Brightly

Commercial Real Estate

Client Success Story

WPM saves $125,000 in Utility Costs and Meets Emissions Targets at 1090 West Georgia with Brightly's Stream and Operational Analytics

Client

Warrington PCI Management property, 1090 West Georgia

Location

Vancouver, British Columbia, Canada

Vitals

- Built in 1976
- 18 stories
- 147,603 square feet

Results

With Brightly's Stream and Operational Analytics services, WPM has been able to:

- Save $125,000 in normalized utility costs from 2023-2024
- Lower greenhouse gas emissions by 31%
- Improve ENERGY STAR score by 43 points
- Reduce total normalized energy usage by 31%
- Decrease annual emissions penalties by $52,000 starting in 2026

Background

Warrington PCI Management (WPM) manages a 147,603-square-foot office building at 1090 West Georgia in Vancouver. In 2022, WPM turned to Brightly's Stream software and Operational Analytics service to help drive energy and utility cost savings at the property.

In 2023, Brightly conducted a Level 1 energy audit and an initial Operational Analytics investigation. The team identified that, starting in 2026, the building was projected to face annual fines of $52,000 due to new regulations for emissions associated with heating fuel usage enforced by the City of Vancouver, which were a high priority for ownership.

In the two years since, WPM has employed Brightly's data-driven approach to identify and implement energy and carbon reduction opportunities, to successfully meet the regulatory requirements from the City of Vancouver.

Optimized Ventilation Control During Cold Weather

In the past, the building struggled to maintain comfortable temperatures during extreme cold weather events. To address this issue, the ventilation system was scheduled to run 24/7 during extremely cold weather to circulate warm air. While this approach was effective to some degree, it also brought in freezing cold fresh air during weeknights and weekends when no one was in the building, leading to excess steam consumption.

Brightly conducted a review of the zone-level BAS data and found that the reason the building struggled to maintain comfortable temperatures was due to an issue with the nighttime zone temperature controls leading to cold temperatures in the morning.

Brightly recommended shutting off building ventilation systems during extremely cold weather, and increasing the nighttime zone temperature setpoints, which saved huge amounts of steam and kept the building warmer—a win-win situation. "The building experienced immediate improvement in thermal comfort," says Jason Herterich, Energy Consultant at Brightly, "and it became a huge driver for energy savings at the same time."

Real-Time Data Driven Solutions

Brightly's solutions have driven energy and utility cost savings and improvements in benchmarking metrics at 1090 West Georgia through various strategies. Other Operational Analytics measures have included:

- Reducing HVAC equipment schedules by 2 hours per day
- Shutting off the heating system during warmer temperatures
- Minimizing chiller usage during the shoulder season

WPM leverages Stream and Brightly energy specialists to help detect energy usage anomalies and to determine their underlying causes. Using real-time utility data, Brightly's analysts flag whenever energy usage increases or decreases, and then analyze the building's automation system data to pinpoint the HVAC equipment responsible for the change in usage patterns. This information is communicated to building operations, along with potential solutions.

Brightly also advised WPM to pursue BOMA gross floor area (GFA) building measurements and completed an ENERGY STAR validation, which on its own, led to an ENERGY STAR score improvement of 11 points and a nearly $20,000 reduction in forecasted annual heating fuel emissions penalties.

A Collaborative Partnership

The Operational Analytics project at 1090 West Georgia achieved excellent results in large part due to WPM's ongoing commitment to sustainability and the seamless collaboration between Brightly and WPM. The building operator, Timothy Christiaens, offered critical insights on how to operate the building to best serve tenants' needs, and led efforts to test out proposed energy savings opportunities.

WPM meets monthly with Brightly to discuss proposed opportunities, and together both teams have developed an implementation plan with support from WPM's Energy Manager, Gregory Tarasov. Gregory has been a key partner and supporter of the program, bringing technical expertise on energy management and HVAC systems throughout the project.

> "Brightly brings a data driven approach, which is key to our energy and emissions management program, enabling us to meet our clients targets.
>
> **Gregory Tarasov**
> Energy Manager at Warrington PCI

Results

Since Brightly began Operational Analytics, **1090 West Georgia has achieved significant improvements in energy and carbon performance, as well as normalized utility cost savings totaling $125,000 to date.**

The Energy Star score has jumped by 43 points to 76, elevating the building from a below-average performer to a top-performer.

1090 West Georgia has **decreased steam consumption by 32%** relative to 2022 levels, and projects to receive no annual heating fuel emissions penalties starting in 2026, as emissions levels are now well below the limits set by the City of Vancouver.

WPM has a strong commitment to sustainability including comprehensive decarbonization planning for its portfolio. Brightly has conducted a decarbonization audit for 1090 West Georgia to provide a roadmap for the building to reach net-zero emissions.

Learn more: brightlysoftware.com