Smart Buildings

CUSTOMER CASE STUDY



Ivanhoé Cambridge

VAUGHAN MILLS MALL

CROSSIRON MILLS MALL

Turntide Smart Motor System™ pilot delivers over 35% energy savings and a path for Ivanhoe Cambridge to reach their 2040 carbon reduction goals

With global assets totaling $69 billion (CAD), Ivanhoé Cambridge is one of the largest real estate companies in the world. The Montreal-based company holds more than 1,200 buildings spanning a wide range of uses, including logistics, office, retail, and residential.

As the recipient of the inaugural PREA Institutional Investor ESG Award in 2021, Ivanhoé Cambridge has already established itself as a global leader in sustainability. Dedicated to fostering well-being by shaping tomorrow's living spaces, the company has set even more ambitious goals for both the short and long term, with plans to reduce the overall carbon intensity of its real estate holdings by 35% by 2025 and achieve net-zero carbon by 2040.

Ivanhoé Cambridge was also the first to invest in Fifth Wall's Climate Technology Fund, which invests in technologies and businesses that can reduce the carbon footprint of the real estate industry, such as Turntide's Smart Motor System. Fifth Wall introduced the two companies after recognizing the value of pairing Turntide's technology with Ivanhoé Cambridge's massive building portfolio.

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Business Challenge

Buildings consume nearly 40% of the world's energy and account for a similar percentage of global CO2 emissions. This presents a unique opportunity for Ivanhoé Cambridge to pursue its corporate financial goals while achieving its sustainability vision.

Ivanhoé Cambridge's building portfolio includes a large number of shopping centers, where tenants are largely responsible for their own energy consumption. In the past, Ivanhoé Cambridge has developed programs to drive tenants to adopt more sustainable practices, including energy reduction contests.

However, the company has also implemented several technologies in order to improve sustainability across its building portfolio, including HVAC efficiency upgrades like VFDs, heat recovery systems, and implementing building controls. Through trial and error, Ivanhoé Cambridge has discovered that not all energy conservation measures (ECMs) perform as advertised.

Ivanhoé Cambridge is always looking for new approaches to reduce carbon emissions across its portfolio, with a focus on the intersection of sustainability and profitability. After being introduced to Turntide through Fifth Wall, the company decided to pursue a motor pilot because:

- The off-the-shelf smart motor solution is quick and straightforward to implement
- It has low engineering implementation costs
- The technology is agnostic to all rooftop unit (RTU) brands

Objective

In order to reduce energy costs and carbon emissions, Ivanhoé Cambridge decided to pilot the Turntide Smart Motor System at two leading Canadian shopping malls: Vaughan Mills in Toronto and CrossIron Mills in Calgary. The company set two distinct goals to determine the technology's feasibility:



Validate the performance of the smart motor ECM



Capture a 5-year ROI through energy savings

Business Outcomes

Ivanhoé Cambridge used Turntide's Remote Monitoring Kit in order to receive real-time data on motor performance and better understand how different settings (fan speeds, on vs. auto mode, etc.) could impact HVAC performance. The numbers speak for themselves - Ivanhoé Cambridge's pilot of Turntide smart motors demonstrated significant energy savings, which could be tracked and validated in real-time.

Vaughan Mills Location

38%
RTU Energy Savings

79%
Motor Energy Savings

$3,434
Annual Energy kWh reduction

32,791 pounds
Carbon Reduction*

32,844 kWh
Annual Energy kWh reduction

CrossIron Mills Location

35%
RTU Energy Savings

64%
Motor Energy Savings

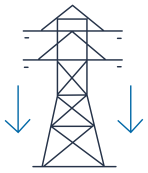
$2,279
Annual Energy kWh reduction

21,767 pounds
Carbon Reduction*

21,801 kWh
Annual Energy kWh reduction

*according to US EPA

On An Annual Basis, Overall Carbon Equivalent To:



Saving **4,358** gallons of gas



Planting **46** acres of forest

Turntide for Shopping Malls

Turntide's Smart Motor System is good for the planet and your bottom line, providing immediate ROI while slashing carbon emissions and enabling a path to net-zero operations. Contact us today to learn how Turntide can help you save energy, save money, and save the environment.





Learn More

Speak with our team to learn more about how Turntide for Buildings can help you drive down energy costs, boost your bottom line, and meet your sustainability goals.

TURNTIDE TECHNOLOGIES

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