Killam Apartment REIT & KingSett Capital partner for deep energy retrofits in Ottawa

Background

Killam Apartment REIT and KingSett Capital have partnered fifty-fifty to decarbonize the apartment buildings they co-own and manage through deep energy retrofits. With a shared vision for a lower-carbon future, Killam contributes decades of experience in property management and sustainability, while KingSett brings investment leadership and data-driven asset performance strategies. Their collaboration has found fertile ground in the Ottawa Retrofit Accelerator (ORA), where one of their flagship projects is underway in Kanata Lakes.

Challenge

Deep energy retrofits offer significant carbon reduction potential – but they're notoriously complex, high-cost, and site-specific. Each building varies by structure, age, utility capacity, and tenant needs. These factors create challenges in capital budgeting, equipment upgrades, tenant disruption, and cost predictability. With the phasing out of low-cost retrofit options, achieving measurable reductions in greenhouse gas emissions now requires upfront capital, rigorous data, and strategic coordination.

With both firms committed to ambitious, portfolio-wide climate goals – Killam targeting a 15 per cent reduction in emissions and carbon intensity by 2030, and KingSett aiming for a 67 per cent carbon reduction by 2035 – finding scalable, cost-effective solutions is critical.

Solution

Killam and KingSett adopted a partnership model rooted in equal investment, shared risk, and aligned sustainability outcomes. Together, they leveraged the ORA program, which provides:

- Carbon pathway studies, funded up to 75 per cent
- On-site assessments to validate retrofit designs
- Guidance and knowledge-sharing from similar projects across the city

This enabled the team to de-risk decisions, prioritize upgrades, and make informed choices about mechanical systems, heat pump compatibility, and tenant communication.

KingSett also introduced custom predictive modeling tools to estimate carbon and energy savings – but both partners emphasize that on-the-ground expertise and iterative validation remain essential.

Process

- **Site selection :** The Kanata Lakes property – comprising six buildings – was chosen for its potential impact and eligibility under the ORA program.
- **Carbon pathway study :** Purpose Building, an approved ORA consulting firm, assessed structural, mechanical, and electrical conditions to ensure modeling aligned with real-world feasibility.
- **Data modeling & real-time monitoring :** KingSett used sub-metering and performance modeling to analyze the size and efficiency of existing systems. This informed right-sizing strategies and futureproofed retrofit plans.
- **Capital planning :** The team prioritized systems nearing end-of-life to align upgrade cycles with sustainability investments, minimizing write-offs and maximizing value.
- **Tenant-centric design :** Retrofits were designed with minimal disruption in mind. Clear communication and visible tenant benefits were key priorities, particularly in occupied residential buildings.
- **Renewable energy integration :** Killam leveraged distributed energy system rebates to install behind-the-meter solar at select Ottawa buildings, directly offsetting electricity usage with clean energy.

Outcomes

While early in execution, this project has already demonstrated:

- **De-risked retrofit planning:** ORA supports validated assumptions and helps prevent costly implementation errors.
- **Actionable decarbonization roadmaps:** The carbon pathway study offers a structured path forward, informing similar future retrofits across Killam's 600-building portfolio.
- **Scalable solutions:** The Kanata Lakes model provides a replicable framework for other multi-residential properties across Canada.
- **Enhanced investor & tenant confidence:** Data transparency and government-backed program participation boost credibility and trust.

Conclusion

Killam and KingSett's partnership exemplifies how deep energy retrofits can move from vision to reality through data, diligence, and collaboration. By leveraging the Ottawa Retrofit Accelerator and combining modeling with on-the-ground validation, the team is not only cutting carbon but also proving that sustainability and financial responsibility can go hand in hand.

As both organizations continue their climate commitments, this project represents a scalable blueprint for decarbonizing Canada's built environment – building smarter, greener, and more resilient communities.

Join industry leaders like Killam Apartment REIT & KingSett Capital in transforming Canada's buildings – start your deep energy retrofit journey with the Ottawa Retrofit Accelerator today. hydroottawa.com/ora