Study – May 2024

The benefits of energy-efficient renovations in commercial buildings

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It is based on survey data, expert interviews and public information that has been analyzed and interpreted by BDC. Any error or omission is the sole responsibility of BDC. All figures in this study have been rounded. Reliance on and use of the information herein is the reader's responsibility.

Message from the Head, Sustainability, Diversity and Social Impact

Climate change is the single biggest challenge of our time. The good news is that we are seeing governments, businesses and consumers, across every sector and all over the world, taking action. The bad news is that it's not happening fast enough. And in Canada, we know that we need to move more quickly if we are going to meet our national target of net-zero greenhouse-gas (GHG) emissions by 2050.

Entrepreneurs have a huge role to play on this journey. They can be agents of change—from those taking actions to reduce their own business' environmental footprint, to those developing and delivering the vital products and services others need to do the same.

This report makes it clear that actions being taken by business owners to reduce the environmental impact of their buildings—in other words, make them "greener"—makes good business sense and reduces their contribution to climate change.

Across the country an estimated 16 million homes and 750 million square metres (more than 8 billion square feet) of commercial space will require retrofitting to help us meet our net-zero targets. Furthermore, Canada estimates it will need 3.5 million more housing units by 2030, to restore availability and affordability. This equals a huge opportunity for both entrepreneurs that own buildings, as well as entrepreneurs with businesses that are part of the green building and green energy supply chain. Manufacturers, wholesalers, construction services, transportation and storage companies, and more, all have a huge role to play!

The potential is vast and those that lead today will reap the rewards for their business, and for our collective future.

At BDC, we want to make this journey as easy as possible for entrepreneurs. We know sustainability makes good business sense, and every day we help entrepreneurs take action. Know that we are on the journey with you and here to help every step of the way.

Message from the Chief Economist

Global warming is a pressing issue of our time, especially in Canada, where temperatures are rising at twice the global rate. If left unchecked, it will cause more damage to our environment and society in the form of increased wildfires, heat waves, floods and other natural disasters.

Buildings are responsible for 13% of the GHG emissions that Canada contributes to climate change. Green retrofits—renovating an existing property to improve its energy efficiency—have proven effective at minimizing the carbon footprint of commercial buildings.

SMEs that undertake such property improvements play an important role in achieving Canada's climate change goals. However, many are reluctant to act, due to knowledge gaps and significant upfront costs.

This report highlights the benefits that green retrofits can bring SMEs, such as increased property value and energy savings. It also provides guidance on the best investments to make, depending on the project's goals, and some proven best practices for facilitating the retrofit process.

Retrofitting a commercial property is a prudent investment that yields long-term returns for small business owners. Not only will it provide them with several benefits, but it also plays an important role in helping Canada achieve its emission reduction goals.

Introduction

The pace of climate change resulting from our actions (or lack thereof) is accelerating. Our window of opportunity to limit global temperature rise by less than 2 degrees Celsius is rapidly closing. Existing buildings, including commercial real estate, significantly contribute to GHG emissions in Canada. While efforts to incentivize investment in retrofitting[1] these buildings are underway, they may not be sufficient. In comparison to other G7 nations, Canada lags in undertaking green retrofits for existing buildings.

To better understand this gap, BDC conducted a study, drawing from a literature review and a survey of 1,500 Canadian SME building owners and tenants. This study highlights the long-term benefits of investing in green retrofits. Not only can retrofitting benefit the environment and future generations; it also benefits the businesses involved.

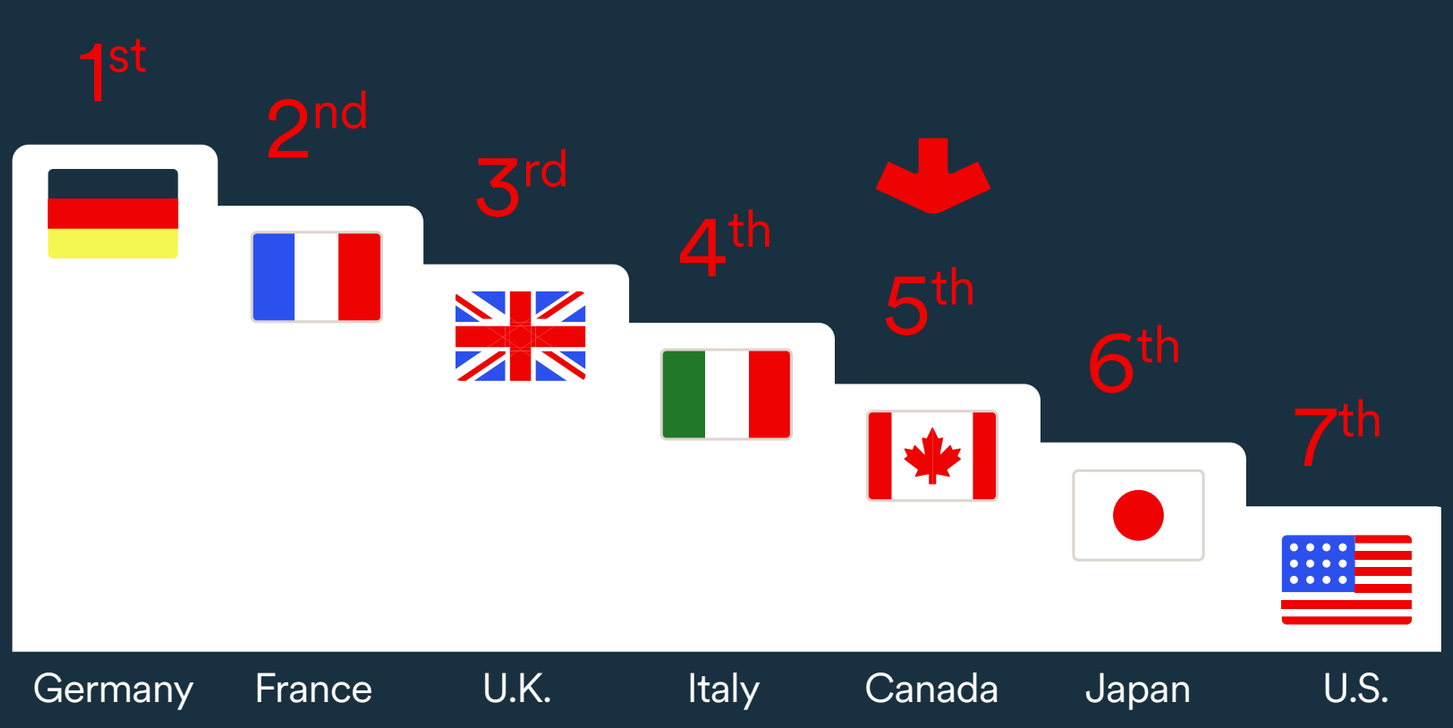
Key topics explored in this study include the following:

- the state of Canadian investments in commercial green retrofits over the past five years
- primary obstacles to increasing the pace of these investments
- tangible and intangible benefits businesses can expect from green retrofits
- best practices and guidelines for successful green retrofit projects

[1] An energy retrofit or green building renovation involves upgrading or replacing a building's systems (such as lighting, insulation, and heat, ventilation and air conditioning (HVAC)) to improve energy efficiency and reduce environmental impact.

Highlights

Green retrofits are crucial to Canada meeting its emission reduction targets. Unfortunately, we lag other G7 nations in terms of our performance in this area.



13%

of Canada's GHG emissions came from buildings in 2022

Businesses that completed green renovations benefitted

62% saved on their energy bill

56% said their employees expressed greater satisfaction

64% raised the rent on their spaces

34% saw their property value increase

Main barriers to carrying out green retrofits

- Upfront costs
- Knowledge gaps

Most beneficial green renovation areas

- Heating, ventilation and air conditioning (HVAC)
- Renewable energy sources

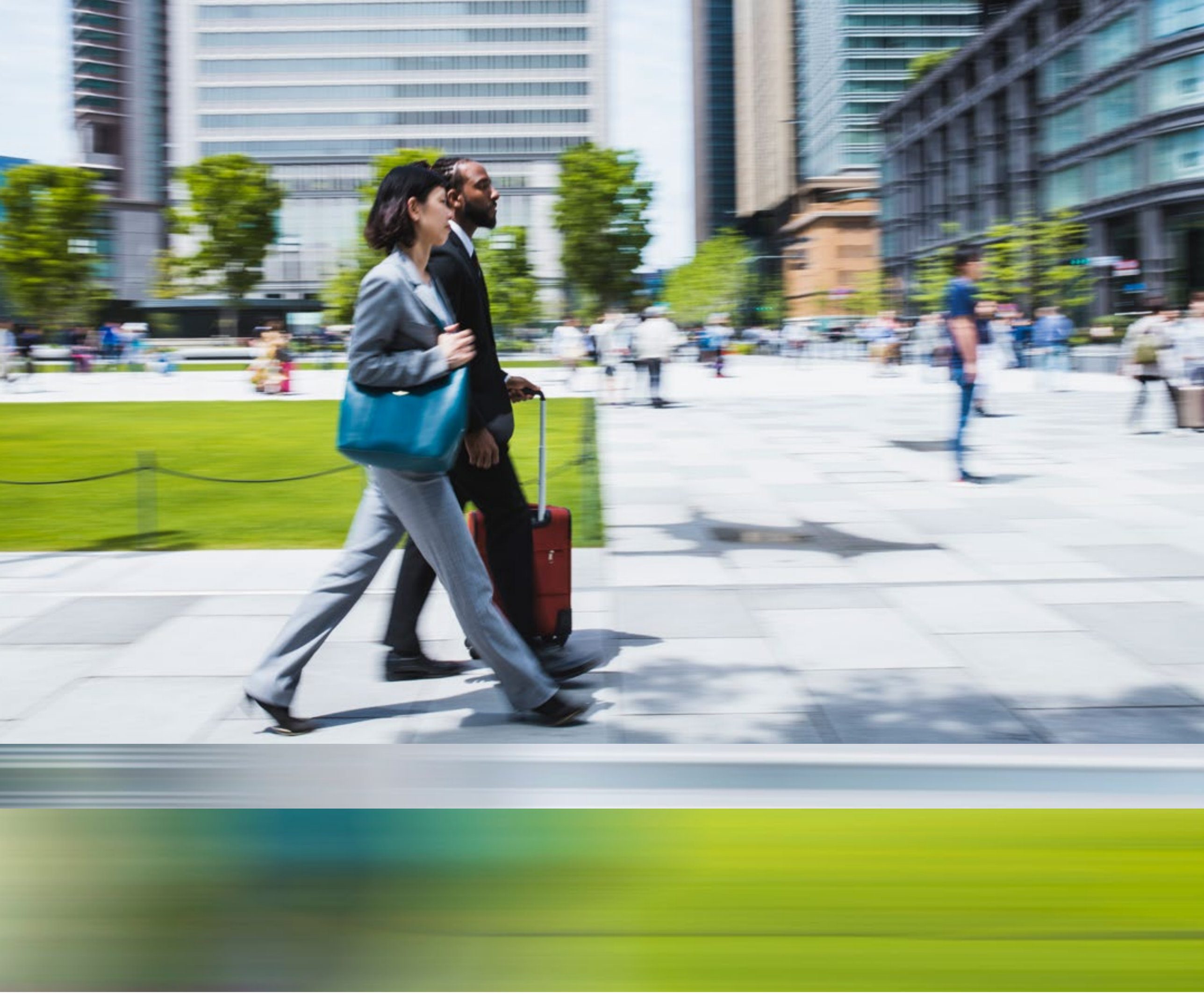
Types of support wanted by building owners to invest in green renovations

31% a clearer idea of the benefits for their business

19% expertise to guide their green projects

27% guidance on programs to help pay for green projects

19% access to expertise/ financial support in their area/region



The current state of green retrofits in Canada

Countries must act swiftly to mitigate climate change by reducing or preventing GHG emissions from human activities. At the current rate of emissions, the global average temperature is projected to rise 1.5 degrees Celsius above pre-industrial levels by 2050.

This is especially concerning for Canada because our climate warms twice as quickly as the global average, due to our northern position. Urgent action is crucial to prevent increasing incidents of severe storms, droughts and forest fires.

Green retrofits play an important role in reducing emissions

Buildings contributed 13%, or almost 89 megatonnes, of Canada's GHG emissions in 2022.

This figure potentially increases threefold if we include indirect emissions from building materials, known as embodied carbon emissions.

Canada's investment in green retrofits is insufficient

Canada lags other G7 nations in green retrofitting investment to reduce the emissions from existing buildings (Figure 1). The 3Keel Global Retrofit Index places Canada near the bottom, deeming public investment "highly insufficient" to meet retrofitting needs.[2]

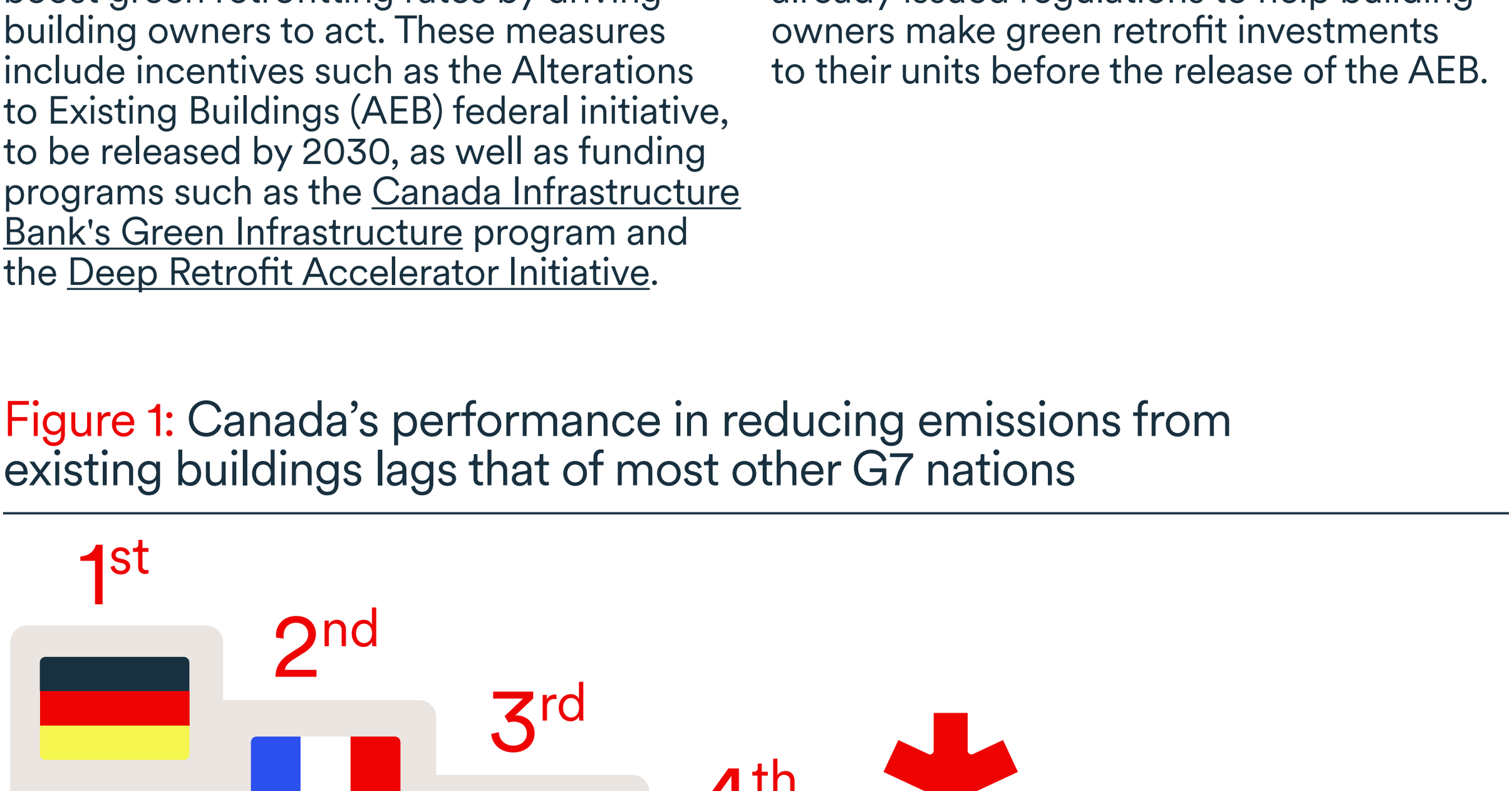
The index evaluates the current need for building retrofits, recent progress and relevant policy.

Canadian building owners must accelerate investment in green retrofits

Governments use regulations, financial incentives and non-financial measures to boost green retrofitting rates by driving building owners to act. These measures include incentives such as the Alterations to Existing Buildings (AEB) federal initiative, to be released by 2030, as well as funding programs such as the Canada Infrastructure Bank's Green Infrastructure program and the Deep Retrofit Accelerator Initiative.

Moreover, large municipalities such as Vancouver, Toronto and Montreal have already issued regulations to help building owners make green retrofit investments to their units before the release of the AEB.

Figure 1: Canada's performance in reducing emissions from existing buildings lags that of most other G7 nations



Source: 3Keel, *Global Retrofit Index*, Report (United Kingdom: 3Keel, 2022).

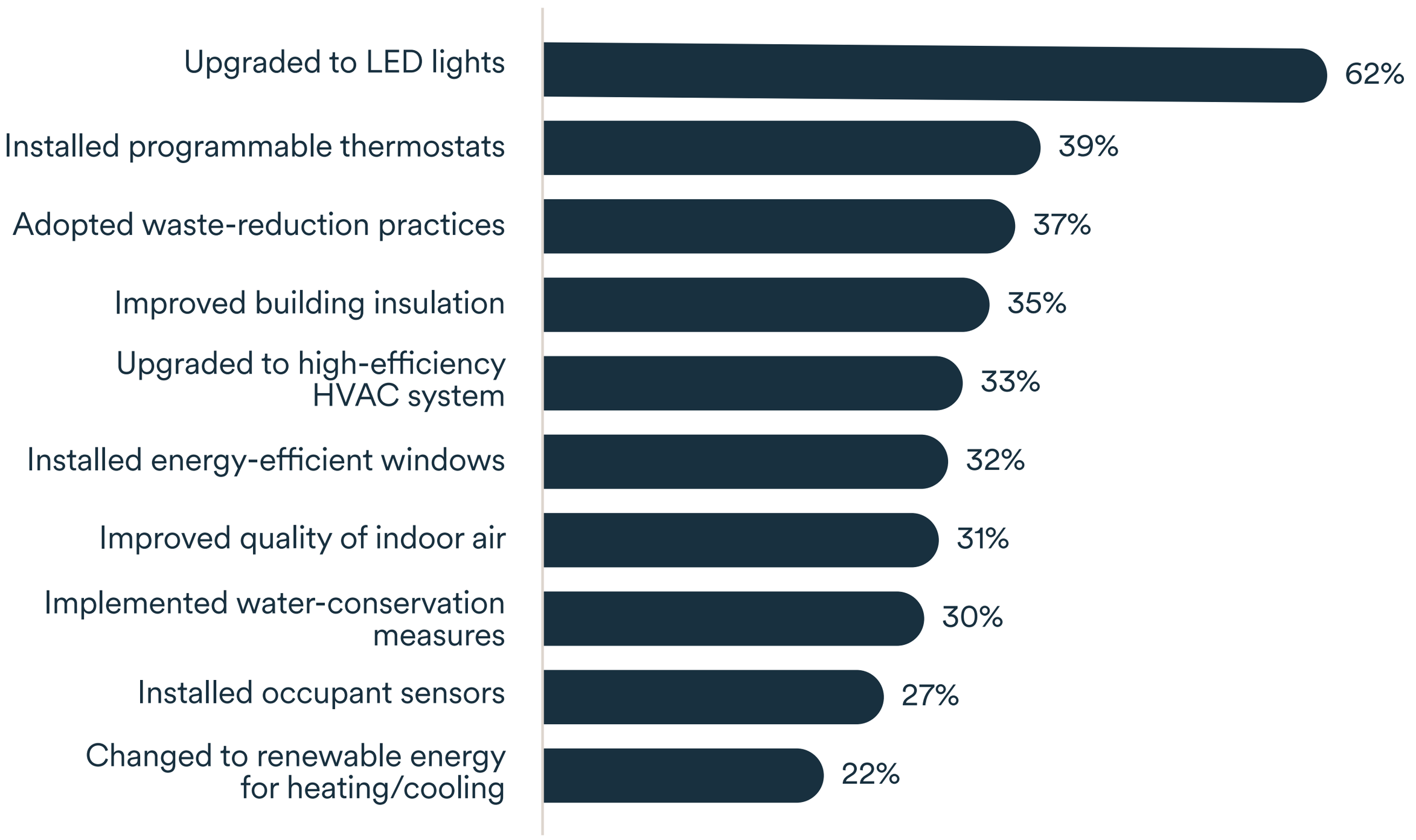
[2] The index range includes sufficient, almost sufficient, insufficient, highly insufficient and critically insufficient.

Some Canadian building owners have invested in green renovations

More than half (59%) of Canadian commercial building owners reported having undertaken a green renovation in their building in the past 5 years. As illustrated in Figure 2, the most common project was upgrading light fixtures to light-emitting diode (LED) lighting (62%), followed by installing programmable thermostats (39%) and adopting waste-reduction practices (37%).

Interestingly, building owners carried out four different types of green building retrofits, on average, indicating that projects are usually not done in isolation.

Figure 2: Top 10 green retrofits carried out by Canadian building owners in the past five years



Source: BDC survey on SME investments in green retrofits and green certification in commercial real estate, October 2023. Base included owners who had undertaken green renovations for their building (n=436). Those who did not know were excluded from the calculation base. Multiple answers were allowed; therefore, the total exceeds 100%.

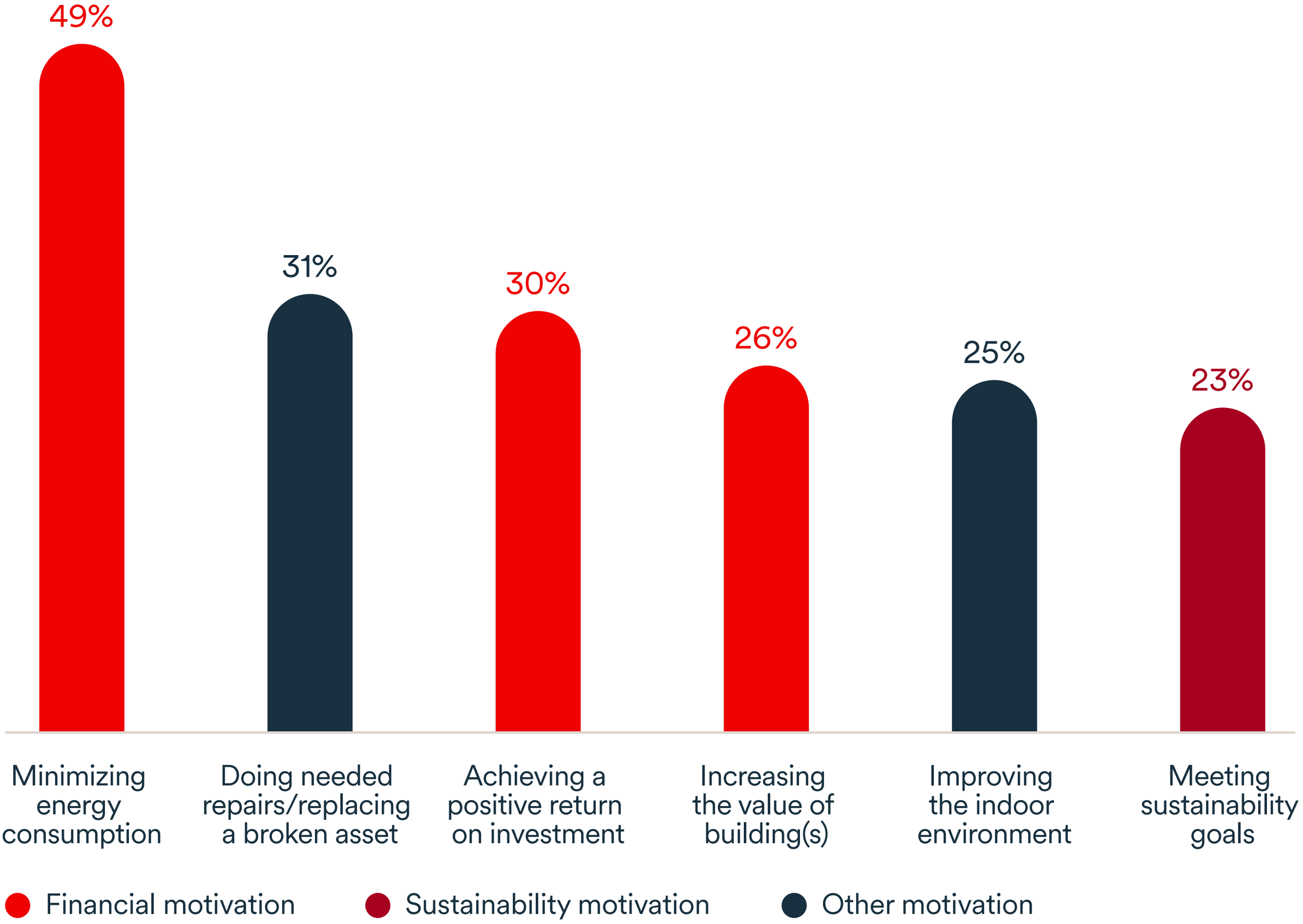
Business owners primarily invest in green renovations for financial reasons

Survey results showed that meeting sustainability goals was not the primary motivation for undertaking green retrofits of buildings. Respondents reported that financial goals such as minimizing energy consumption (49%), achieving a positive return on investment (30%) and increasing property value (26%) were primary motivators (Figure 3). This was consistent with prior research, which indicated that actions that are good for the environment are also good for business.

Apart from financial motivation, business owners also carried out green renovations to replace a broken asset (31%) or to provide a healthier indoor environment for building occupants or employees (25%).

Fewer than a quarter (23%) of building owners reported being motivated by sustainability goals. However, this number increased to 31% among business owners whose company reports on its GHG emissions.

Figure 3: Owner motivations for undertaking green retrofits of buildings



Source: BDC, SME survey on SME investments in green retrofits and green certification in commercial real estate, October 2023. Base included owners who had undertaken green renovations for their building (n=435). Those who did not know were excluded from the calculation base. Multiple answers were allowed; therefore, the total exceeds 100%.

Building owners tend to renovate spaces occupied by their employees

Figures 4 and 5 show the characteristics of buildings that underwent green retrofits. Most projects were carried out in offices (42%), warehouses (22%) or retail buildings (21%).

More than two-thirds (70%) of green retrofits were carried out in spaces of 25,000 square feet or less. Additionally, many (56%) were carried out in spaces occupied by employees of the building owner.

Figure 4: Green retrofits, by building type

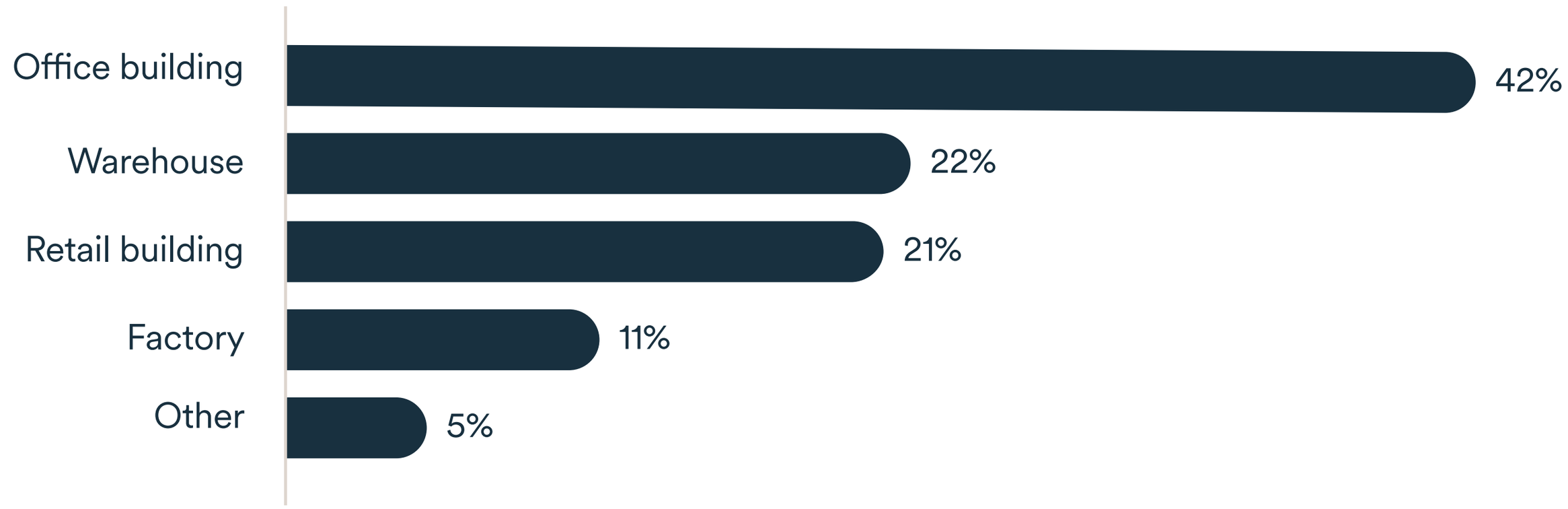
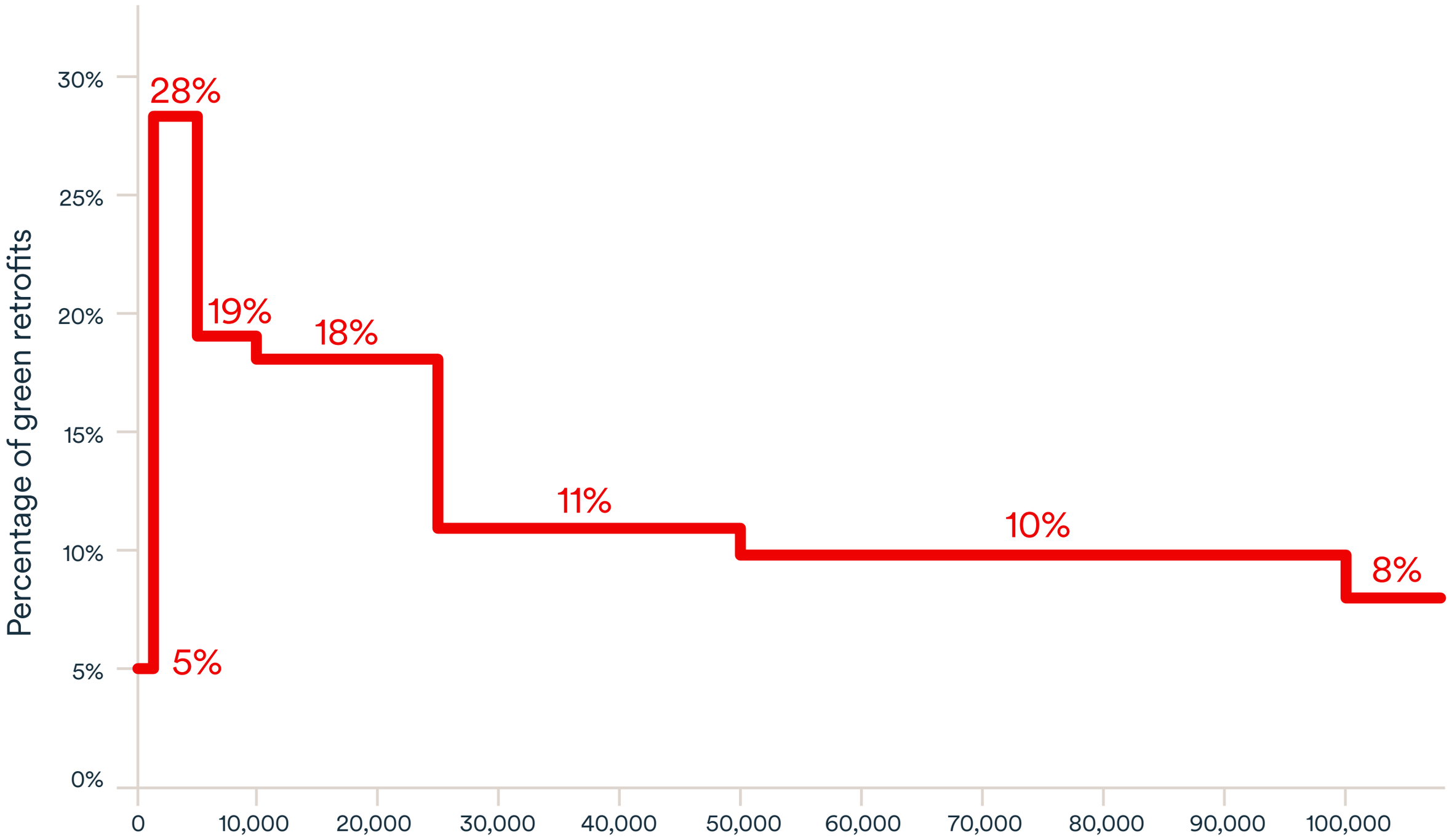


Figure 5: Green retrofits, by building size



Source: BDC, SME survey on investments in green retrofits and green certification in commercial real estate, October 2023. Base included owners who had undertaken green renovations for their building (n=425-436). Those who did not know were excluded from the calculation base. Totals exceed 100% due to rounding.

Barriers Canadian SMEs face in carrying out green retrofits

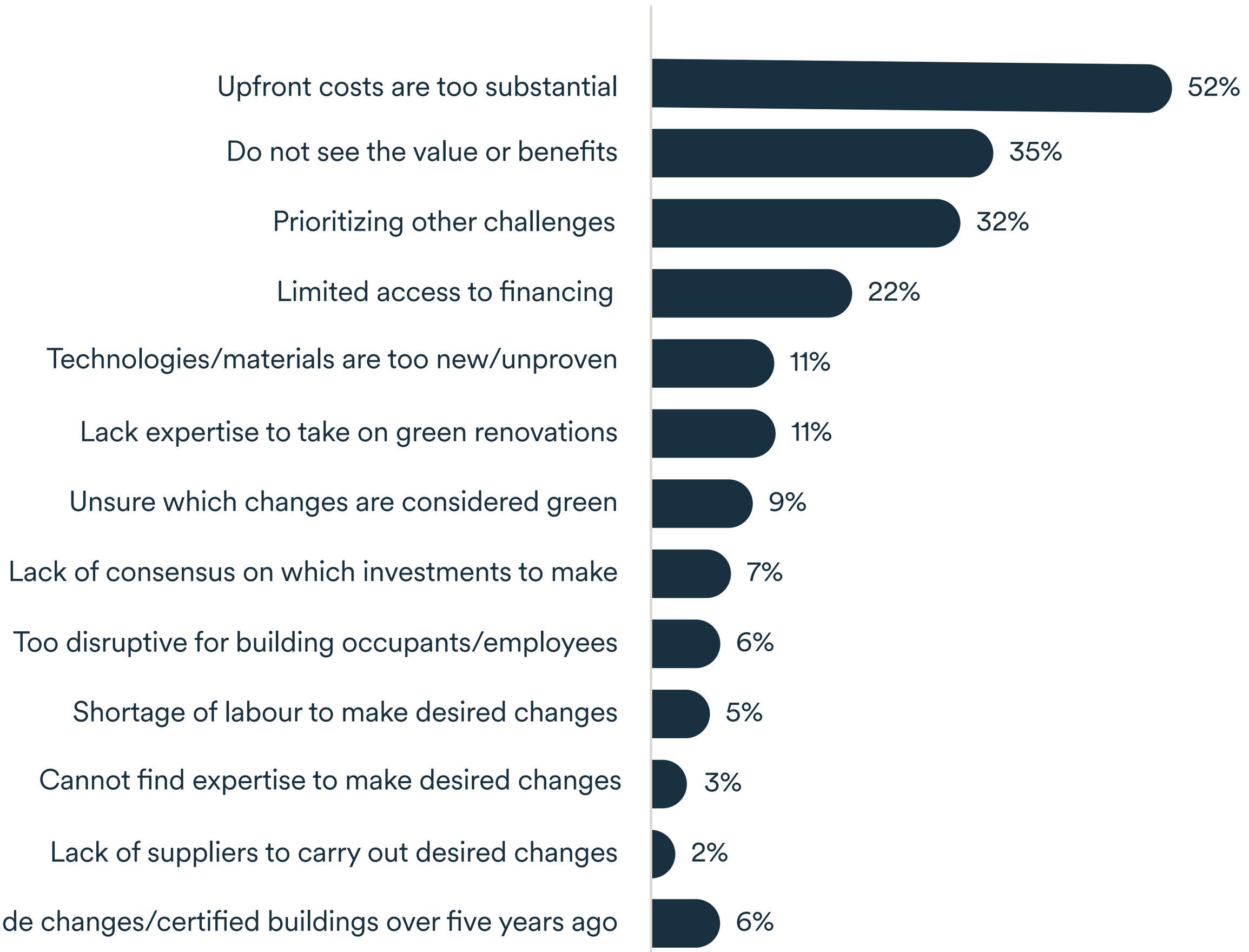
Previous studies indicated that the most common barriers to investing in green retrofits included:

- lack of funds
- high investment costs
- disruption to building occupants
- lack of know-how
- doubts about the return on investment

BDC survey results clearly demonstrate that the single most important barrier to Canadian SMEs undertaking green renovations is cost (Figure 6). Among owners who had not completed green retrofits in their buildings in the past five years, more than half (52%) reported that the upfront costs were too substantial.

The next most important reason, mentioned by a third of owners, was that they did not see the value or benefits of investing in green retrofits (35%). This was closely followed by building owners who indicated that they were prioritizing other challenges (32%).

Figure 6: Reasons SME owners cited for not investing in green retrofits



Source: BDC, SME survey on investments in green retrofits and green certification in commercial real estate, October 2023. Base included owners who had not undertaken green renovations for their building (n=244). Multiple answers were allowed; therefore, the total exceeds 100%.

Increasing awareness is key to boosting investment in green retrofits

When asked what type of support would motivate businesses to invest in green retrofits, building owners expressed a need for more knowledge (Figure 7). The largest proportion (31%) indicated that they would need a clearer picture of the benefits for their business.

This was followed by respondents (27%) who indicated that they would need guidance on the different support programs available to help pay for these types of projects.

Figure 7: Types of support SMEs need to invest in green retrofits

Source: BDC, SME survey on investments in green retrofits and green certification in commercial real estate, October 2023. Base included owners who had not undertaken green renovations for their building n=248. Multiple answers were allowed; therefore, the total exceeds 100%.

An energy efficiency paradox

This research demonstrates a significant disconnect between potential and perception. Despite the potential benefits, organizations may not invest in energy improvements due to high up-front costs, uncertainty about future energy prices and/or a lack of know-how.

Programs that aim to increase investment in green retrofits should inform clients what they could gain and how quickly (for example, the simple payback period). Programs should also provide financial and technical expertise to help businesses lower the costs of the investment.

Information is key to bridging this gap

Potential benefits of green retrofits

- Cost savings
- Employee satisfaction
- Reduced emissions

Building owners must have information on these topics:

- Benefits of green renovations
- Payback period of the investment[3]
- Available financial and technical guidance

Perceived barriers to green retrofits

- High upfront costs
- Lack of know-how
- Future energy prices

[3] The simple payback period is defined as the number of years that must pass until the money saved due to the project will cover the investment. For example, if an investment costs $100 and results in annual savings of $20, the simple payback period is $100/$20 = 5 years.

Benefits of green retrofits for commercial real estate owners

A literature review pointed to two types of benefits associated with investing in green retrofits in a building—tangible (economic) and intangible. Green retrofits for buildings not only save energy costs and reduce GHG emissions but can also enhance workspaces.

A better environment can increase user satisfaction, productivity and retention. Content employees or tenants can also foster a positive company culture.

Benefits		Tangible	Intangible
Energy savings	Changing from fluorescent lighting to LED can yield annual savings of 20% to 50%.[4]	✓	
Higher occupancy and rental rates	– Projects that are certified under the Leadership in Energy and Environmental Design (LEED®) program earn 3.7% more in rent and have 4.0% higher occupancy rates than those that are not. – Buildings certified under the Energy Star® program[5] earn 2.7% more in rent and have 9.5% higher occupancy rates than those that are not.[6]	✓	
Increased resilience to climate risk	Green renovations can make buildings more resilient to extreme temperatures, resulting in the following benefits: – reduced insurance costs – fewer business disruptions	✓	
Increased employee well-being	Retrofitted buildings can do the following: – decrease employee stress levels – increase worker productivity by 23%[7]		✓
Greater incentive to work onsite	One study[8] found that 90% of employees in a green-retrofitted building wanted to work onsite at least four days a week.		✓

Most businesses that invested in green retrofits reported benefits

BDC survey results also shed light on the rewards companies may expect when they carry out green renovations.

- 62% saved on their energy bill (63% saved at least 6% annually)
- 34% saw their property value increase (46% saw it increase by 6% or more)
- 64% raised the rent on their spaces
- 64% saved at least 6% on their annual insurance premiums
- 56% said their employees expressed greater satisfaction
- 43% saw increased employee productivity

[4] "Explainer: How Do Retrofit Economics Differ For Commercial Buildings and Homes?" Clean Energy Finance Forum, https://www.cleanenergyfinanceforum.com/2022/05/04/explainer-how-do-retrofit-economics-differ-for-commercial-buildings-and-homes.

[5] LEED® certification evaluates the overall sustainability of buildings by considering a variety of environmental factors, such as energy efficiency, water use and materials. Energy Star® primarily focuses on the energy efficiency of products, buildings and industrial facilities.

[6] Avis Devine and Nils Kok, "Green Certification and Building Performance: Implications for Tangibles and Intangibles," The Journal of Portfolio Management 41, 6 (2015): 151-163.

[7] "Explainer: How Do Retrofit Economics Differ For Commercial Buildings and Homes?"

[8] "Cities Revitalised: 10 Trends for 2023," Avison Young, https://avison-young.foleon.com/ten-trends-for-2023/explore/cities-revitalised.

Certain green retrofit projects are better for beginners

While most owners who carried out green retrofits procured some form of benefit, it is also interesting to analyse whether they saw multiple benefits.

The BDC study focused on three aspects of green retrofit projects:

- ease of implementation
- return on investment (ROI)
- average payback period

Green retrofit projects that ranked highly with survey respondents in all three categories are a good starting point for building owners trying to decide where to focus their efforts (Table 1).

Table 1: Ease of implementation, ROI and average payback period, by project type

Green retrofit made by building owners	% of respondents who felt project offered Ease of implementation	% of respondents who felt project offered good ROI	Average payback (years)
Upgraded to LED lights	28%	16%	2.9
Installed programmable thermostats	11%	5%	2.8
Adopted waste-reduction practices	9%	4%	2.9
Installed energy-efficient windows	7%	6%	3.5
Improved the quality of indoor air	6%	8%	3.2
Obtained building certification (e.g., LEED, BOMA BEST, WELL)	6%	7%	n.a.
Installed light sensors (so that lights turn on only when someone is in the room)	5%	2%	2.8
Improved building insulation	4%	9%	3.3
Implemented water conservation measures	4%	6%	3.1
Created white, green or blue roofing	4%	2%	4.6
Changed to renewable energy sources for heating and cooling	3%	5%	3.8
Changed to a high-efficiency HVAC system	3%	13%	4.1
Implemented intelligent building technology (e.g., for energy efficiency, water management, maintenance)	3%	6%	3.9
Installed renewable energy sources	2%	7%	3.6
Average	n.a.	n.a.	3.4

Rating scale: Best · Better than average · Average · Worse than average · Worst

Source: BDC, SME survey on investments in green retrofits and green certification in commercial real estate, October 2023.
Base included owners who have undertaken green renovations for their building (n=65-379).

Among the investments made by SMEs in the last five years, upgrading to LED lights had the highest reported return on investment and a shorter-than-average payback period, and was identified as the easiest to implement.

Projects such as improving building insulation and the quality of air in the building also provided above-average returns and had shorter-than-average payback periods. Building owners looking to make green improvements to their buildings could begin by tackling these types of projects.

Bill Townsley, Co-owner,
Festina Lente Estate Winery

Festina Lente Estate Winery

Green means growth for this B.C. winery

For Teresa and Bill Townsley, co-owners of Festina Lente Estate Winery in Langley, B.C., the best approach to growing their business is baked right into its name: Festina Lente is Latin for “make haste slowly.”

As Teresa explains, it’s a philosophy that is perfect not only for winemaking, but for building a sustainable business. “The idea is you get there faster by moving slowly and making carefully planned, conscientious decisions.”

Sitting on five acres of land in a Tuscany-like microclimate about an hour outside of Vancouver, Festina Lente makes wine from honey, known as mead.

The decision to renovate

Teresa and Bill launched their mead business in 2016. When the COVID-19 pandemic struck, they realized that it might be the perfect time to undertake some renovations.

Part of the motivation was the pandemic itself: they wanted to give visitors more space for social distancing and allow them to be outside. But they also realized that this might be a chance to invest in sustainability, according to their personal and corporate values.

“Our whole business model is built on reducing greenhouse gases,” says Teresa. “For example, we use compressed sugarcane corks, which are a byproduct of sugar manufacturing. Little business decisions like that can be environmentally forward without costing more.”

Switching to LED lighting throughout the property was the obvious first step. After that, they installed low-flow toilets because careful use of water makes sense for a growing business reliant on a well and aquifer.

They also decided to replace all the metal-framed windows, which dated back to the original 1979 property. “If you stood next to those windows in winter, you could feel the cold,” says Teresa. “The new ones significantly increase comfort and warmth—and at the same time, reduce costs and our carbon footprint.” They also reduce cooling costs in summer.

“[Goodwill from customers interested in sustainability] has been a huge factor in the success of our business and is why we’ve expanded six times in eight years," says Teresa.

The real payoff: Customer loyalty

Even though the windows were one of the pricier changes, Teresa says the return on investment will be less than five years.

“We haven’t been able to calculate exactly how much we’re saving on energy costs yet because the B.C. climate has been so variable,” she says. “But we have definitely realized substantial savings. I would say costs are down 20% simply because of the windows.”

The new energy-efficient windows have also reduced some business risk, she says. At a winery with a tasting room, hot weather can damage the product.

But perhaps the biggest reward of all: the green renovations are generating major customer loyalty and helping Festina Lente grow its customer base. “That goodwill in itself is a huge factor in the success of our business and is why we’ve expanded six times in eight years.”

Next up: Solar power

Teresa and Bill have their sights on a new, much more ambitious goal: running the entire farm on solar power and even putting power back into the grid.

“Based on the success of our green renovations so far, we’re ready to do more,” Teresa says. “We want to be the first winery in B.C.’s Lower Mainland to be completely solar powered.”

Although a project of that size will have a longer ROI, Teresa is optimistic that they can get it down to 10 years with the right technology. “It’s not just about what we might save in the first year or two,” she says. “It’s about what’s going to be best for the business and the planet in the long run.”

Certain green retrofit projects deliver more benefits than others

Studying individual green retrofit projects revealed insights into the benefits and returns for businesses. Equally important was understanding the collective impact of multiple projects.

The BDC study found that building owners generally undertook four green retrofits, on average, rarely focusing on a single project. To explore these benefits further, the individual improvements can be classified by theme (Table 2).

Table 2: Proportion of commercial building owners that carried out certain types of green retrofit projects

Project type	Examples of the kinds of improvements this type of project could include	Proportion of owners surveyed that carried out one or more improvements in this type of project
Electrical systems	– Upgraded to LED lighting – Installed programmable thermostats – Installed occupant sensors – Implemented intelligent building technology	83%
Building envelope	– Improved building insulation – Installed energy-efficient windows – Created white, green or blue roofing	61%
HVAC	– Replaced an old HVAC system with a more efficient one – Improved the quality of indoor air – Changed to a renewable heating or cooling source	59%
Occupant-related project	– Adopted waste-reduction practices – Improved water conservation	54%
Energy source	– Installed a renewable energy source	21%

Source: BDC, SME survey on investments in green retrofits and green certification in commercial real estate, October 2023. Base included owners who had undertaken green renovations for their building (n=425-436). Those who did not know were excluded from the calculation base. Totals exceed 100% due to rounding.

HVAC and energy-source projects result in the greatest energy savings

BDC survey data showed that building owners who undertook electrical system projects were more likely to report reduced energy costs as a benefit (68%) than owners who carried out other types of green retrofits (62%).

However, those who undertook energy-source projects (40%) or HVAC projects (23%) were more likely to report the greatest energy cost savings—reductions of 15% or more annually—than were owners who carried out other types of green retrofits (18%).

Property value increases the most following energy-source and building-envelope projects

Increasing the value of the property was another key motivation for doing green renovations. Owners who carried out projects related to the building's energy source, HVAC, occupants or envelope were more likely to report an increase in property value.

Furthermore, those who carried out projects related to the energy source (32%) or building envelope (24%) were more likely to report the greatest increase to property value—a 10% rise—than were owners who carried out other types of green retrofits (18%).

Changing to a renewable energy source generates the highest rent increase

Survey results indicated that three types of projects were more likely to help owners charge higher rents: energy-source, HVAC and occupant-related projects.

The highest rent increase—more than 15%—accrued to owners that changed their energy supply to a renewable source (20%), as compared to owners who carried out other types of green retrofits (12%).

To summarize

While smaller projects (such as those that involved electrical systems) did benefit building owners, owners that pursued more complex projects (such as changing energy sources or improving HVAC systems) saw even greater benefits.

Best practices to successfully retrofit your building

The choice to pursue a green retrofit project should not be made in a hurry. It's important to select your project carefully.

In the current economic climate, small investments can yield substantial returns. Start with quick, easy and cost-effective renovations to build momentum.

These could include switching to LED lighting, upgrading your HVAC system or installing energy-efficient equipment.

While large, elaborate retrofits may not be necessary initially, you may want to do them later. Consider timing larger investments to coincide with expected interest rate declines in 2024 and 2025 to reduce renovation costs.

7 tips for a successful green retrofit

A successful outcome depends on a methodical, step-by-step approach including these best practices.

1. Assess your property

Conduct an energy audit to identify improvement areas such as the roof, windows and lighting. Set clear goals for the retrofit, such as targets for energy savings or emissions reductions. Leverage tools such as the Energy Star® Portfolio Manager to benchmark your building's performance against that of other commercial buildings in North America.

2. Seek professional guidance

Collaborating with experienced professionals can help you work more efficiently and effectively. They will help you build a robust plan to meet your renovation goals (e.g., certification) within the limits of your space and available resources. Additionally, developing a capital improvement plan—to replace equipment near the end of its useful life—helps minimize waste.

3. Comply with regulations

As mentioned at the beginning of this study, more regions are putting regulations in place to compel commercial real estate owners to make green investments in their properties. Learn about local regulations and secure the necessary permits. Adhering to these standards ensures a smooth, legally sound and cost-effective process.

4. Communicate with tenants or employees

Keep stakeholders informed, address concerns promptly and maintain transparency. Engaging with them fosters a positive atmosphere and helps manage expectations. Furthermore, early engagement ensures buy-in from end users of the space.

5. Build a budget and get financing

Setting a realistic budget for your retrofit project is crucial and can help you secure financing for your investment. Ensure your budget includes all green retrofit costs, such as the costs of construction, building permits, professional services and materials. Renovate complementary processes and technologies at the same time to maximize benefits and optimize costs. Your budget should also include an emergency fund to cover unexpected expenses and the cost of ongoing maintenance.

6. Document everything

Meticulously document the entire process. Keep records of permits, plans, receipts and relevant paperwork. A comprehensive record is valuable for future reference, audits, and grant and rebate applications.

7. Develop quality-control measures

Stringent quality control is essential. Regular inspections at key stages ensure work aligns with approved plans and complies with standards and regulations.

After the renovation

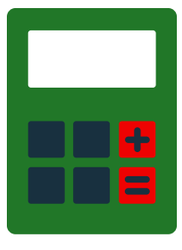
After completing the green retrofit, assess its success.

Solicit feedback from stakeholders

- tenants
- employees
- project team members

Evaluate the project's impact on:

- property functionality
- energy efficiency
- property value
- overall satisfaction



Quantify the results so that you can:

- make the case for future retrofits
- reinvest the savings in the business or other green renovations

Develop an ongoing maintenance plan for the renovated elements in order to:

- prevent performance issues
- ensure long-term effectiveness
- maximize lifespan

The Corner Coworking

Energy-efficiency upgrades improve workspaces

Mark Eaton owns The Corner Coworking, an Alberta-based company that provides shared office and warehouse spaces on a membership or on-demand basis. Three buildings are in Cochrane with the fourth in Okotoks, both cities about 30 minutes from Calgary.

Over the years, Eaton has made several changes to lessen the environmental footprint of his buildings. “We had those typical four-foot fluorescent tubes that would buzz and flicker,” he recalls. New LED lights emit no sound and can be dimmed.

Eaton also installed occupancy sensors that light up when a client walks into a meeting room or warehouse space—these also shut off the lights when no one is there. In addition, smart thermostats lower temperatures when a space is unoccupied, appliances and outlets power down when not in use and smart locks activate the lighting and heating.

Energy efficiency is just the start

One of the benefits of implementing these changes is the cost savings. “We covered the price of our thermostats within three months,” says Eaton, adding that money is not the only motivator.

“It’s about doing the right thing. Investing in the energy efficiency of my buildings is just another climate action I take, along with recycling and composting.”

Besides the energy savings, the move to more sustainable spaces has modernized The Corner Coworking into autonomous facilities.

“Thanks to these efficiency upgrades, we don’t have to be onsite to manage the space. A member can let themselves in with a code, and the lights and heating come up. It saves my team a lot of time,” Eaton says.

The system also sends warnings of potential problems. “If a furnace goes out, I’ll get a notification,” he says, recalling a burst pipe in one of his facilities six years ago. “If that happened today, an alarm would notify me rather than a customer.”

Because the system is more autonomous, new coworking clients require little onboarding.

“We don’t have to walk them around to show them how things work.” He feels this has led to an improved member experience, where his clients can simply enjoy the workspace.

Small changes can make a big difference

Green renovations don’t need to be big commercial-grade endeavours; sometimes small changes, like the ones Eaton decided on, are easy to make and lead to significant benefits.

Eaton says he used more affordable and readily available consumer products. “This would be different if I had a 40,000 square-foot place. But mine are 5,000 square feet or less. The consumer products are reliable and I can control most of them from my phone or tablet.”

Entrepreneurs may want to ask themselves similar questions when planning their green renovations.

Step by step leads to results

The Corner Coworking's greening was not done all at once. The business launched with one building in 2018 and, as each new coworking space opened, Eaton and his colleagues noticed areas for improvement and energy efficiency. They would typically start the retrofit six months after moving in.

Some of the challenges lay in matching older facilities with new technology. Their warehouse space, for example, has a basic radiant heater that blows a flame down a metal tube, heating it up and spreading the heat throughout the space.

"This is not designed to run with a smart thermostat," Eaton says. "But we worked with an electrician who was able to find a solution."

The Corner Coworking does not own its buildings. As a tenant, it is limited in how much it can renovate. "We're not going to buy a new furnace," says Eaton, but adds that the changes he has made have benefitted his business and shown goodwill to the landlord, something to bring up when it's time to renegotiate a lease.

Eaton plans to open more coworking spaces and says the energy efficiency lessons he has gained are now ingrained in the way he works.

"When you renovate multiple locations, the savings really add up."

Mark Eaton,
Owner,
The Corner Coworking

Methodology

This study is based on a literature review, interviews with several experts and an online BDC survey about commercial real estate investments in green retrofits and green certification.

From October 16 to October 27, 2023, BDC surveyed 1,508 Canadian SME owners and tenants who make decisions in their companies about real estate-related investments in green retrofits and green certification. We did not weight the results of this online survey because we did not know the weighting factors for the populations we surveyed.

However, we ensured that the data collected were representative of the entire Canadian business population, by region and by number of employees.

For a probabilistic sample of 1,508 respondents, the maximum margin of error is ± 2.5 percentage points, 19 times out of 20. However, as this survey is based on a non-probabilistic sample, this information is provided for reference only.

Appendix

Examples of government programs, by-laws, subsidies and financial incentives

Programs and by-laws

The following are examples of the types of actions municipalities are taking to prepare for the new building code (AEB), which is coming soon. It is not an exhaustive list and building owners should consult their local government to learn what is available in their region.

Location	Name
Calgary	BenchmarkYYC
Montreal	By-law concerning GHG emission disclosures and ratings of large buildings
Ottawa (City)	Energy benchmarking and auditing program
Toronto	Energy & Water Reporting for Buildings
Vancouver	Annual Greenhouse Gas and Energy Limits By-law
Winnipeg	Building Energy Disclosure Project

Subsidies and financial incentives

Support your business's environmental initiatives by learning about these climate-related provincial and federal funding programs.

Improve your commercial property's energy efficiency

- Explore our advisory services for obtaining certifications.
- Learn more about our flexible financing options for your sustainability investment projects.
- Complete the *B Impact Assessment* to better understand your company's impact on the community.

For more information

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