Considerations for Benchmarking Multifamily Properties

Benchmarking your properties’ energy is a foundational element in your organization’s energy management strategy and a critical step for understanding how much energy each building is using and where it performs in relation to similar buildings. While the process of benchmarking is similar for all property types, multifamily owners and managers may encounter some specific challenges. This guide is intended to highlight those challenges and to provide solutions and a clear path towards benchmarking multifamily properties. Please note that while this document focuses on energy benchmarking, ENERGY STAR® Portfolio Manager® also allows for benchmarking of water usage, and tracking of waste and materials, so we encourage you to explore those options since they can lead to substantial utility savings as well.

For additional guidance on benchmarking, ENERGY STAR offers live and on-demand webinars on using Portfolio Manager, along with other training guides and videos, and our Quick Start Guide is a useful tool to give you an overview of Portfolio Manager functionality.

What data is needed to benchmark in ENERGY STAR Portfolio Manager?

In addition to general information about your property, you will need 12 full months of whole-building energy consumption data (from your utility bills) for Portfolio Manager to calculate performance metrics. If your property is master metered in addition to separately metered resident units, or if you are billed for all utilities, then you should have access to the utility data needed. However, in buildings where residents pay some of their bill directly to the local utility, an owner may not have the required data on hand. If the latter is true, we recommend the following approach to assess data availability:

1. Determine whether your utility will provide you with whole building data, including aggregated resident and common area utility bills, by utilizing ENERGY STAR’s Interactive Utility Data Map. Search on your property’s zip code to see if your utilities have established a process for providing whole-building aggregate data.
   a. If your utility has it, you can contact them through the e-mail address provided in the search results (if available), or look for information on their web site.
   b. If your utility does not have a process for providing whole building data, try contacting them anyway as some may provide the data by individual request.
2. If you are unable to get aggregated whole building data through your utility, consider obtaining a separate agreement with all residents which would give you permission to obtain their energy use information either from them or from the utility. Note though that this is probably not feasible if you have a large number of residents. Also, your utility may have its own requirements on providing 3rd party data, so you’ll want to check with your utility first to learn about these requirements.
3. If neither of the above work for you, your benchmarking options are:
   a. Benchmark what you can for now, which will probably just be the common areas for which you pay the utility bills and have access to the data.
   b. Use estimated data based on a sampling of residents. While not recommended as a best practice, energy data can be flagged as “estimated”. Estimated data cannot be used for ENERGY STAR certification and it may not be acceptable for some 3rd party reporting requirements, but it’s an option to explore if you cannot get aggregated data. Using estimated data will allow you to generate metrics like the 1-100 ENERGY STAR Score, although results should be taken with some caution since they aren’t based on actual measured data. For information on how to go about resident sampling, the US Department of Housing and Urban Development (HUD) released sampling guidelines in June 2015 as part of a Methodology for Completing a Multifamily Housing Utility Analysis.
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Once you have determined how you are getting the energy use data that you need, you should proceed with setting up the property in portfolio manager and inputting your utility data. There are a few different options for getting data into Portfolio Manager, so use the one that is best suited for your organization.

How should I set up my property?

Given the different types and configurations of multifamily properties, there are a number of options you should consider in order to benchmark your property accurately. All multifamily properties need some basic information in order to receive performance metrics, including the very valuable 1-100 ENERGY STAR® Score (see sidebar for more information). Your first step should be to use the data collection worksheet which will give you a list of the main data points you need to have along with definitions that describe exactly what's required. Just select your country and “Multifamily Housing” (under “Lodging and Residential”) for the property type, and the lookup tool will show you what’s needed. After reviewing the basic data needs, there are a few additional considerations that should be made:

Does your property consist of a single building or multiple buildings?

If your property consists of multiple buildings, like a garden-style community, and each individual building is separately metered, you should consider benchmarking the property as a campus of multiple buildings. Benchmarking as a campus allows you to measure the performance of single-building properties, while also tracking how these properties contribute to campus-wide performance. Look for more detailed instructions in the How to Benchmark a Campus resource.

Is your property low, mid, or high-rise?

Portfolio Manager requires you to specify how many residential units are located in low, mid, and high-rise portions of your property, where low-rise is 1-4 stories, mid-rise is 5-9 stories, and high-rise is 10 or more stories. You may have a mix on your property, so be sure to enter the data correctly. For example, if your property consists of 5 garden-style buildings that are 4 stories each as well as an 8-story building, the units in the garden-style buildings would be counted as low-rise and the units in the 8-story building would be counted as mid-rise.

Does your property include commercial space (e.g. ground-floor retail, restaurant)?

If so, there are a few different options for benchmarking depending on the type of commercial space it is, whether it is a scorable property type, and the square footage of the space. If the property type is scorable, it should be entered separately as its own use type. If it cannot receive a score, as in the case of a restaurant, it depends on the square footage. If the non-scorable space is less than 25% of the total property gross floor area (GFA), its square footage and details can be added to the main property use. If it is more than 25% of the total property GFA, it should be broken out into a separate category of “Other”. For more details on this process see this FAQ on creating separate property uses.

1-100 ENERGY STAR SCORE

One of the most valuable metrics that comes out of benchmarking is the 1-100 ENERGY STAR® Score. It compares your building to other buildings like it across the country, and gives a simple 1-100 score that lets you understand your relative performance, where the higher the score the better the energy performance of your property. See below for more details:

- How is the score calculated?
- What information do I need to receive a score for Multifamily property?
ENERGY STAR Certification

If you have benchmarked your property and received a 1-100 ENERGY STAR® Score, you should have a good understanding of how your property is performing. Properties that score less than a 50 are performing lower than average and should be assessed. Properties that have an ENERGY STAR Score of 75 or higher are eligible to apply for ENERGY STAR certification. ENERGY STAR is the single most trusted environmental label in the United States and is recognized by more than 95 percent of American households. Not only do ENERGY STAR certified buildings have lower utility costs and higher net operating income, but studies in the commercial real estate market suggest that certified buildings could lead to higher occupancy rates, sales price premiums, and better financing rates. In fact, green loan programs run by institutions like Fannie Mae and Freddie Mac give loan discounts to properties that have earned the ENERGY STAR label. For more information, see our webpage: How to apply for ENERGY STAR certification. If your property still needs to improve to be eligible for ENERGY STAR certification, see our guide on how to move from a 50 to 75.

Did you know?
Multifamily properties can earn a 1-100 Water Score

One unique feature of multifamily properties that benchmark with Portfolio Manager is that they also have the opportunity to receive a 1-100 Water Score. This score was developed in partnership with EPA’s WaterSense® program and can be a great tool to identify where properties need to reduce water consumption. Similar to energy benchmarking, the EPA Water Score is a 1-100 rating of how your building uses water compared to similar properties nationwide. To receive a score, you will need at least 12 months of whole-building water usage and your property’s irrigated area square footage. For more information on the Water Score, and resources from WaterSense on how to improve water efficiency, visit the WaterSense web site.

Additional Resources

- Financial incentives for multifamily properties
- Fannie Mae reporting requirements
- Freddie Mac reporting requirements
- Is Design recognition available for new construction of multifamily properties?
- ENERGY STAR® Portfolio Manager® help desk
- Additional Multifamily FAQs