

KEY FINDINGS



→ **Building on
Sustainability**

Carbon: BOMA BEST Buildings
Continue to Reduce GHG Emissions

Resilience: Are Buildings Ready
to Weather the Storm?

Another Strong Year

Welcome to the 2019 BOMA BEST National Green Building Report!

In the following pages you will learn about the outstanding energy and water performance from this sample of buildings, in addition to our first look at how buildings are tackling resilience — are they prepared for extreme weather events?

For those keen for even more facts and figures, we invite you to visit the **Technical Report** at <http://bomacanada.ca/resources/ngbr/>

← Seton Gateway, Calgary, AB
First Capital Realty Inc./FCR Management Services LP

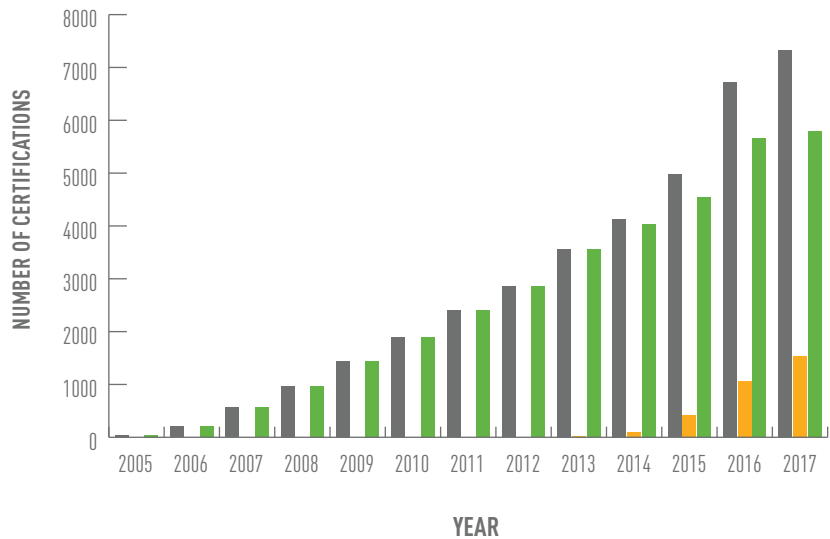


← Palliser South, Calgary, AB
Aspen Properties

OVERALL CERTIFICATIONS

BOMA BEST Sustainable Buildings is North America's largest environmental assessment and certification program with 7331 certifications and recertifications achieved since its launch in 2008.

608 new certifications were achieved in 2017.



● Cumulative Single Certified ● Cumulative Portfolio Certified ● Total Cumulative Certified

Cumulative Number of BOMA BEST Certifications (All levels)

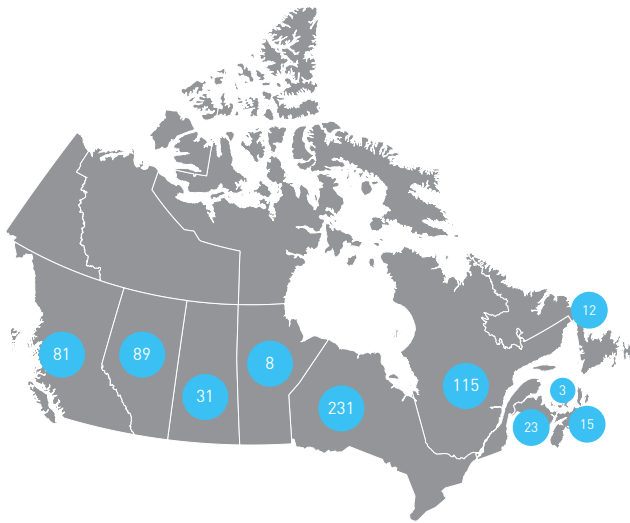


Recertification leads to improvement:

75% of all certifications are from returning buildings. This is up from 28% in 2013.

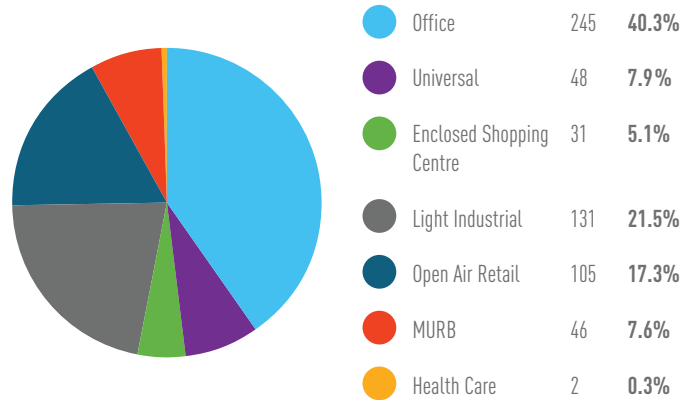
CERTIFICATIONS AND PERFORMANCE

Certifications by Region



Number of 2017 BOMA BEST Certifications by Region (All levels)

Certifications by Property Type



Distribution of 2017 Certifications by Property Type

Performance by Property Type and Level

More office buildings are achieving Platinum certification than any other building type. As tenants increasingly expect more environmental leadership from their workplaces, this creates a perfect opportunity for building managers to align their environmental objectives with tenant expectations.

	Certified	Bronze	Silver	Gold	Platinum
Office	104	2	63	44	32
Universal	22		15	9	2
Enclosed Shopping Centre	4	1	7	13	6
Light Industrial	102		11	17	1
Open Air Retail	87	6	5	6	1
Multi-Res	45		1		
Health Care			1	1	

Performance by Category



BOMA BEST Category Performance for Office Buildings

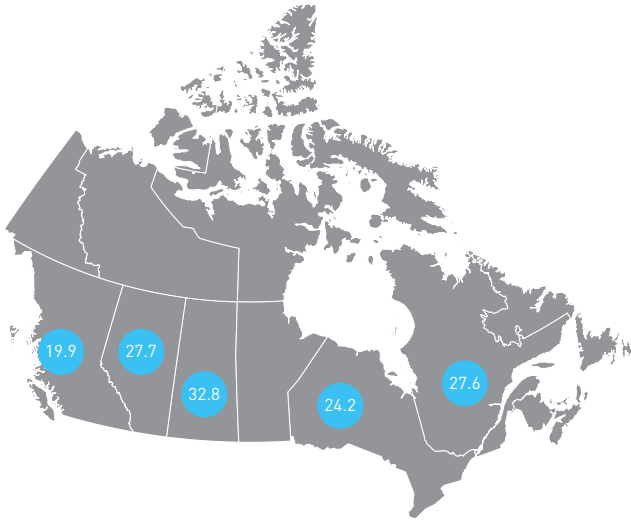
→ Buildings are assessed in 10 environmental categories. Office buildings are doing well in the Custodial, Air and Comfort sections. Opportunities remain in Water, Health and Wellness and Site.

→ **ENERGY**



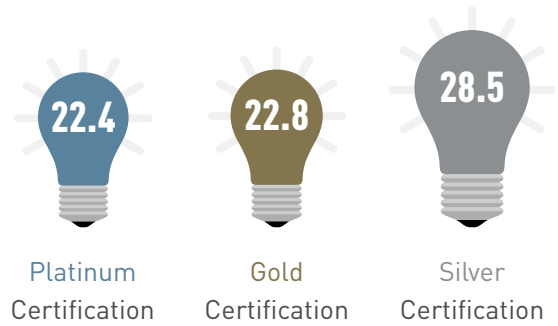
There has been a 23% drop in energy consumption in BOMA BEST office buildings since 2008—now averaging 25.3 ekWh/ft²/year

EUI by Region



Average Energy Use Intensity (ekWh/ft²/yr) by Region—Office

EUI by Level



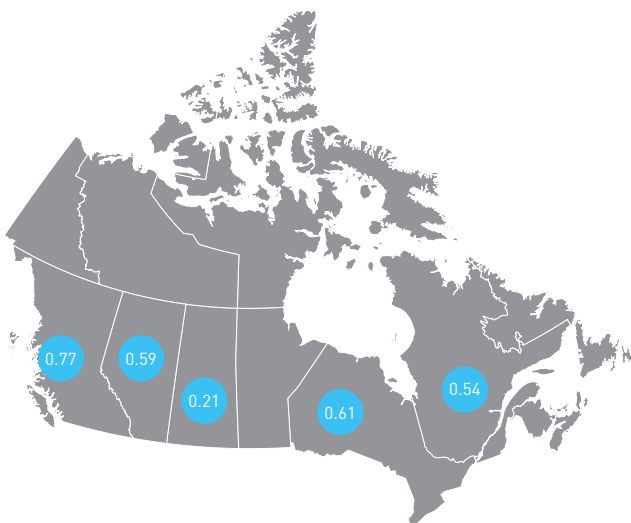
Energy Use Intensity (ekWh/ft²/yr) by Certification Level—Office

→ **WATER**



Office buildings are 39% more water efficient than the REALPAC national average—with a WUI of 0.60 m³/m²/year

WUI by Region



Average Water Use Intensity (m³/m²/yr) by Region—Office

WUI by Level

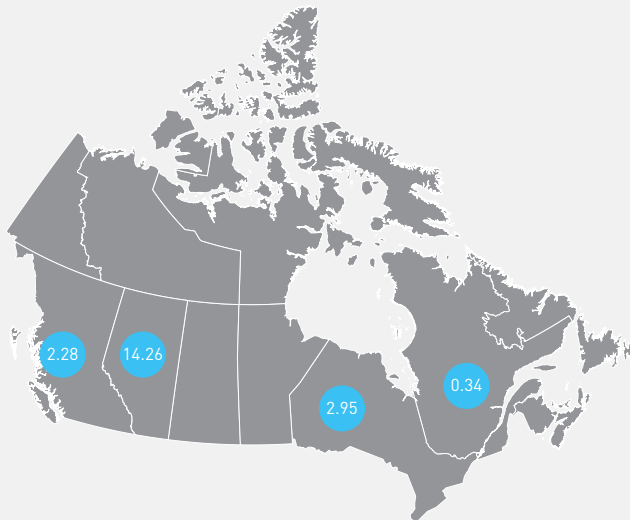


Average Water Use Intensity (m³/m²/yr) by Region—Office



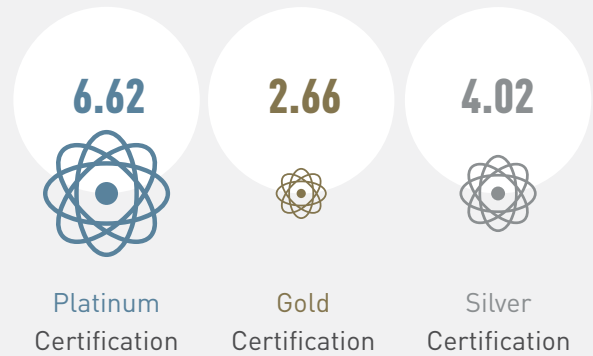
Efficient operations in Gold buildings are leading to savings of over 1 million kg of CO₂ emissions per year — equivalent to taking 218 passenger vehicles off of the road

Carbon Intensity by Region



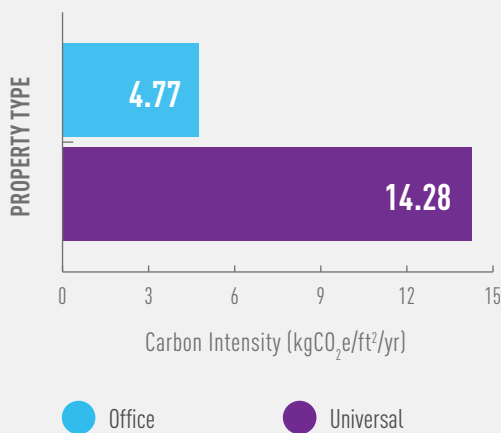
Average Carbon Intensity (kgCO₂e/ft²/yr) by Region—Office

Carbon Intensity by Level



Average Carbon Intensity (kgCO₂e/ft²/yr) by Certification Level for All Regions—Office

Carbon Intensity by Building Type



Average Carbon Intensity (kgCO₂e/ft²/yr) by Property Type

145 King Street West, Toronto, ON →
QuadReal Property Group LP



→ Universal buildings have a significantly higher carbon intensity than Offices.

Universal asset classes include all types of buildings, such as mixed-use facilities, courthouses, police stations, performing arts institutions and vocational properties.

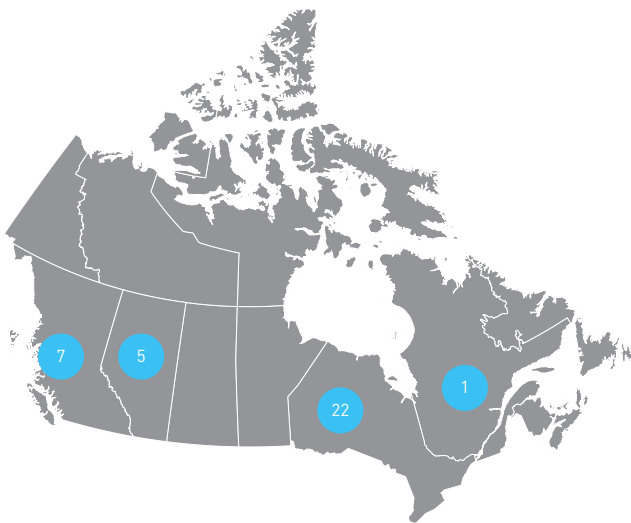


WASTE



36% of BOMA BEST Office Buildings are obtaining very high capture rates of 80-100%

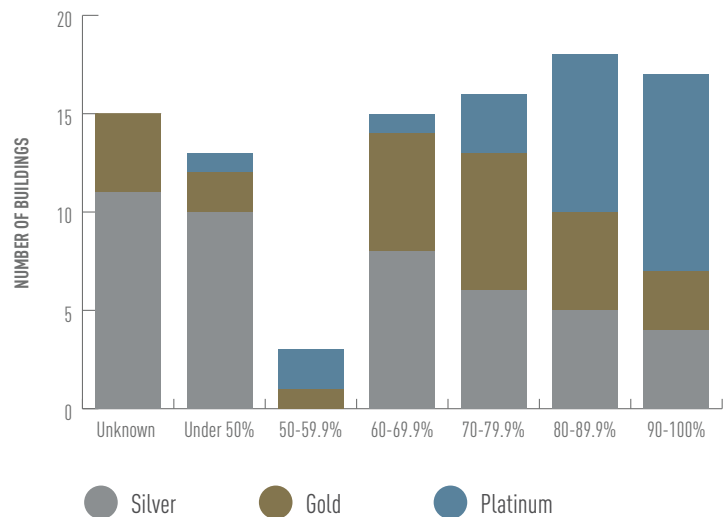
Capture Rates Above 80% By Region



Waste Capture Rates above 80% by Number of Office Buildings per Region

Capture rates, assessed via waste audit, provide an accurate way of measuring the efficacy of a building's waste diversion program. It calculates how much of the material that could be diverted (via recycling, composting, etc.) from landfill, was actually successfully diverted. High capture rates are preferred.

Capture Rates by Level



Waste Capture Rates by Number of Office Buildings per Certification Level

Low capture rates indicate that many materials that can be diverted are actually ending up in landfill. This information supports building managers as they continuously fine tune the waste management process – perhaps by improving signage at bins or by increasing collection frequency.



The top 5 waste diversion programs implemented at Office Buildings are for:



Batteries



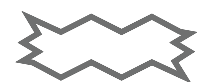
Electronics



Ballasts and fluorescent tubes



Toner cartridges



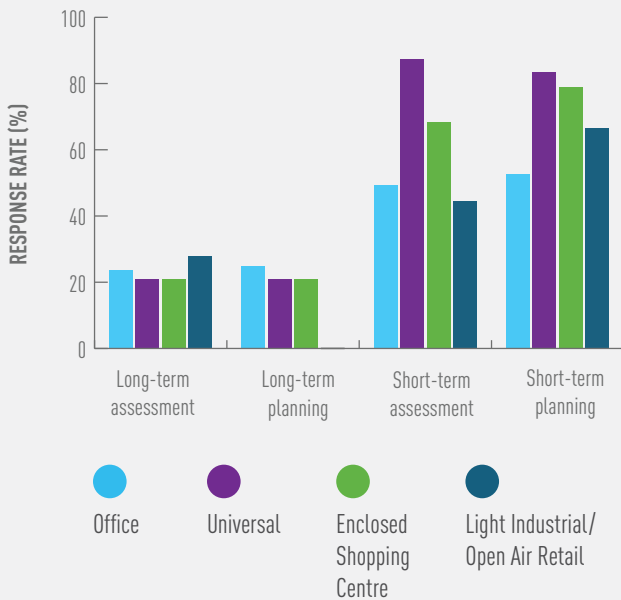
Scrap metal



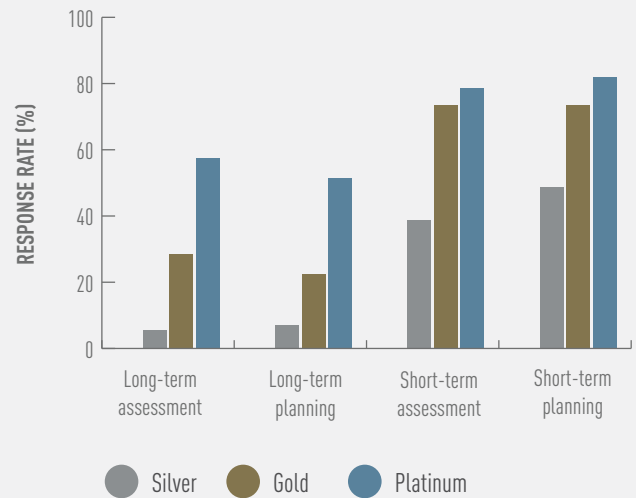
Most buildings are looking at short term resilience planning over the long term

BOMA BEST buildings are preparing for extreme weather events by incorporating resilience planning into their management practices.

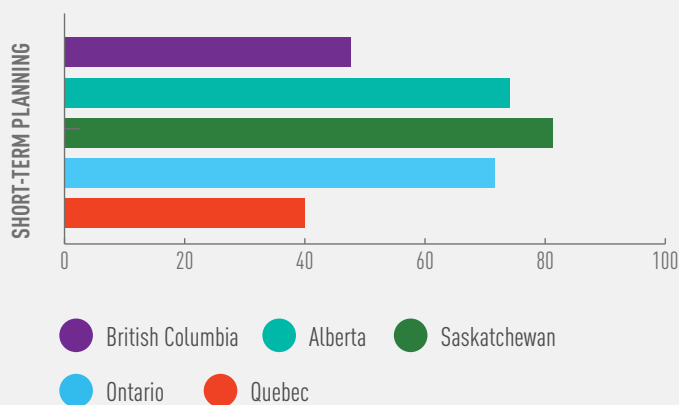
Response Rate by Property Type



Response Rate by Level



Response Rate by Region



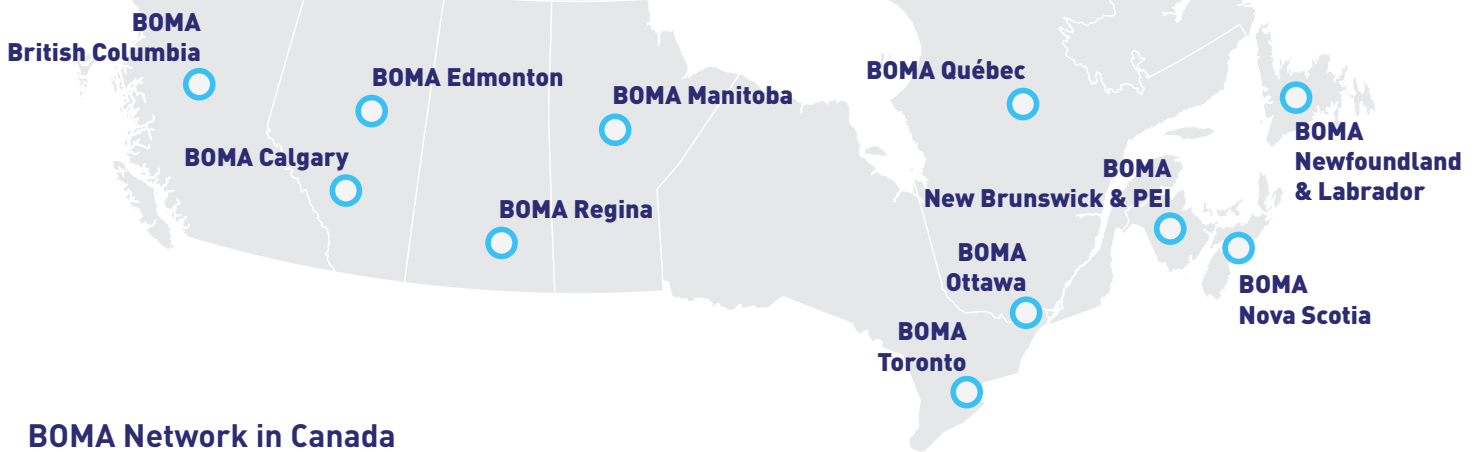
Livingston Place, Calgary, AB →
QuadReal Property Group LP



→ BOMA BEST buildings are stepping up to the resilience challenge by incorporating short term risk assessment and planning into their management practices.

BOMA Canada is proud to introduce the **Resilience Brief** to assist the industry in this important area.

An organization built to benefit a nation



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For the complete report, please visit the BOMA BEST website.

Ce rapport est disponible en français.