# GREEN BUILDING CERTIFICATIONS REPORT









RESIDENTIAL

**OFFICE** 

**INDUSTRIAL** 

**RETAIL** 

Prepared for the City of Ottawa 2025 Update



The information contained herein is believed to be from reliable sources. JJMcNeil does not represent, warrant or guarantee the accuracy, correctness and completeness of the information. JJMcNeil does not accept or assume any responsibility or liability, direct or consequential, for the information or the recipient's reliance upon it. The recipient of the information should take such steps as the recipient may deem necessary to verify the information before placing any reliance on it. The information contained herein is subject to change without notice.

Prepared 1st Quarter 2025 - James McNeil RPA, LEED AP Broker 613.668.7738 james@jjmcneil.ca

This research was carried out with support from Hydro Ottawa's Ottawa Retrofit Accelerator program through Natural Resources Canada. Notwithstanding this support, the views expressed are the personal views of the authors, and neither Hydro Ottawa, Natural Resources Canada, nor the City of Ottawa accepts responsibility for them.

## Ottawa Green Building Certifications

Prepared for the City Of Ottawa
2025 Update

Executive Summary	4
Introduction	6
-Residential Sector	7
-Office Sector	16
-Retail Sector	24
-Industrial Sector	28
Conclusion	31



## **Executive Summary**

#### City of Ottawa's Green Building Initiatives:

The City of Ottawa has implemented several initiatives to promote green building certification and sustainability. Key initiatives include:

- Ottawa's Climate Change Master Plan (CCMP): A commitment to achieving net-zero emissions by 2050, with green buildings playing a crucial role in reducing carbon footprints.
- **Zero-Carbon Building Targets:** A push to integrate renewable energy, high energy efficiency, and net zero targets in new developments.
- **Green Building Strategy:** Encouraging developers and homeowners to pursue Leadership in Energy and Environmental Design (LEED), ENERGY STAR, and Net Zero certifications through incentives and support programs.
- Energy Evolution Ottawa's Energy Transition Strategy: A roadmap to transitioning Ottawa to a low-carbon economy, emphasizing energy-efficient building practices.

The City's policies align with national sustainability goals, aiming to enhance energy efficiency, reduce emissions, and promote resilient urban development. The City of Ottawa has made significant progress in green building certification, with 65,248,007 sq. ft. of certified space across the Office, Retail, and Industrial sectors, plus an additional 10,780 Residential units.

#### **Key Findings:**

- Office buildings account for the largest share of green-certified space, totalling 45,279,646 sq. ft., split almost evenly between BOMA BEST and LEED. Twenty buildings, representing 6,218,138 sq. ft., or 13.73%, have multiple certifications.
- Retail sector follows with 13,814,893 sq. ft., where BOMA BEST leads, particularly in enclosed malls and open-air shopping centers.
- Industrial sector has 2,852,303 sq. ft. of certified buildings, mainly through BOMA BEST, with limited LEED-certified properties.
- Residential sector has 19,160 units certified under various programs.

From 2021-2024 the share of new certified residential units in Ottawa has shown a gradual annual decline as a % of total new units, from 8.9% to 6.8%.

While the total number of new residential units has remained relatively consistent, the proportion of those achieving certification has softened slightly, suggesting a potential slowdown in the uptake of voluntary green building certification in the residential sector.

## **Executive Summary**

#### **Key Recommendations:**

- 1. Expand net-zero and zero-carbon programs to accelerate decarbonization efforts.
- 2. Encourage broader adoption of LEED and BOMA BEST in the industrial and retail sectors.
- **3. Improve incentives for green building certification** to increase participation from developers and property owners.
- **4. Enhance public awareness** about the benefits of green-certified buildings to drive demand and engagement.



## Introduction:

#### **Understanding Green Building Certifications**

Green building certifications provide a framework for designing, constructing, and operating buildings in an environmentally responsible manner. These certifications help reduce carbon footprints, improve energy efficiency, and promote healthier indoor environments. Some of the most recognized certifications include:

## Introduction:

- **LEED** (Leadership in Energy and Environmental Design) A globally recognized certification that assesses buildings on sustainability, energy efficiency, water usage, and indoor environmental quality.
- BOMA BEST (Building Environmental Standards) Focuses on the energy and environmental performance of existing buildings, particularly in the commercial and industrial sectors.
- **ENERGY STAR** A certification that evaluates energy efficiency in residential and commercial buildings, ensuring compliance with strict performance standards.
- **Zero Carbon Building Design Standard** guides the design of new buildings or retrofits of existing ones. It offers a pathway to ensure buildings can achieve zero-carbon once in operation.
- Zero Carbon Building Performance Standard is used to demonstrate that a building has achieved zero-carbon operations. It requires verification annually.
- One Planet Living A holistic sustainability framework that incorporates social, environmental, and economic factors into urban development projects.
- Passive House Certification is a rigorous energy efficiency standard that ensures buildings use significantly less energy for heating and cooling while maintaining superior indoor air quality and thermal comfort, achieved through high-performance insulation, airtight construction, and advanced ventilation systems.

Each certification has unique criteria and applicability depending on the building type, operational goals, and sustainability targets. Understanding these certifications is essential for advancing Ottawa's green building initiatives and achieving climate action goals.

This report provides an overview of green building certifications in the **Residential, Office, Retail, and Industrial** sectors within the City of Ottawa. It outlines the number of certified buildings, total green-certified square footage or number of units, and key trends in sustainable development. This analysis supports Ottawa's commitment to reducing carbon emissions and promoting sustainable urban growth.



#### **Green Certifications by the Numbers**

The residential sector has seen increasing adoption of green certifications, with a total of **19,160 certified units** across multiple programs. The breakdown is as follows:

#### **LEED Certifications:**

- **LEED New Construction & Major Renovations**: 1,808 units within 15 buildings
- LEED Residential Design & Construction: 274 units within 4 buildings
- **LEED For Homes** Single Family 17 townhomes, 1,058, and 106 apartments within 2 buildings.
- **LEED Neighborhood Development**: 1,341 units within 3 buildings
- Zero Carbon Building (ZCB) Standards: 536 unit within 5 buildings

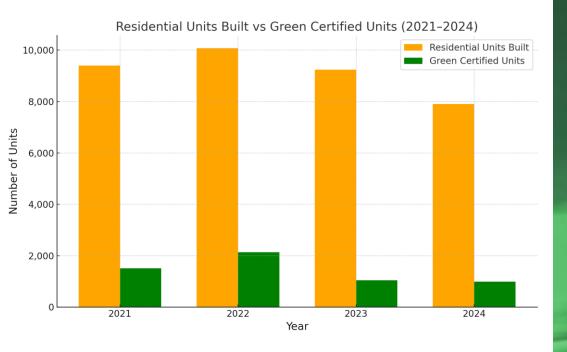
#### **Other Certifications:**

- **BOMA BEST**: 1,820 units within 8 buildings
- CHBA Net Zero: 15 homes
- CHBA Net Zero Ready: 57 homes
- Energy Star Multi-Unit Residential Buildings (MURBs): 72 units within 6 buildings
- Energy Star Homes: 11,323 units (2013-2024)
- One Planet Living: 6 buildings, 729 units
- Passive House: 4 projects: 3 single-family homes, and 1 apartment with 42 units, totaling 45 units (Passive House is not well documented)

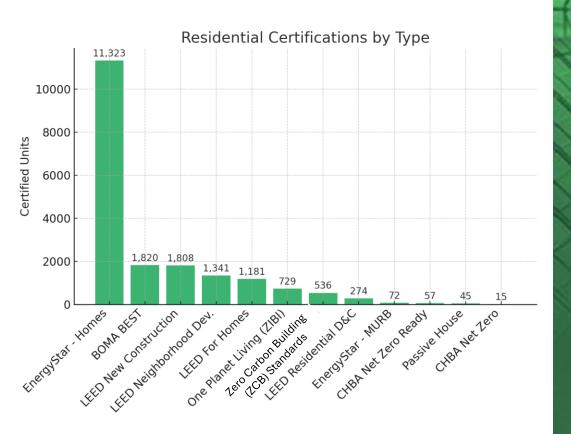
While Passive House adoption in Ottawa is still emerging, it presents an opportunity for future growth in sustainable residential development.

**Total Green Certified Residential Units: 19,160** 









#### **Notable Housing Projects in Ottawa:**

- Karen's Place is a four-storey, 42-unit supportive housing project developed by Ottawa Salus and located in the Heron Park neighbourhood. Construction began in April 2015 and was completed in October 2016. It is recognized as Canada's first affordable multiresidential Passive House-certified building, setting a national precedent in sustainable, high-performance construction for supportive housing. Designed to meet the rigorous Passive House standard, Karen's Place achieves up to 80–90% reductions in heating and cooling demands compared to conventional buildings. The project demonstrates how affordable housing can also lead in energy efficiency, occupant comfort, and climate resilience.
- **Grey Residence** A fully Passive House-certified home designed by The Conscious Builder, achieving exceptional airtightness.
- Rideau Passive House A redevelopment project leveraging optimal solar orientation and energy-efficient materials.
- Mosaïq Ottawa, Ottawa Community Housing's flagship redevelopment, integrates a range of green initiatives focused on energy efficiency and sustainability. Phase 2 is being built to Passive House standards, with features like geothermal heating and cooling, rooftop solar panels, and a high-performance building envelope. The project also includes mechanical ventilation with heat recovery, low-carbon materials, and sustainable transportation options such as bike storage and proximity to transit. Stormwater management and green landscaping further support its environmental goals. Altogether, Mosaïq reflects OCH's commitment to climate leadership and resilient, low-carbon affordable housing.







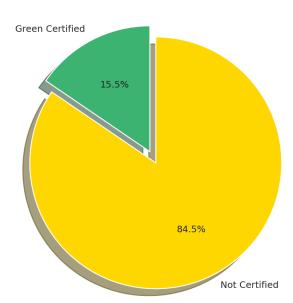




#### **Key Observations:**

- **LEED dominates** in large-scale residential projects, particularly in multiunit buildings.
- **Energy Star certifications** are widely adopted for homes, indicating strong momentum for energy-efficient housing.
- **BOMA BEST presence** suggests a focus on operational sustainability for multi-residential buildings.
- **Net Zero initiatives** are emerging, reflecting growing interest in carbonneutral residential development.
- Over the past four years (2021–2024), a total of 36,624 residential units were built in Ottawa, of which 5,668 were certified under recognized green building standards. This means that approximately 15.5% of all new residential construction during this period received certification, highlighting a modest but consistent integration of sustainability practices into the city's housing stock.

## NEW BUILD RATIO OF GREEN CERTIFIED HOMES



Preliminary data suggests **certifications are concentrated in urban areas,** with some suburban regions showing little participation.

**Recommendation**: Establish an Ottawa Green Building Tracking System to monitor annual certifications rather than relying on cumulative historical data.



#### **Project to Watch - Dream LeBreton Project:**

Currently under construction, Dream LeBreton is a residential project within the National Capital Commission's LeBreton Flats Master Concept Plan. It aims to create a sustainable community with 601 housing units, including 246 affordable units. The project incorporates regionally sourced, natural, and non-toxic materials and aims for net-zero carbon emissions, LEED Gold status, and One Planet Living accreditation.



#### **Summary of Ottawa's Residential Sector**

The adoption of green building certifications in Ottawa's residential sector is steadily increasing, reflecting a growing commitment to sustainability, energy efficiency, and climate resilience. Certifications and labelling programs such as Passive House, LEED for Homes, ENERGY STAR, and CHBA Net Zero are gaining traction among developers, homeowners, and policymakers. While multi-unit residential buildings lead in certification numbers due to their economies of scale, the number of certified singlefamily homes is also rising, albeit at a slower pace. However, green-certified homes still represent a relatively small percentage of Ottawa's overall housing stock and new construction, highlighting the need for stronger incentives and policy support. Passive House-certified projects, such as Karen's Place and 900 Merivale Road, showcase the potential for ultra-lowenergy buildings in both affordable and market-rate housing. However, barriers such as upfront costs, regulatory challenges, and the need for specialized expertise continue to limit widespread adoption. As Ottawa advances its climate action goals, continued investment, incentives, and awareness will be critical in accelerating the adoption of certified green homes across the city.



#### **Case Study: Greystone Village**

**Overview:** Greystone Village is a LEED-certified mixed-use residential development located along the Rideau River, designed with sustainability at its core.





#### **Key Features:**

- **LEED Operations & Maintenance certification**, ensuring continuous efficiency improvements.
- Energy-efficient HVAC and lighting systems to lower energy use.
- **Sustainable construction materials** reducing the building's carbon footprint.
- LEED Neighbourhood Development certification ensuring sustainability in planning and design.
- **Energy-efficient homes** incorporating high-performance insulation and renewable energy.
- Water conservation initiatives, including stormwater management and permeable paving.
- **BOMA BEST Baseline Certification** ensuring energy efficiency and sustainability improvements.
- Efficient HVAC systems that optimize energy use in industrial spaces.
- Waste and water management systems to minimize environmental footprint.

#### **Case Study: Greystone Village (continued)**

- **LEED-certified industrial space** integrating high-performance energy systems.
- Innovative water conservation techniques including stormwater management.
- **Optimized building envelope** to enhance thermal performance and reduce energy demand.
- Net-zero carbon emissions for all residential units.
- Energy-efficient building designs, including LEED-certified homes.
- Integration of renewable energy and water conservation strategies.

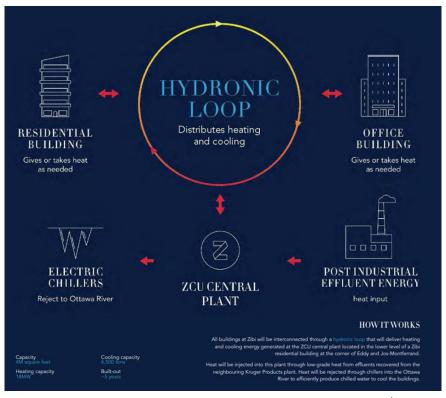
**Relevance:** Serves as a model for sustainable urban development, integrating residential, commercial, and green spaces within a LEED-certified framework.





#### ZIBI

Zibi adheres to all ten principles of the world-class One Planet Living framework – from eliminating GHG-emitting energy sources to encouraging social equity. Their goal is building the most sustainable and only One Planet Living endorsed community in Canada. Zibi will develop the region's first zero-carbon District Energy System (ZCU), relying on post-industrial waste energy for heating and the Ottawa River for cooling.



Source ZIBI/Dream

Zibi Community Utility is a District Energy System developed by Zibi to provide zero-carbon heating and cooling for all Zibi tenants and residents in the 34-acre waterfront city. https://zibi.ca/zcu/







#### **Green Certifications by the Numbers**

The office sector represents a significant portion of Ottawa's green building inventory, with **170 certified buildings** covering **45,279,646 sq. ft.** 

#### **LEED Certifications:**

- LEED Operations & Maintenance: 40 buildings, 14,198,986 sq. ft.
- Zero Carbon Building (ZCB) Standards: 4 buildings, 2,886,342 sq. ft.
- LEED Canada for New Construction & Major Renovations: 18 buildings, 4,148,077 sq. ft.
- LEED Canada for Core & Shell Development: 12 buildings, 3,450,102
   sq. ft.
- Total LEED Certifications: 74 buildings, 24,683,507 sq. ft.



#### Other Certifications:

- BOMA BEST: 112 buildings, 26,384,268 sq. ft.
- One Planet Living (ZIBA) Net Zero: 4 buildings, 430,009 sq. ft.

Total Green Certified Office Inventory: 170 buildings, 45,279,646 sq. ft.

Twenty office buildings carry multiple certifications, equaling 6,218,138 sq. ft. of the total green office inventory.

BOMA BEST Certifications By Level

4,150,438.00
5,464,653.63

902,089.00

Baseline

902,089.00

Bronze

Silver

Gold

Platinum



#### **Key Observations:**

- **Operationally, BOMA BEST** remains the dominant certification in the office sector, representing roughly half of all certified square footage..
- **LEED Operations & Maintenance** is widely used for existing office buildings, focusing on improving energy efficiency.
- **Zero Carbon initiatives** are emerging, signaling increased interest in deep carbon reductions.
- One Planet Living (ZIBA) Net Zero certifications indicate a niche but growing interest in holistic sustainability models.
- Competitive Pressure on Non-Certified Office Buildings
  - With nearly two-thirds of office space now green-certified, tenants increasingly expect sustainability as a baseline.
  - Non-certified buildings (~29 million sq ft) face higher risks of vacancy and declining asset value.
  - Government, institutional, and corporate tenants prioritize ESGcompliant buildings, making sustainability a key leasing factor.
  - Landlords of non-certified buildings should consider green retrofits to remain competitive.
- The Future of Ottawa's Office Market is Zero Carbon & Net Zero
  - Zero Carbon Building Standard program is in early adoption stages but are expected to grow significantly.
  - Corporate ESG strategies and government policies will likely accelerate the demand for net-zero office buildings.
  - Investors and developers focusing on zero-carbon properties will be well-positioned for future market growth.
  - Non-certified buildings (37.4% of the market) risk becoming obsolete unless upgraded for sustainability



**OFFICE** 

When evaluating Ottawa's office market by area, it is notable that the total office space spans approximately **80,522,341 sq. ft.**, of which 64% has achieved **some level of green certification**. This high percentage is attributed mainly to the commitment of larger buildings—primarily in the **Central Business District**—to sustainability.

Determining the exact number of office buildings in Ottawa can be challenging due to varying definitions and data collection methods. However, available data provides valuable insight into the city's office inventory. According to CoStar, Ottawa has over 1,400 office buildings of all sizes. Most brokerages define the competitive (private-sector) office market as approximately 600 office buildings across the entire market, 170 buildings have obtained green certification.

Despite these achievements, there remains significant work to be done, particularly in enhancing sustainability within smaller office buildings.

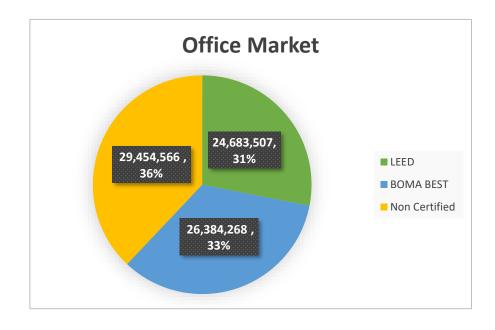
<b>LEED Operations</b>	and Maintenance	
	Number BLDG	Area (sf)
Certified	1	187,992
Silver	10	2,308,213
Gold	22	9,379,693
Platinum	7	2,323,089
ZCB Performan	nce	14,198,986
<b>LEED Zero Carbor</b>	n ZCB-Performance	
Certified	4	2,886,342
Total	4	2,886,342
<b>LEED Canada for</b>	Core and Shell Deve	lopment
	Number BLDG	Area (sf)
Certified	1	46,156
Silver	3	307,245
Gold	7	,, -
Platinum	1	000,:=0
Total	12	3,450,102
LEED Canada for	New Construction a	nd Major Renovations
	Number BLDG	Area (sf)
Certified	2	· · · · · · · · · · · · · · · · · · ·
Silver	3	- /
Gold	13	, ,
Platinum	0	= :,000,00:
Total	18	.,,
Grand Total	74	21,797,165



BOMA BEST		
	Number BLDG	Area (sf)
Baseline	24	5,464,654
Bronze	8	902,089
Silver	41	7,490,159
Gold	25	8,376,929
Platinum	9	4,150,438
Total	112	26,384,268

#### **Summary of Ottawa's Office Sector**

Ottawa's office sector has seen a gradual increase in green building certifications, driven by corporate sustainability goals, tenant demand, and government policies. Certifications such as LEED, BOMA BEST, and WELL are the most prevalent, with LEED being the dominant standard for new office developments and major retrofits. While large institutional and government buildings have led the way in certification adoption, uptake in privately owned office buildings has been more limited, particularly in older stock where retrofitting can be costly and complex. Currently, 64% of Ottawa's total commercial office space by area is certified, demonstrating strong market penetration. However, with just 170 certified buildings, the overall number of certified properties remains a small percentage of the total office inventory, indicating significant room for further adoption. The ongoing shift toward energy efficiency, wellness-focused design, and net-zero carbon commitments is expected to drive further certification, particularly as regulatory requirements and financial incentives evolve. Strengthening policy frameworks and providing targeted support for retrofits will be essential in accelerating the transition to greener office spaces in Ottawa.





**OFFICE** 

#### **Case Study: 275 Slater Street**

Overview: 275 Slater Street, a 20-story office building in Ottawa's central business district, has demonstrated a strong commitment to sustainability through several initiatives. 275 Slater Street was the first building in Ottawa to receive a LEED Operations & Maintenance (O&M) certification, originally achieving Silver and now upgraded to Platinum.



**OFFICE** 

#### **Key Features:**

In June 2021, the building achieved LEED® Platinum v4.1 Certification for Operations and Maintenance, the highest distinction in the Leadership in Energy and Environmental Design (LEED) rating system. This certification reflects significant improvements in

environmental performance.



Consumption Reduction:
Since its previous LEED Gold
certification in 2017, 275
Slater Street has reduced
energy consumption by 7%
and water consumption by
16%. These reductions were
achieved through various

upgrades and operational

enhancements.

**Energy and Water** 



• ENERGY STAR Certifications: The building has consistently achieved ENERGY STAR certifications annually since 2020, with a recent score of 77, placing it in the top 25% of comparable buildings across Canada.

**Case Study: 275 Slater Street** 

#### **Key Features:**

- **Sustainability Upgrades**: The property has undergone several improvements to enhance its sustainability, including:
  - 0 Retrofitting LED lighting throughout the building and garage.
  - Installing heating curtains and new fans to improve air 0 circulation.
  - Upgrading HVAC dampers and louvers. 0
  - Installing variable speed drives on domestic cold-water pumps.
  - Replacing humidifiers and installing low-flow toilets and auto 0 faucets.
  - Adding six electric vehicle charging stations in 2023.

These initiatives highlight the owners of 275 Slater Street's dedication to environmental sustainability and operational efficiency.

Relevance: Built in 1968, 275 Slater is a pioneering example of how existing office buildings can successfully implement LEED O&M certification and other initiatives to improve sustainability over time.





**OFFICE** 

#### Case Study: 100 Murray Street

Overview: Located in Ottawa's ByWard Market, 100 Murray Street is a 60,000 sq. ft. Class A commercial office building managed by Bentall GreenOak (BGO) (formerly Bentall Kennedy). In June 2018, it became Canada's first building to achieve the Zero Carbon Building (ZCB) – Performance certification from the Canada Green Building Council (CaGBC).

#### **Key Features:**

- Zero Carbon Building Performance Certification: Achieved in 2018, demonstrating a balance of zero carbon emissions over a 12-month operational period.
- **LEED Gold Certification:** Attained in 2016 under the LEED for Existing Buildings: Operations & Maintenance (O&M) rating system, highlighting the building's commitment to sustainability and operational efficiency.
- **Energy Efficiency Measures:** Utilizes an advanced building automation system, efficient lighting, and control systems.
- Electricity from Ontario's low-carbon grid accounts for 95% of its energy use, contributing to its zero-carbon status.

**Relevance:** 100 Murray Street serves as a pioneering example of how existing office buildings can achieve both LEED Gold and Zero Carbon certifications. Its success demonstrates the feasibility of transforming high-performing buildings to meet rigorous sustainability standards, aligning with Ottawa's climate action goals.



100 Murray Street
Canada's first Zero Carbon
Building – Performance
certification and Ottawa's first
Zero Carbon Building
Ottawa, Ontario

In June 2018, 100 Murray Street in Ottawa's central Byward Market, asset managed and operated by Bentall GreenOak, was awarded the country's first Zero Carbon Building (ZCB) – Performance certification. This existing 60,000 sq. ft. Class A commercial office space further built upon its proven energy performance results and LEED Gold certification in 2016, to demonstrate that it had achieved a balance of zero carbon emissions from the building.



**OFFICE** 



## 3. Retail Sector

#### **Green Certifications by the Numbers**

The retail sector has a total of **11,667,588 sq. ft.** of green-certified buildings across multiple certification programs.

#### **LEED Certifications:**

- LEED Canada for Core and Shell Development: 473,472 sq. ft.
- LEED BD+C: Retail: 102,321 sq. ft.

#### **BOMA BEST Certifications:**

- BOMA BEST Enclosed Malls: 6,138,036 sq. ft.
- BOMA BEST Open Air Retail: 4,983,759 sq. ft.

Total Green Certified Retail Inventory: 11,697,588 sq. ft.

It should be noted that an additional 2,117,305 sq. ft. of BOMA BEST Open-Air Retail is currently "in verification." Once verified, this will bring the total retail area to 13,814,894 sq. ft.

#### **Key Observations:**

- BOMA BEST dominates the retail sector, covering the majority of greencertified retail space.
- **LEED certification for retail properties** is growing but remains a smaller portion of total green-certified inventory.
- **Open-air retail spaces** are increasingly pursuing BOMA BEST certifications, indicating a shift toward sustainable practices in outdoor shopping centers.

#### **Summary of Ottawa's Retail Sector**

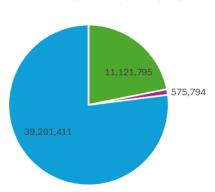
Green building certifications in Ottawa's **retail sector** have been slower to gain traction compared to the office and residential sectors. While some large shopping centers and big-box retailers have pursued **LEED**, **BOMA BEST**, and **ENERGY STAR** certifications, adoption among smaller retail properties remains limited due to cost barriers, shorter lease terms, and the complexity of upgrading older buildings. As a result, **certified retail spaces represent a small fraction of the overall retail inventory in Ottawa**. However, interest in sustainability is growing, driven by consumer demand for environmentally



## 3. Retail Sector

responsible businesses, corporate net-zero commitments, and regulatory shifts. Shopping malls and major retail chains are leading the way in sustainability efforts, incorporating energy efficiency upgrades, improved waste management, and green leasing practices. Looking ahead, expanding certification programs and offering targeted incentives for small and independent retailers will be key to increasing the adoption of green building standards across Ottawa's retail sector.

#### **RETAIL CERTIFICATIONS**



- BOMA Best
- LEED
- Non Certified

LEED	Cert Level	Area (SF)
LEED Canada for Core and Shell Development		
	Certified	354,014
	Silver	119,458
Total		473,472
LEED BD+C: Retail		
	Certified	102,322
Total		102,322
BOMA BEST		
Enclosed	Baseline	82,436
	Certified	-
	Bronze	504,547
	Silver	2,361,814
	Gold	2,086,735
	Platinum	1,102,504
Total		6,138,036
Open Air	Baseline	1,240,226
	Certified	-
	Bronze	1,383,159
	Silver	1,756,896
	Gold	603,478
	Platinum	-
Total		4,983,759
		.,555,755
Total Green Inventory		11,697,588



## 3. Retail Sector

#### Case Study: CF Rideau Centre

**Overview:** CF Rideau Centre is Ottawa's largest mall. It has over 180 stores and approximately **1 million square feet** of retail space. Located in downtown Ottawa, it is one of the busiest shopping centres in the region, attracting millions of visitors annually. The mall features high-end retailers, department stores, a large dining hall, and direct access to the city's public transit system, including the O-Train's Rideau Station.

**BOMA BEST Gold Certification**: The centre achieved BOMA BEST Gold Sustainable certification under BOMA BEST 4.0, marking it as the only enclosed shopping centre from Cadillac Fairview to receive this distinction

#### **Key Features:**

- Comprehensive energy and waste management program.
- Water conservation initiatives reducing overall consumption.
- Sustainable construction and renovation strategies.
- Eco-Friendly Dining Hall: As part of a \$360 million redevelopment project, the centre introduced a 35,000-square-foot dining hall featuring 16 premium eating establishments. This facility utilizes reusable dinnerware, glassware, and metal cutlery, significantly reducing waste from traditional fast-food packaging.
- **Green Energy Partnership**: In 2016, fashion retailer Simons opened a location within the Rideau Centre and partnered with Bullfrog Power to offset its electricity usage with 100% clean, pollution-free energy. This collaboration underscores the centre's dedication to supporting tenants in their sustainability efforts.

**Relevance:** Shows how large-scale **retail properties** can integrate green initiatives while maintaining commercial operations.









## 4. Industrial Sector

#### Green Certifications by the Numbers

The industrial sector has a total of 2,852,303 sq. ft. of green-certified buildings across multiple certification programs, representing a relatively small fraction of the total 45,209,000 sq. ft. of industrial space in Ottawa. All of the certifications tend at lower levels of LEED (certified two and Silver two), and the majority of buildings (36) are a Baseline BOMA BEST, with only four buildings achieving Silver.

#### **LEED Certifications:**

LEED Canada for New Construction & Major Renovations: 4 Buildings
 70,815 sq. ft.

#### BOMA BEST Certifications:

BOMA BEST Industrial Buildings: 49 Buildings 2,781,488 sq. ft.

Total Green Certified Industrial Inventory: 2,852,303 sq. ft.

#### **Key Observations:**

- BOMA BEST is the primary certification in the industrial sector, covering the vast majority of certified space.
- LEED-certified industrial buildings remain limited but show potential for future growth.
- With only ~6.3% of industrial space certified, there is significant opportunity for expanding green building initiatives in this sector.

#### **Summary of Ottawa's Industrial Sector**

The industrial sector in Ottawa is experiencing high demand, driven by ongoing product line construction and a growing need for modern, efficient spaces. However, sustainability initiatives and green certifications within this sector remain limited compared to commercial and residential buildings. While some industrial facilities integrate energy-efficient design, water conservation, and advanced waste management, widespread adoption of green building standards such as LEED or BOMA BEST is not yet the norm. As industrial development continues to expand, there is an opportunity to enhance sustainability through improved building performance, carbon reduction strategies, and the incorporation of renewable energy sources. Encouraging certification programs and green retrofits will be crucial to aligning the sector with Ottawa's broader climate action



### 4. Industrial Sector

#### Case Study: 1050-1051 Baxter Road (Industrial Light Facility)

Overview: The 1050-1051 Baxter Road facility is a BOMA BEST-certified industrial light facility, demonstrating sustainability in operational efficiency and energy conservation.

#### Key Features:

- Energy-efficient HVAC systems reducing operational costs.
- Stormwater management to mitigate environmental impact.
- Smart building technology to enhance efficiency.

Relevance: Demonstrates how industrial facilities in Ottawa can achieve sustainability through BOMA BEST certification, optimizing energy efficiency and waste management.

While a specific industrial building case study in Ottawa is not readily available, these examples and initiatives demonstrate the city's commitment to sustainable building practices across various sectors.



#### **Rogers Centre**

Recognizing that the Roger Centre falls outside the Scope of this report, I did feel that this building is worth pointing out.

Formerly known as the Ottawa Convention Centre and the Shaw Centre, Rogers Centre Ottawa was awarded LEED Gold certification in January 2013. The building incorporates environmentally friendly features such as rainwater harvesting, use of recycled materials, and energy-efficient design.





## Conclusion

## GREEN BUILDING CERTIFICATIONS REPORT









RESIDENTIAL

**OFFICE** 

INDUSTRIAL



## 5. Conclusion

Ottawa has made significant strides in promoting green building certifications across the residential, office, retail, and industrial sectors, aligning with its Climate Change Master Plan and zero-carbon targets. While the office sector leads in certified space, followed by retail and residential, the industrial sector lags in sustainability adoption. Despite growing demand for industrial space, only 6.3% of the sector is certified, presenting an opportunity for increased investment in energy efficiency, renewable energy, and sustainable construction practices.

Key recommendations for advancing green certification adoption include expanding incentives, strengthening policy frameworks, and increasing awareness among developers and property owners. Encouraging more participation in programs like LEED, BOMA BEST, and net zero will be crucial for meeting Ottawa's long-term climate commitments. As the city continues to grow, prioritizing sustainable development will be essential to reducing carbon emissions, enhancing resilience, and fostering a greener, more energy-efficient built environment.

#### **Barriers & Solutions to Green Building Certification in Ottawa**

While Ottawa has made significant progress in green building certification, several barriers continue to hinder widespread adoption, particularly in the industrial, smaller office, and suburban residential sectors. Addressing these challenges is crucial for achieving the city's climate goals and ensuring the long-term sustainability of Ottawa's built environment.

#### **Key Barriers to Green Building Adoption**

#### 1. Cost Barriers & Financial Constraints

- High upfront costs for certification, retrofits, and energy-efficient materials deter property owners, especially in older buildings.
- Smaller landlords and developers often lack access to capital and knowledge for green upgrades.
- The return on investment (ROI) is long-term, while upfront expenses are immediate, making it less attractive to investors.

#### 2. Lack of Mandatory Green Standards for Existing Buildings

- New developments often incorporate sustainability from the start, but existing buildings face no mandatory requirements to pursue certification.
- Without government-mandated benchmarks, many landlords opt for minimal compliance rather than full green certification.



## 5. Conclusion

#### 3. Market Awareness & Perceived Complexity

- Some building owners and developers are unaware of the financial benefits of energy-efficient buildings (e.g., lower operating costs, higher tenant demand).
- The certification process can seem complex and bureaucratic, discouraging participation.
- Smaller property owners lack in-house expertise to navigate sustainability certifications like LEED and BOMA BEST.

#### 4. Tenant-Landlord Misalignment ("Split Incentive" Problem)

• In leased buildings, landlords bear the cost of green upgrades, but tenants benefit from lower energy bills. This misalignment discourages landlords from investing in energy efficiency without proper incentives.

#### 5. Limited Industrial Sector Participation

- The industrial sector lags far behind in certification, with only 6.3% of total industrial space certified.
- Industrial facilities prioritize operational efficiency over sustainability, and many certifications focus more on office and retail spaces.
- Limited government incentives or policy mandates targeting industrial green buildings.

#### **Solutions to Accelerate Green Certification Adoption**

#### 1. Expand Financial Incentives & Funding Support

- ▼ Tax credits & rebates for energy-efficient retrofits and certifications.
- ☑ Green building grants targeted at small property owners and industrial facilities.
- Establish a **low-interest financing program** for property owners to fund green upgrades.

#### 2. Strengthen Policy Frameworks & Regulations

- ✓ Implement **progressive building codes** requiring existing buildings to meet energy efficiency standards.
- ✓ Introduce **green retrofit requirements** for buildings undergoing major renovations.
- Mandate public disclosure of energy performance to increase market pressure for certification.



INDUSTRIAL

## 5. Conclusion

- 3. Increase Market Awareness & Technical Support
- **☑** Launch a Green Building Education Program for property owners and developers.
- **☑** Provide one-on-one advisory services to help businesses navigate the certification process.
- ☑ Create a publicly accessible database of green-certified buildings in Ottawa to highlight success stories and encourage participation.
- 4. Address the Split Incentive Problem
- **☑** Promote Green Lease Agreements, where landlords and tenants share cost savings from energy efficiency upgrades.
- Offer incentives for tenant-landlord collaboration, such as subsidies for shared sustainability investments.
- 5. Targeted Strategies for the Industrial Sector
- **☑** Develop an Industrial Green Building Pilot Program with custom incentives.
- Collaborate with industrial developers to explore sustainable design solutions tailored to warehouses and manufacturing facilities.
- **☑** Promote low-carbon building materials and energy-efficient HVAC solutions for industrial spaces.

#### **Conclusion: The Path Forward**

While Ottawa has made significant progress in green building certification, these barriers must be addressed to achieve widespread adoption. By expanding financial support, strengthening policies, increasing awareness, and tailoring strategies to underserved sectors, the city can accelerate the transition to a more sustainable built environment. A proactive approach will not only help meet climate targets but also ensure that Ottawa remains a leader in green urban development.



James McNeil 613.668.7738 james@jjmcneil.ca



**RESIDENTIAL** 



**OFFICE** 



RETAIL



**INDUSTRIAL**