI*, *GHG Emissions*, and *Energy Cost* are evaluated for your target conditions. This will enable you to compare your design energy use with your design target, and determine whether your planned design meets your design target goals. The design target is expressed in one of two ways:
 - Target ENERGY STAR Score
 - Target Percent Better than National Median

You have chosen to delete your property's profile. This cannot be undone. Are you sure you wish to continue?

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Facility at 0.76 mgd Average Flow

Portfolio Manager

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Proposed Falmouth WWTF

154 Blacksmith Shop Road, Falmouth, MA 02540 | [Map It](#)

Portfolio Manager Property ID: 3187857 | Primarily: [Wastewater Treatment Plant](#)

Year Built: 2003

ENERGY STAR Score (1-100)

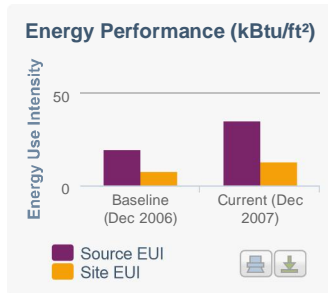
[Current Score:](#)

21

[Baseline Score:](#)

N/A

- [Summary](#)
- [Details](#)
- [Meters](#)
- [Goals](#)
- [Design](#)



Current Baselines & Targets

Selected **Baselines:**

Energy: Not Set
Water: Not Available

Earliest **Baselines:**

(calculated by Portfolio Manager)
Energy: Dec 2006
Water: Not Available

Target:

Not Set

Design Target:

Not Set

[Set Baselines or Target](#)

Generate & Download Performance Reports for this Property

[Statement of Energy Performance \(SEP\)](#)

[Score Card](#)

[Data Verification Checklist](#)

Total Project Investment

\$0.00

Total Estimated Savings

\$0.00

Third Party Certifications

You can track your third party certifications, such as LEED and Green Globes. This information will automatically be included in your Sustainable Buildings Checklist.

Sustainable Buildings Checklist

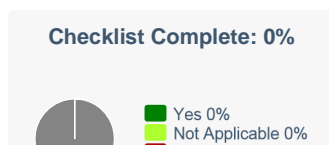
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Metric	Baseline (Dec 2006)	Current (Dec 2007)	Target*	Median Property*
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Source Energy Use (kBtu)	5391788.1	9455422.5	Not Set	6908825.4
Site Energy Use (kBtu)	2169517.7	3507000.7	Not Set	2556809.4
Energy Cost (\$)	0	0	Not Set	0
Total GHG Emissions (MtCO ₂ e)	Not Available	325.2	Not Set	237.08988924

* To compute the metrics at the target and median levels of performance, we will use the fuel mix associated with your property's current energy use.

Energy Projects (0)

[Add Project](#)



Checklist completion percentage includes "Yes" and "Not Applicable" responses.

Name	Date Implemented	Estimated Savings	Action

Nothing to display

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[Start the Checklist](#)

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[Continue](#) [Cancel](#)

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