The Power of Measurement

Make the most of your Fannie Mae Green Mortgage Loan utility data reporting!

Benefits of Measurement Reporting

Measurement, also called energy and water benchmarking, monitors your energy and water consumption and costs. All Fannie Mae Green Mortgage Loan Borrowers must complete Measurement reporting for the life of the Mortgage Loan. We would like to highlight some of the many benefits your utility data reporting provides. Measurement can help you find ways to reduce your Property's operating expenses, and allows you to showcase the impact of installed energy and water upgrades.

Bright Power, Fannie Mae's Green Measurement and Verification Consultant, assists you in collecting and reporting utility data to meet the annual Measurement requirement. Fannie Mae provides the added benefit of access to EnergyScoreCards, Bright Power's premier multifamily utility tracking tool. It helps you better understand your Property's energy and water use and may identify new areas for improvement. Fannie Mae Green Mortgage Loan Borrowers have ongoing access to EnergyScoreCards upon completion of their first annual Measurement reporting.

EnergyScoreCards

If your Property has completed the annual Measurement reporting requirement, you can log in to EnergyScoreCards to view the latest energy and water scores, consumption, and spending. Contact Bright Power at fanniemaegreen@brightpower.com if you have not received your EnergyScoreCards login credentials or if you need help logging in.

EnergyScoreCards analyzes your building information and annual utility consumption and cost data to understand where your Property spends the most on energy or water, where it is performing efficiently, and where it can improve performance. Use these insights to improve your Property's operation and maintenance (O&M) or to plan retrofits.

You can also make sense of your Property's utility data through **easy-to-understand dashboards**. EnergyScoreCards' Property Scorecard shows each type of use:

- **Cooling**
- **Heating**
- **Electric Baseload**
- **Fossil Fuel Baseload (hot water)**
- **Water**

You can view each use as consumption, spending, or carbon emissions. Additionally, EnergyScoreCards **assigns a grade between A and D for each fuel type** and for the Property's overall performance.

- These grades indicate how your Property is performing compared to other similar properties.
- High spending and a low grade are the first place to look for savings. The Scorecard also shows where use has gone up to quickly spot waste.

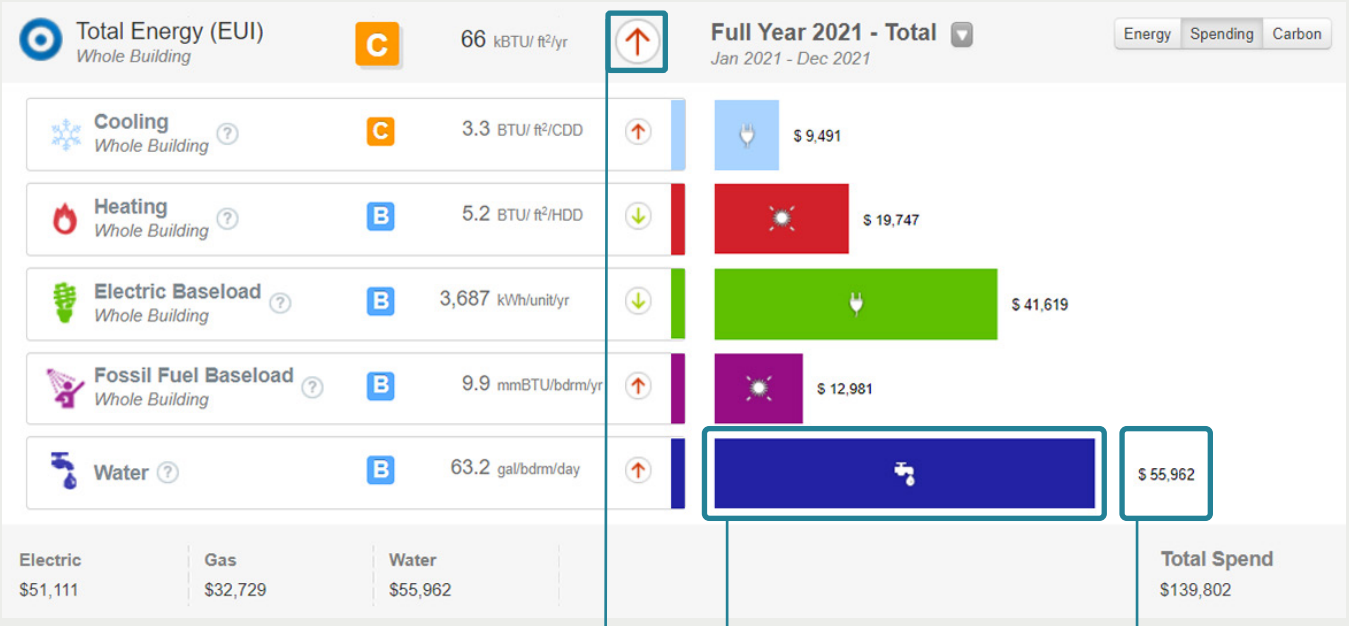
Learn more about EnergyScoreCards and understand ways to leverage your Measurement reporting to improve your Property through the examples below.

Find and Reduce Water Waste

This first Scorecard suggests a savings opportunity by targeting water waste. A multifamily Property owner has noticed an increase in their monthly water bills as well as an abnormal increase in their summer month cooling costs. The Borrower views their Property Scorecard and discovers that water, as well as cooling and fossil fuel baseload, are all increasing, shown by the **red arrow pointing up**. This red arrow indicates that the Energy Use Intensity (EUI), or energy per square foot per year, has gone up since the previous year.

The blue spending bar shows that the single biggest utility cost is water. High spending plus waste signals the biggest savings opportunity. There may be leaks or inefficiencies that require small fixes or potential retrofits.

PROPERTY SCORECARD: OPPORTUNITY FOR WATER SAVINGS



A red arrow pointing up indicates that the overall energy use at the Property has increased from the previous year. The arrow will appear after the first year of reporting

The relative size of the blue bar shows that water is the single biggest utility cost at the Property

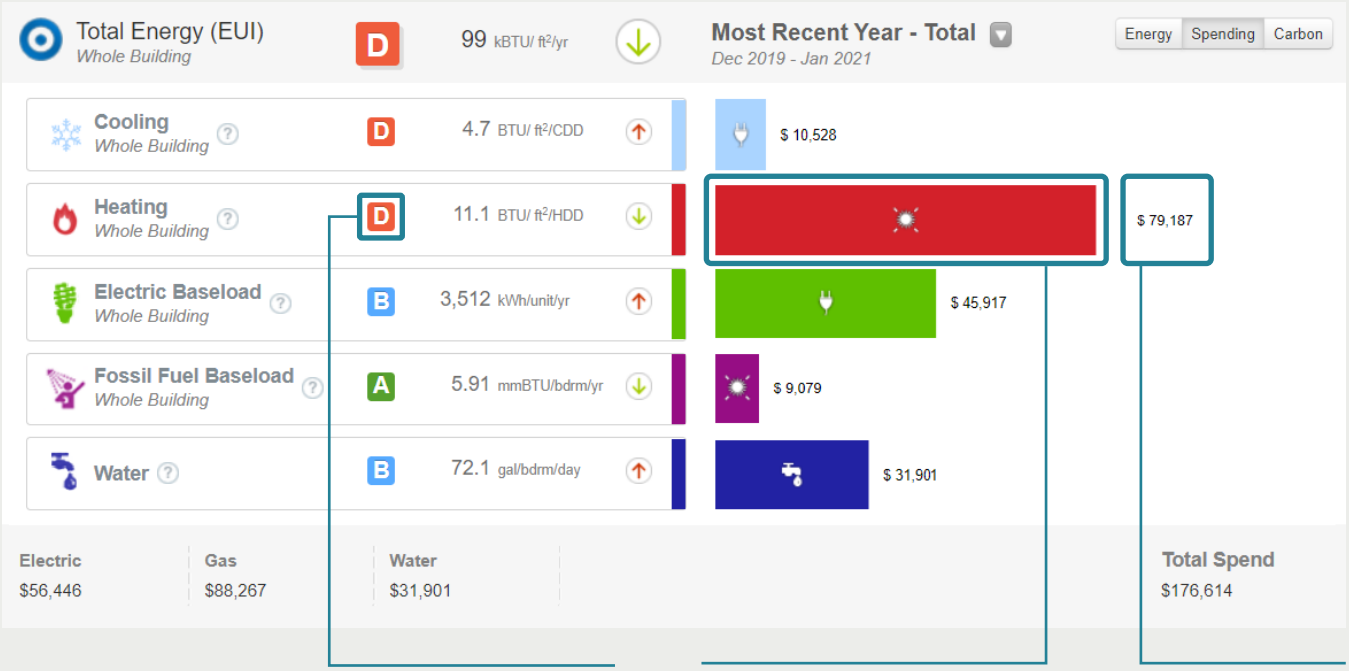
This is the total amount spent on water in 2021

Find and Reduce Energy Waste

This second Scorecard shows an opportunity for natural gas savings. This Property uses gas for both heating and hot water (fossil fuel baseload), and the multifamily Property owner has been concerned about very high gas bills. They check the Property Scorecard and find that **heating is the highest area of spending, in the red spending bar. Heating also has a "D," the lowest possible grade, indicating poor performance compared to peer properties**. While the green arrow pointing up shows that the Energy Use Index (EUI) has decreased from the previous year, waste plus high spending on heating signals the biggest savings opportunity. With more than $79,000 in spending, investigating opportunities for improvements may reveal high return on an investment.

Specific improvements will vary by your building, equipment, and climate. A few common heating efficiency improvements include air sealing, insulation, more efficient equipment, or smart thermostats. An energy auditor or your company's energy manager can help you identify the improvements that will have the greatest return.

PROPERTY SCORECARD: OPPORTUNITY FOR ENERGY SAVINGS



D is the lowest possible grade in EnergyScoreCards, indicating poor performance compared to peer properties

The relative size of the red bar shows that Heating is the single biggest utility cost at the Property

This is the total amount spent on heating in 2021

Measure and Showcase the Impact of Your Green Improvements

You can also use your annual utility use and cost data to measure and showcase improvements in energy or water efficiency at the Property. Show investors and company leadership cost savings or market improved health and comfort to prospective tenants.

This third Property below installed energy and water efficiency measures in 2019, and they saw reductions in utility use and spending across all utilities by 2021. Using the **Year to Year** page in EnergyScoreCards, you can compare changes in use across all utility types. The energy units control for variations in weather patterns and utility prices, so you can see the savings when comparing any year to any other year. EnergyScoreCards allows you to accurately assess performance changes over time by accommodating spikes in energy use and utility price rates during extremely hot summers or unusually cold winters.

The Year to Year comparison shows a **48% decrease in energy use for Cooling**. To achieve these savings at the Property, they replaced air conditioning units, installed smart thermostats, and provided air sealing to all units. EnergyScoreCards helps demonstrate the tangible impacts of these installed efficiency measures.

YEAR TO YEAR COMPARISON: DECREASED ENERGY USE FOR COOLING

Indices	Full Year 2019 - Owner		Most Recent Year - Owner		Difference		Units
Energy Index	46	A	41	A	-11%	-5.00	kBTU/ ft²/yr
Cooling Index	4.2	C	2.2	B	-48%	-2.00	BTU/ ft²/CDD
Heating Index	3.4	A	3.2	A	-7%	-0.20	BTU/ ft²/HDD
Electric Baseload Index	3,433	C	2,734	C	-20%	-699	kWh/unit/yr
Fossil Fuel Baseload Index	12.4	C	11.5	C	-8%	-0.90	mmBTU/bdrm/yr
Water Index	75.3	A	66.2	A	-12%	-9.10	gal/bdrm/day

A green arrow pointing down indicates that the energy use for Cooling at the Property has decreased from the previous year

If you have questions or would like to learn more about your Property in *EnergyScoreCards,* contact Bright Power at *fanniemaegreen@brightpower.com*.