CASE STUDY MIXED-USE OFFICE

From 36 To 4 Months: Accelerated Commissioning At A Landmark Mixed-Use Office Tower



Manual commissioning replaced by an integrated Property Risk Platform that reduces capital spend and forecasts $10.1M in 10-year energy savings.

32 mo
Commissioning time saved (36 to 4 months)

$10.1M
10-year energy savings forecast

900+
Building issues found and resolved

SOLUTION PROVIDER	CUSTOMER	LOCATION	ASSET
Novem	A landmark mixed-use office tower in a major Canadian city	Canada	Mixed-use office tower with integrated plant and systems

BACKGROUND

A Flagship Smart Building With Complex Systems

A landmark mixed-use office tower in a major Canadian city was designed as a sustainability and technology showpiece. The site integrates a shared central plant, photovoltaic array, uninterruptible power supplies, generators, HVAC, security, lighting, car chargers, life safety, operable windows, and irrigation systems.

These integrated systems generate large volumes of data that must be managed in real time if the building is to meet its performance targets and brand promise.

THE CHALLENGE

Manual Commissioning On A Highly Integrated Asset

The developer's previous projects relied on a manual commissioning process that typically took 2 years and cost approximately $300K. For this tower, the complexity of integrated systems created operational risk and the potential for extended commissioning timelines.

Key challenges included:

- Integrating multiple vendor systems into an open, secure platform
- Aligning diverse stakeholders across finance, design, technical, construction, operations, and HR
- Establishing an information management program including alarm management and performance scorecards
- Educating stakeholders on the value of a proactive, predictive operating model

Leadership wanted to accelerate commissioning, improve performance, reduce wrap-up liability costs, and prove the long-term financial value of the investment.

THE SOLUTION

Property Risk Platform And Automated Continuous Commissioning

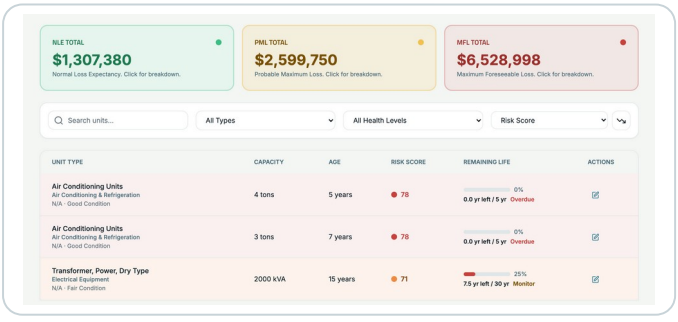
Novem deployed its Property Risk Platform with Automated Continuous Commissioning to reduce commissioning timelines and turn integrated systems into a source of financial insight.



Identifying And Resolving Issues At Scale

After the platform was implemented, analytics identified more than 900 issues across building systems. Over roughly 4 months, Novem's algorithms, combined with targeted reporting, helped the project team reduce the issue count from more than 900 to 10, each with a clear path to repair.

By capturing and resolving issues early, the project team improved building performance while reducing risk of future claims and operating inefficiencies.



Illustrative portfolio view

More than 900

building issues identified and reduced to 10 with clear resolution paths

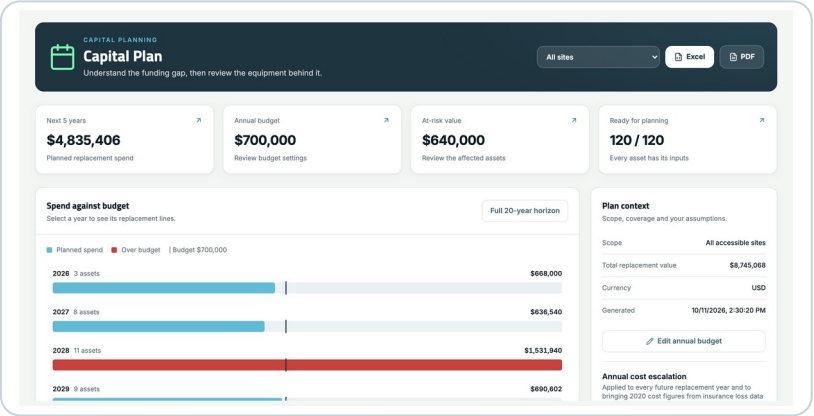
Accelerated Commissioning And Reduced Capital Spend

Automated continuous commissioning reduced the commissioning and optimization period from the typical 36-month cycle to approximately 4 months. The approach also allowed the team to eliminate infrastructure redundancies and save approximately 2% of infrastructure capital.

The project delivered energy intensification roughly one third below peer office towers in the same market, supporting a 10-year forecast energy savings of approximately $10.1M.

Approximately 2%

of infrastructure capital spend avoided through design and integration efficiencies



Illustrative portfolio view

BY THE NUMBERS

The Impact

- **Commissioning reduced from 36** months to approximately 4 months
- **More than 900** building issues identified and reduced to 10 with clear resolution paths
- **Approximately 2%** of infrastructure capital spend avoided through design and integration efficiencies
- Energy intensification approximately one third lower than peer towers, supporting a 10-year savings forecast of $10.1M

WHAT THE NUMBERS MEAN

By compressing commissioning timelines, the developer reduced wrap-up liability exposure and began operating at target performance levels much earlier. Avoided capital spend and energy savings directly improve project returns and support a stronger long-term Total Cost of Risk Ownership profile.

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For executives, the building now functions as a proof point that integrated smart systems can deliver measurable financial outcomes, not just a sustainability story. Performance data underpins a 10-year, $10.1M energy savings forecast and validates infrastructure savings at the board and lender level.

This is a clear example of monetizing data. Real-time and historical performance data are used to cut commissioning time, avoid capital spend, and prove energy performance, turning the building's data exhaust into a financial asset over the life of the tower.

THE TRANSFORMATION

From Data Overload To Predictive Operations

For owners and investors: The tower demonstrates that a Property Risk Platform can transform a complex smart building into a predictable financial asset, with transparent performance data for boards, lenders, and tenants.

> **While most will never see the technical details, they benefit from improved comfort, reduced downtime, and the assurance that the building is operated to high environmental and operational standards.**

For operators and facility teams: Embedded analytics and automated continuous commissioning help staff detect inefficiencies, identify potential risk areas, and act proactively to keep systems within specification.

For tenants: While most will never see the technical details, they benefit from improved comfort, reduced downtime, and the assurance that the building is operated to high environmental and operational standards.



LOOKING FORWARD

A Template For Future Developments

The developer can now apply this approach to future projects, using the Property Risk Platform as a repeatable template to accelerate commissioning, control capital spend, and demonstrate energy performance. Over time, the portfolio benefits from consistent data and a shared operating model.



About Novem. Novem is an artificial intelligence (AI)-powered Property Risk Platform for institutional real estate portfolios, built to confront invisible risk: the unmonitored systems that stay quiet until a preventable failure becomes a multi-million-dollar claim, years of insurance premium increases, and a board asking for evidence that was never assembled. We understand the responsibility of protecting people, capital, and confidence when that evidence is fragmented. Novem turns building, claims, and operational data into a defensible view of risk so Chief Financial Officers and asset owners can predict and prevent equipment failures, reduce Total Cost of Risk Ownership (TCRO) and insurance costs, protect net operating income (NOI), and support stronger asset valuations.

Confidentiality. This case study is anonymized to protect customer confidentiality. Under NDA, Novem can share full customer identity, underwriting evidence, and detailed financial and technical results with qualified insurers, lenders, and strategic partners.

Failures are Predictable.

Contact us at **connect@novemdigital.com** to see what predictive operations could save your project.

CONTACT US

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