

FEDERAL AGENCY FINDS POWER IN BENCHMARKING

Michael Brand, building maintenance specialist, Stuart McLaughlin, assistant facilities manager and Rodrigo George, sustainability program manager

Saving energy is an important part of Bonneville Power Administration's role in delivering power to Northwest communities. BPA promotes energy-efficiency programs and strategies to businesses and residences throughout the Northwest. The agency also understands the importance of identifying opportunities to address its own energy use.

According to Rodrigo George, BPA sustainability program manager, his work starts with a very basic principle: you can't manage what you don't measure. As part of an ambitious sustainability action plan, the federal wholesale electrical power marketing agency benchmarks energy performance at its headquarters facility in Northeast Portland.

Controlling energy to control costs

With a 700,000-square-foot office building to manage, George knows that monitoring is the first step to controlling energy use and costs. Using the ENERGY STAR Portfolio Manager® tool, BPA tracks electricity, natural gas and water consumption. The agency currently has over five years of energy performance data in the system.

The agency's effort to understand and control its energy consumption goes back to 2011. BPA was among the first in the region to take advantage of Energy Trust of Oregon's Strategic Energy Management, SEM, initiative, which helped staff pinpoint areas of energy waste and adopt processes and behaviors to reduce consumption.

Participation in BetterBricks' regional 2013 Kilowatt
Crackdown competition advanced BPA's program even
further. A complete energy audit of the whole building
during day and evening hours found fans running at night,
open bay doors and inconsistencies in the control of air
handlers. Findings from the Kilowatt Crackdown inspired
the agency to develop a three-year action plan complete
with recommended operational improvements and proposed
capital investments. BPA received cash incentives from
Energy Trust, making these energy-efficiency upgrades
even more affordable.

Real data for making real change

Where SEM and Kilowatt Crackdown helped BPA identify significant areas of improvement, benchmarking gives the agency real-time results. "We know where we're meeting goals or falling short, so we can make decisions based on real data," George continued.

"Our maintenance crews and facilities specialists now have more insight into our systems and how they operate," he said. "This building was built in 1985 so our goal is to run it as efficiently as we can. Benchmarking tools give us the capability to track performance against goals, normalize results for weather, and compare performance year to year or against selected baselines."

"Thanks to a combination of data tracking and technical initiatives from our facilities team, we've improved energy performance by 5 percent and saved more than 650,000 gallons of water. If these tools help you manage your building performance, why not use them?" - Rodrigo George, sustainability program manager, BPA

This kind of information is essential to BPA's management plan and provides value to the agency in a broader context. BPA is an active board member in the Lloyd EcoDistrict, a coalition of businesses, residents and organizations in Northeast Portland committed to becoming the most sustainable district in North America. George chairs the LE3, the district's commercial building energy-efficiency working group, and BPA shares its headquarters building performance data as part of the district's action plan to collectively reduce energy consumption.

George acknowledges there's still plenty of room for improvement at BPA headquarters. Future priorities include significant lighting upgrades and more work in helping the staff adopt new energy-saving behaviors.

















Portland General Electric

