BENCHMARKING:

UNLOCKING ENERGY SAVINGS IN RESIDENTIAL BUILDINGS

ellwether Housing owns and manages 29 apartment buildings that provide affordable housing for more than 3,000 Seattle residents, many of whom are low-income families and seniors.

<u>Bellwether</u> aims to keep housing costs as low as possible for its residents and that means keeping energy bills in check. Energy is one of the biggest expenses of residential buildings so, for Bellwether, good energy management is key to keeping energy costs down and housing more affordable.

Since the organization was founded 30 years ago, Bellwether (formerly known as Housing Resources Group) has taken great pride in its buildings and has kept a close watch on their maintenance and operations. In recent years, Bellwether took a deeper dive into each building to get a better sense of how they use energy. One tool they used to benchmark, or measure, their buildings' energy performance was **ENERGY STAR Portfolio Manager**. This free, online tool allowed Bellwether to assess and compare the energy consumption of a number of buildings in its portfolio, and thereby identify Mercer Court (pictured below) as one with significant potential for energy savings.



Mercer Court Stats:

Address	527 12 th Avenue East, Seattle WA		
Year Built	1996		
Size	14,886 sq. ft. (24 units)		
Building Type	Affordable Housing		
Major Management	Bellwether		



For us, benchmarking and making energy-efficiency improvements isn't just about helping the environment, it is also a good business decision. Our mission is to help families afford more than rent, so the more we can do to lower our energy costs and keep housing affordable, the better.



Lynda Carey
Construction and Asset
Manager at Bellwether

Let the Energy Savings Begin:

enchmarking helped Bellwether identify which of its buildings were the highest energy users and take a strategic approach toward making energy improvements. Through benchmarking, Bellwether found that annual utility expenses at Mercer Court were among the highest of all its buildings. From 2007 to 2010, energy costs at Mercer Court had increased by about \$300 per unit. The building appeared to be a prime candidate for an energy-efficiency overhaul.

The more information and knowledge you have about your building's energy performance, the more power you have to control it.

Through assistance from the Enterprise Green Retrofit Program, Bellwether had an energy audit done of the building to find out why energy costs were skyrocketing and identify which upgrades made sense. The audit led to several "ah-ha!" moments for Bellwether. One of those moments was realizing that the building was losing more energy than necessary due to airflow issues, causing the utility bills to be higher than other similar-sized apartment buildings. In total, the energy audit recommended a number of measures that would reduce energy as well as water usage by approximately 30% - the equivalent of almost \$10,000 a year in savings.

While Bellwether has not yet tackled all of these recommendations, the group is well on its way to energy savings and has been going after the "low hanging fruit" - relatively easy fixes that still realize significant energy savings. Examples include:

- Adjusting the irrigation system (previously on year-round)
- Cleaning dryer vents in the central laundry facility
- Turning off the heat in non-residential spaces such as corridors
- Setting bathroom fans to low

After these fixes, Mercer Court's energy use in October and November of 2011 was 40% lower than it was during the same period the previous year. According to Bellwether's energy auditor, **Ecotope**, Bellwether might be able to turn its worst energy performing building into its best.

Mercer Court Energy Use				
For Bill Period Oct - Nov	2011	2010	Change	
No. of days	30	29	1	
Thrm. use	276.8	480.5	-203.7	
Avg. thrm. Use per day	9.2	16.6	-7.4	
Avg. temp. per day	52 F	53 F	-1 F	

SAVING TODAY:

Owners of all commercial and multifamily buildings 20,000 sq. ft. or larger are required to annually benchmark and report energy performance to the City of Seattle.

Get a leg up on the competition and benchmark your building today using the EPA's free benchmarking tool.

For more information on rebates and other financial assistance for energy upgrades to buildings, visit your local utility website:

- Seattle City Light: <u>seattle.gov/multifamily</u>
- Seattle Steam: seattlesteam.com
- Puget Sound Energy: pse.com/savingsandenergycenter

Visit the City of Seattle website to learn more about the city's benchmarking policy and how to get started: seattle.gov/energybenchmarking.

Questions? Email EnergyBenchmarking@seattle.gov

