Case Study

Capital Park 2023

GREATERVICTORIA 2030 DISTRICT®

Sustainability Leadership Shines at Capital Park

Capital Park, owned by Concert Properties and Jawl Properties, is a mixed-use development that includes office, commercial and residential uses. 525 and 545 Superior St are both five-storey buildings with office use on floors 2-5 and ground floor retail. Both buildings are LEED Platinum Core and Shell Certified.

Significant emission reduction initiatives have been undertaken at Capital Park including substantially reducing natural gas use in buildings through cost-effective electrification initiatives, including converting gas domestic hot water heaters to Sanden CO_2 heat pump water heaters; incorporating renewable energy systems, such as solar photovoltaic (PV) panels, and heat recapture; and purchasing renewable natural gas as an interim solution where natural gas is still used.

Read on to learn about Jawl's impressive sustainability efforts at the Capital Park building.

Capital Park's sustainability features include high-performance building envelope, radiant ceiling panel system driven by electric heat pump technology paired with heat recovery systems, advanced programming controls and monitoring, advanced lighting controls, solar panels, EV charging stations (load management), extensive bicycle storage and post-trip facilities, green roof, low flow plumbing fixtures, rainwater harvesting for toilet flushing and irrigation, bike share system, and Sanden CO₂ heat pump water heaters.



Spotlight on Capital Park's Solar PV System



The Capital Park solar photovoltaic system is a 251 panel, 114 kW system, with an expected lifespan of 40 years.

To date, the system's performance has exceeded expectations (see chart below). At the time of installation, this solar PV system was one of the largest private installations on Vancouver Island. It is expected to produce 112,000 kWh annually, saving around \$10,000 in electricity costs. The capital cost of installing the system was \$225,000 with a payback period of between 15-16 years, factoring in anticipated BC Hydro increases of 3% annually.



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Jawl's Sustainability Goals

Jawl has established aggressive energy and GHG emissions targets for the properties that they manage:

- Reduce energy consumption by 50% per square foot by 2030 (using a 2007 baseline).
- In 2021, after meeting their GHG emissions ahead of schedule (they had already reduced emissions per square foot by 40% against a 2007 baseline), Jawl set a new target to reduce GHG emissions by 60% per square foot by 2030 (using a 2007 baseline).

Jawl plans to meet these targets by minimizing or eliminating natural gas service to new buildings, pursuing cost-effective options for load switching in existing buildings and, as an interim solution, purchasing renewable natural gas for a portion of its natural gas consumption. Currently, they are on track to meet these targets.

Jawl's sustainability efforts also include water conservation (water audits and installation of high-efficiency fixtures), EV charging stations, provision of bike facilities that are appropriately sized and meet the needs of each building, green roofs, waste diversion and recycling education and tenant support.

Jawl's commitment to sustainability is exemplified by its Capital Park building and by The Rotunda (1515 Douglas St./750 Pandora Ave). In 2020, these buildings were ranked 2nd and 3rd in the province, respectively for GHG emissions intensity by Benchmark BC.



The GHG emission intensity of Jawl's (JPL) properties are dramatically less than the BC average

Spotlight on Controls

Controls have played a large role in Jawl's at achieving low-emission success intensity buildings. Across the portfolio, buildings feature Direct Digital Control (DDC) Optimization, with scheduling, predictive programming, free cooling, variable speed drives, and occupancy Energy efficiency retrofit sensors. measures were estimated to cost \$2/ft on average but resulted in a 25% reduction in electrical consumption and cost and a 22% reduction in gas consumption and cost. These measures yielded a 15-20% ROI with a 5-year payback.



"We are proud members of BOMA's District 2030 and appreciate learning from and sharing with our peers in this group as we support one another in achieving our greenhouse gas reduction goals. Jawl Properties has committed to and is on track to reduce its GHG emissions by 60% by 2030."

Karen Jawl, Jawl Properties

About Jawl Properties

Since 2007, Jawl Properties has been committed to reducing the environmental footprint of its portfolio with a focus on mitigating climate change, conserving natural resources and reducing utility consumption and the associated costs for their tenants. Jawl Properties believes sustainability is a fundamental part of being a leading landlord but more importantly, that it is the right thing to do for current and future generations.

This case study has been prepared by the Greater Victoria 2030 District. Jawl Properties is a founding member of the District.

About the Greater Victoria 2030 District

We are part of a global network of 2030 Districts that are leading efforts to build economic and environmental resilience by helping commercial buildings reduce greenhouse gas emissions.

The 2030 District helps property managers and building owners reach energy efficiency and greenhouse gas emission reduction goals. We provide support, information and peer networking opportunities. For more information see our <u>website</u>.

We respectfully acknowledge that we are based on the land of the $lak_wanand WSANEC$ peoples, including Esquimalt and Songhees Nations, and Coast Salish peoples.