Transforming Edmonton’s HSBC Place into a sustainable, future-ready tower

HSBC Place - Edmonton, Alberta, Canada

Rebuilt to brand new with EcoStruxure™ Building Operation enabling real-time control and management of building systems.
Eighteen storeys above a busy street in downtown Edmonton, rises HSBC Place, a modern, eye-catching structure transformed to a premier office space for top-tier tenants.

It wasn’t always so. While the building has always had an excellent location, it had also aged. “The mechanical and electrical equipment had reached the end of its useful life and was ready to be replaced, so there was a huge capital outlay that needed to be invested into the building,” says Kevin Humphrys, Vice President of Real Estate Management at Epic Investment Services, which manages the property. While others may have seen a challenge, its new owners – Alberta Investment Management Corporation (AIMCo) – and the Epic Investment management team saw an opportunity. “We wanted to create a modern, amenity rich and sustainable building that would not only be relevant today, but also be relevant in 20 years,” Humphrys says. In less than two years, HSBC Place underwent a total overhaul that transformed the building into a distinctive AA class office tower, competing with other premier downtown buildings.

Putting tenant experience first

With the Edmonton commercial real estate market taking off, it was the right time to invest in a top-to-bottom overhaul of the building. Real estate plays a major role in attracting and retaining talent, with demands for a great working space putting pressure on building owners and managers. Tenants were showing a growing appetite for high quality spaces that are not only aesthetically pleasing but are also sustainable. In short, tenants expect more from their office spaces. AIMCo, the building’s owner, recognized this and put the tenant experience at the heart of its plan to restore the building.

“The most important consideration is the tenant experience. There were no amenities in this building. The building’s aesthetic was very dated and offered little appeal other than its location,” – Humphrys says.

Prior to the upgrades, the building had no amenities or visual interest. Adding conference spaces, a club style fitness centre, secure bike parking, upgrading the structure and aesthetic of

Goal

To transform an ageing office building into a beautiful, sustainable tower that could compete with other premier office spaces in downtown Edmonton’s Financial District.

Solution

By implementing Schneider Electric’s EcoStruxure™ Building Operation, the operations team and tenants at HSBC Place now have control of over 600 areas controlled by one central system. The solution enables occupants to customize their air and lighting levels and allows the operations team to easily monitor and control power, HVAC and automation systems.

Results

• Greater tenant control and visibility into the buildings operation
• Satisfied occupants
• A centralized operating system for mechanical and electrical systems
• LEED® Gold v4
• WELL Gold v2
• WiredScore Platinum
the parking garage, and more, were essential to stay competitive. However, the project went well beyond a facelift.

Achieving their vision meant stripping the building down to its original structure. The restoration started with creating a high-performance building envelope to ensure energy efficiency and sustainability, including installing full height triple-pane insulated glass window units in the tower.

The project also included reimagining how the building stands out on the busy downtown corner. Today, HSBC Place has a bright podium with two-storey windows and digital architecture that adds a dynamic visual aesthetic both inside and outside the space.

How Schneider Electric helped marry back-end systems

Along with aesthetics, using building automation to provide a better tenant experience was also essential.

“Our goal was to deliver a single platform for both operators and tenants – a common platform for scheduling, visualization, alerts and alarms,” says Langdon Baker, Principal at Smith + Andersen, the intelligent integrated systems, communications and security designer for the project. Smith + Andersen was also the electrical and mechanical engineering firm for the project.

The design and engineering team selected several state-of-the-art automation systems for the mechanical and electrical operations, including HVAC systems, meters, water, lighting, security, door access and fire alarms.

In order to truly connect the building, Smith + Andersen needed to bring these systems together. The team found its solution in Schneider Electric’s EcoStruxure™ Building Operation. An open and secure building management platform, the solution integrates multiple systems for centralized, real-time control and management across buildings of all sizes, including complex multi-tenant spaces.

Part of the decision was made after seeing EcoStruxure™ Building Operation at work, according to Jim Leahy, President of Automatic Controls Ltd., which implemented the various building control systems.

“[Schneider Electric] had done another building in the Netherlands that had a full integration piece to it, where they integrated all the mechanical and a good portion of the systems – security, video all that – into one access point. And so, I knew that it could be done,” — Leahy says.
Schneider Electric worked with The Edge in Amsterdam’s prominent Zuidas district to equip the facility with the newest in building automation technology, enabling onsite and remote management to optimize energy usage and ensure the optimal tenant experience. Dubbed the world’s most sustainable office building, The Edge not only set a benchmark for environmental standards, but also prioritized the comfort, health and productivity of its occupants.

At HSBC Place, the main challenge was the disparate backend systems behind the building automation and finding a way for them to work together.

“Working from a BAS infrastructure perspective, our aim is to always have as many systems as possible talking on BACNet IP or on open APIs, but that introduced some challenges. Some systems didn’t necessarily “talk” to each other, so custom connectors were needed to facilitate this interaction between the systems,” – Baker explains.

Working with Schneider Electric, the Automatic Controls team built custom APIs to access data and connect the various systems. It became what the project team describes as a design-build process, iterating on the building design on paper, with all parties meeting regularly and working together to support the desired end user functionality across the board.

Ultimately, EcoStruxure™ Building Operation allowed all the pieces to tie together, and all systems to be fully integrated and viewed in one central place – the exact vision the team had in mind for creating a best-in-class tenant experience. Tenants at HSBC Place now have control and flexibility when using many systems, including lighting and temperature.

The building operations team, meanwhile, has a greater line of sight into how the building is functioning, from security to HVAC. The system is also truly mobile, so building operations and tenant management teams can gain data and insights wherever they are. Greater visibility into the overall operations and building performance means potential for reduced operating costs. One such advantage offered through the building management system (BMS) is greater visibility into the power consumption of various equipment throughout the building, allowing the team to make adjustments as required to help reduce energy consumption.
Building for the future

The vision for HSBC Place – an amenity rich, sustainable, future-focused office tower – is now a reality. Along with offering a best-in-class tenant experience, the systems in place allow for continuous improvement. By installing an access card system upfront, the building is equipped to accommodate future optimizations, including lighting and temperature control based on individual preferences.

“We’re just scratching the surface in terms of what the building can actually do,” Humphrys says. Having comprehensive building automation in place offers the potential to continue building in better energy monitoring and analytics. In short, the building operations team can become more proactive with how they manage HSBC Place’s day-to-day operations and plan for the future.

In the meantime, HSBC Place now has satisfied, comfortable tenants, plus is drawing interest from new top-tier tenants, successfully competing with other premier office buildings.

Humphrys adds, “the building itself is now a top tier building, not just within Edmonton, but a top tier building in Canada.”