



Energy Management in the Ontario Mid-Tier Commercial Real Estate Sector

Ontario's mid-tier commercial real estate sector is energy intensive and has significant opportunities to become more energy efficient. Taking steps towards energy efficiency can help organizations in this sector to not only lower their costs, but it can also help improve comfort levels, productivity, occupant satisfaction and more.

The new ***Energy Management in the Ontario Mid-Tier Commercial Real Estate Sector*** study provides a comprehensive review of the challenges this sector faces and identifies opportunities to address them.

The study at a glance

This study examines current attitudes toward energy efficiency and barriers to energy management in the mid-tier commercial real estate (CRE) sector in Ontario. It is based on a comprehensive survey conducted in 2019 and 2020.

The study was prepared for the Independent Electricity System Operator (IESO). The project benefited from the direction and sector intelligence provided by a steering committee consisting of experts from the energy-efficiency and mid-tier CRE sectors.

The study included the following:

- A detailed survey of 76 building owners and property managers
- These participants own and manage 351 buildings in Ontario
 - This represents just over 10 per cent of Class B and C rentable building area in the province
 - The buildings ranged from 10,000 ft² to 350,000 ft²
 - The primary use of all buildings that participated in the survey was for offices, although some indicated their buildings included retail space or other uses
- Site visits were conducted at eight mid-tier CRE facilities, including building walk-throughs and interviews with on-site staff

The mid-tier CRE sector defined

Ontario's CRE sector is made up of different types of ownership, operating structures and **building classes**, the latter of which are influenced by geographic location. Office buildings are categorized as Class A, Class B and Class C. Class A buildings can also be further categorized as Prestige, AAA and AA. Commercial real estate agents, owners and managers determine the class of each building. This study defines mid-tier CRE buildings as Class B or C office buildings with a total rentable area of between 10,000 ft² and 250,000 ft².

Class B: These buildings are well maintained overall and quite functional. They commonly have an acceptable curtain wall finish, adequate (but not state-of-the-art) mechanical, electrical and safety and security systems, and a mid-quality level of interior finish.

Class C: These office buildings are generally older and usually have higher-than-average vacancy rates compared to the overall market. Older, less desirable architecture, limited infrastructure and outdated technology define these buildings. The curtain walls and mechanical, electrical and safety and security systems of Class C buildings are generally dated, and the quality of the interior finish is often below average.



The energy-efficiency opportunity for Ontario's mid-tier CRE sector

The IESO's **2019 Achievable Potential Study** found that the office sector has a very high potential for improving the energy efficiency of its buildings. The categories of small office (less than 20,000 ft²) and large office (greater than 20,000 ft²) together account for 33 per cent of commercial electricity consumption in Ontario and an estimated 3,000 GWh or 23 per cent of electric energy-efficiency potential. Mid-tier CRE facilities comprise 60 per cent of the total office square footage – representing a significant opportunity for electricity savings.

The mid-tier CRE study revealed that the sector could be doing more to unlock the benefits of energy efficiency. Specifically, owners and managers of mid-tier CRE properties could think more broadly about their approach to energy efficiency and take steps to improve, for example, from undertaking new retrofit projects to making operational changes.

The top five takeaways

The top five findings from the study include:

1. There are opportunities beyond lighting
2. Operational improvements can make a difference
3. Benchmarking and tracking can be improved
4. Greater alignment of corporate and on-site energy management
5. Mid-tier CRE organizations don't know who to trust

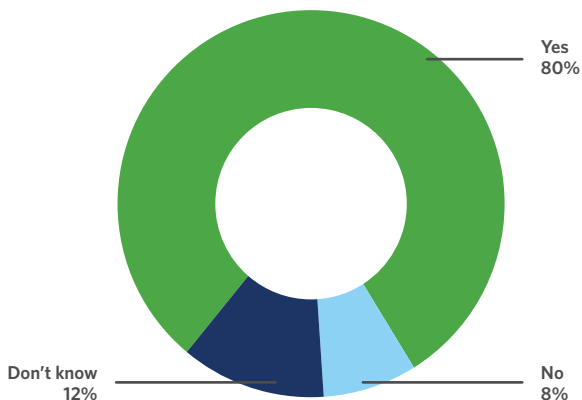
1. There are opportunities beyond lighting

Key takeaway: There is an opportunity for the mid-tier CRE sector to broaden its view of energy efficiency. Lighting upgrades are a highly visible change, which makes them a popular choice for building improvements. While these upgrades offer definite energy-savings potential, the mid-tier CRE sector should also be thinking beyond lighting when planning its energy-efficiency projects. In addition to lighting retrofits, low-cost operational changes are quick wins that are often the first building blocks of broader energy-efficiency strategies.

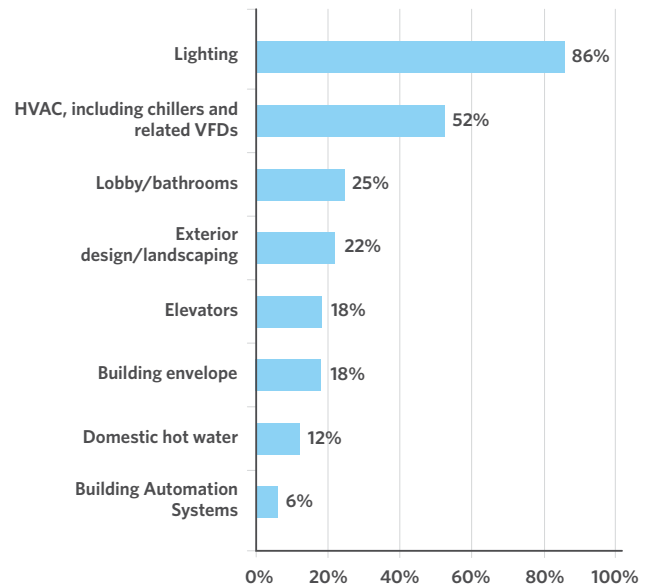
Lighting upgrades dominate retrofits

When looking at upgrades over the past 10 years in the mid-tier CRE sector, energy efficiency-related improvements surpassed other upgrades such as those to elevators or bathrooms. However, study participants tended to have a narrow experience with energy efficiency. When asked what specific actions had been taken in their buildings to reduce energy costs, 51 per cent cited lighting, followed by HVAC measures.

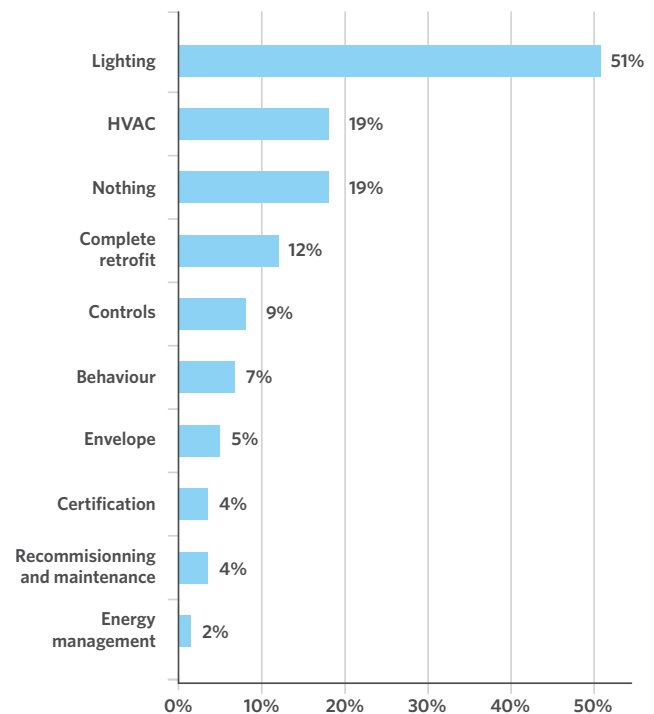
Have any retrofit projects been completed in the last 10 years?



Types of upgrades implemented



Specific actions taken to improve energy efficiency



2. Operational improvements can make a difference

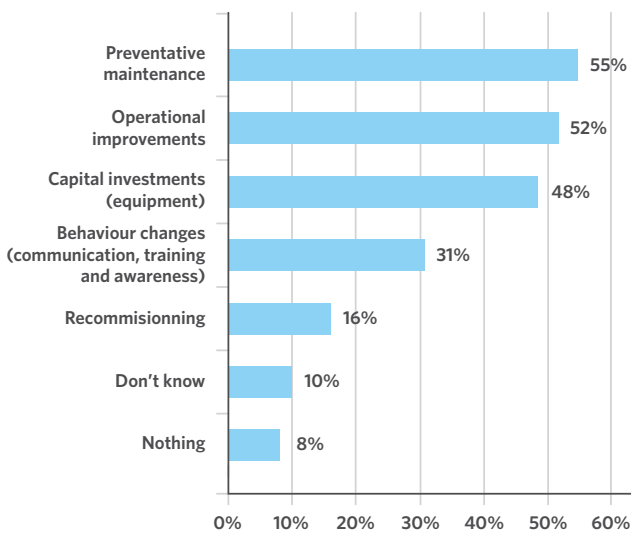
Key takeaway: Operational improvements and energy management are rarely being implemented by the mid-tier CRE sector. Operational efficiencies offer low-cost/no-cost opportunities to reduce energy costs and are frequently the first steps in an efficient energy management plan.

Awareness of operational measures is low

When asked about energy-efficiency improvements, many participants did not reference energy management (referring to monitoring performance and making energy-efficiency changes over time), behaviour change, or building recommissioning/existing building commissioning.

This supports the finding that many in the mid-tier CRE sector associate energy efficiency primarily with retrofit-type measures, such as equipment upgrades, rather than with a broader approach that includes behaviour changes. Although making operational improvements was one of the top ways identified to reduce energy and manage costs, few had implemented them.

Ways identified to manage electricity costs



3. Benchmarking and tracking can be improved

Key takeaway: To achieve the benefits of energy efficiency, mid-tier CRE operators need to better understand their energy use and costs. Few participants are using benchmarking tools and techniques, and more would benefit from identifying, tracking and compiling energy consumption data.

Mid-tier CRE operators need to track energy costs

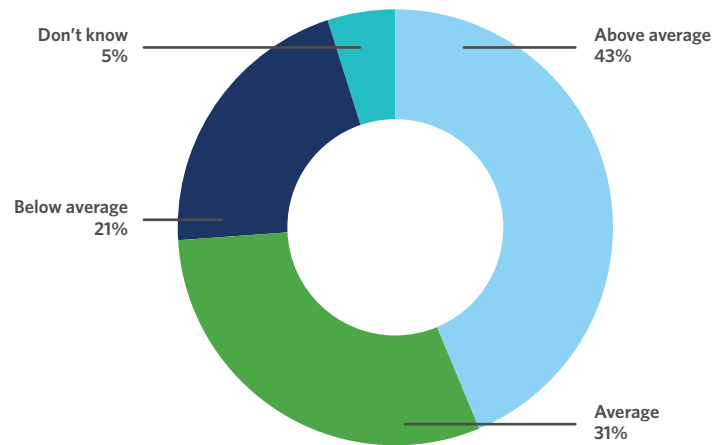
Over half (55 per cent) of participants provided an estimate of their annual energy utility costs, but their estimates varied widely.

Since cost tracking is at the core of energy management, there appears to be an opportunity to better identify, track and compile energy consumption data using off-the-shelf tools such as ENERGY STAR® Portfolio Manager®.

Energy performance benchmarking can improve

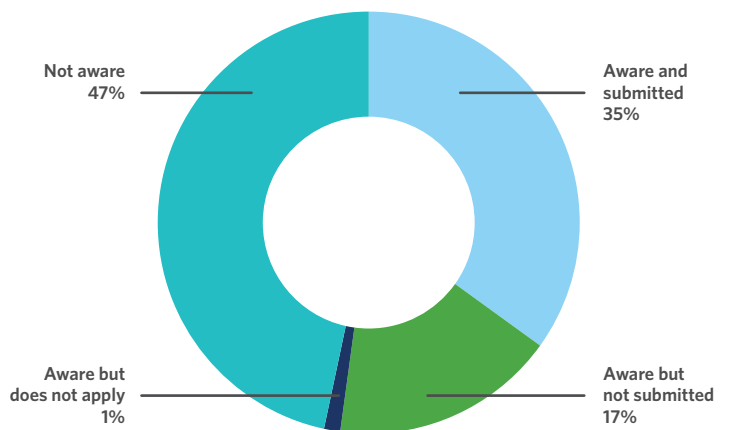
The survey results indicated that building owners and property managers may not be aware of their buildings' actual energy performance, including building performance relative to comparable buildings in the sector. Forty-three per cent of participants believed their buildings' performance was above average, while 21 per cent said their building performance was below average.

How would you rate your building energy-efficiency performance against your sector?



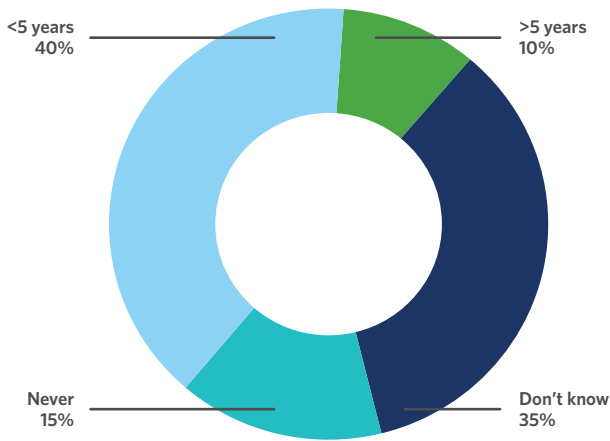
Forty-seven percent of participants were not aware of the **Energy and Water Reporting and Benchmarking (EWRB) initiative** in Ontario. This regulation is designed to help companies save money by tracking energy and water usage, comparing this usage to similar buildings and identifying energy and water efficiency opportunities.

Are you aware of the Energy and Water Reporting and Benchmarking initiative?

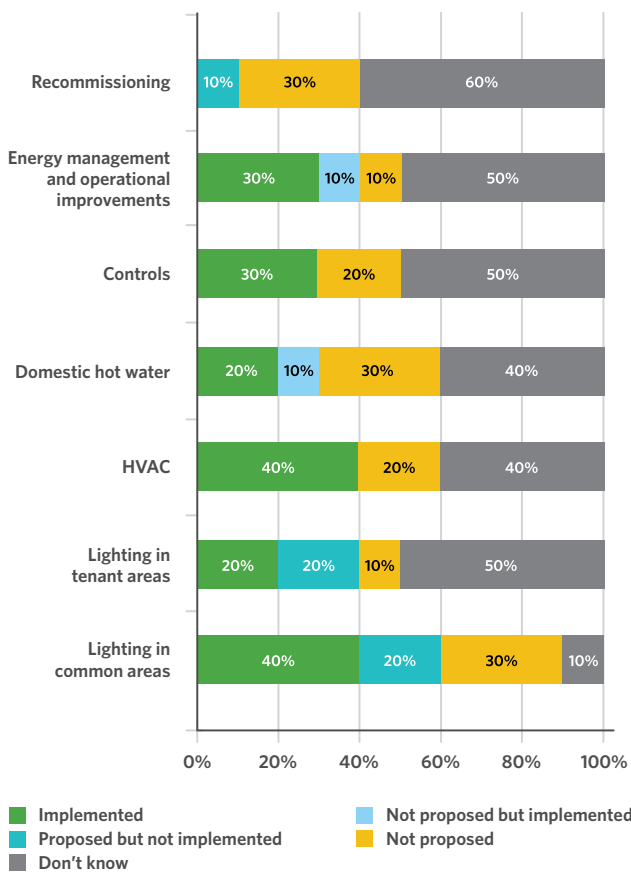


Many participants also did not know whether an energy audit of their buildings had been undertaken and whether any energy-efficiency projects, including operational measures, had been implemented as a result of such an audit.

When was an energy audit last undertaken?



Recommendations from audit implemented



4. Greater alignment of corporate and on-site energy management

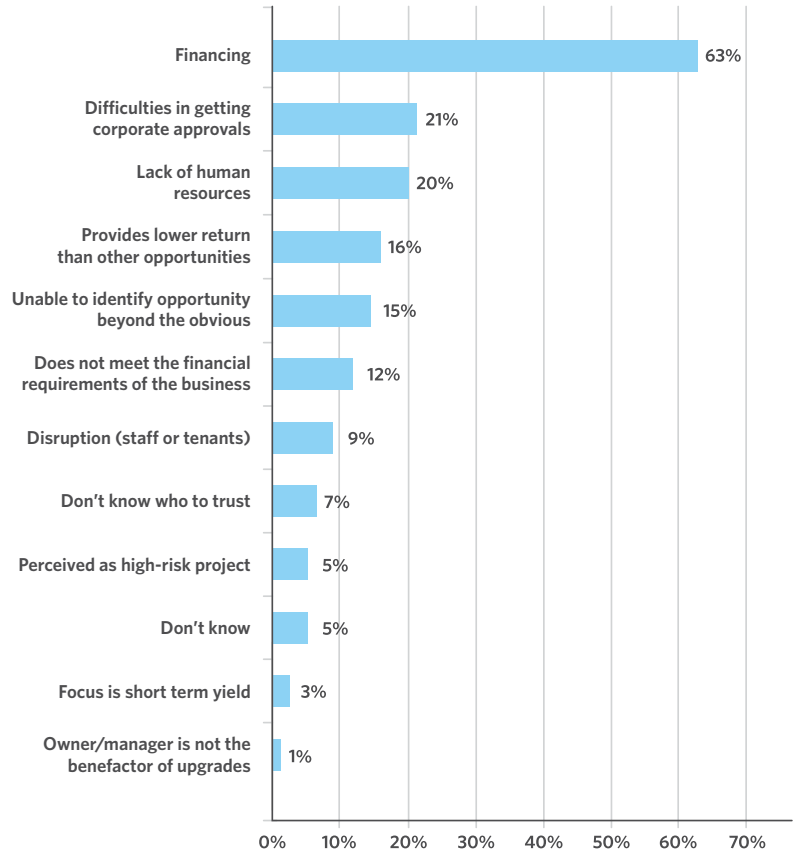
Key takeaway: Effective energy management should be an organizational-wide responsibility, and not limited to one functional area or department. The study found that there is often a disconnect between corporate and on-site management approaches to energy efficiency. Representation from – and communication between – senior management and on-site staff is essential for successful energy-efficiency strategies.

This is especially important given challenges such as securing financing and ensuring that property managers have adequate resources to implement these strategies.

Financing is a hurdle

The most common challenge to implementing energy-efficiency projects is access to financing, followed by obtaining corporate approval and a lack of human resources. The need for financing options was confirmed in discussions with property managers and operational staff during the site visits conducted for this study.

What are your main challenges with undertaking retrofits?

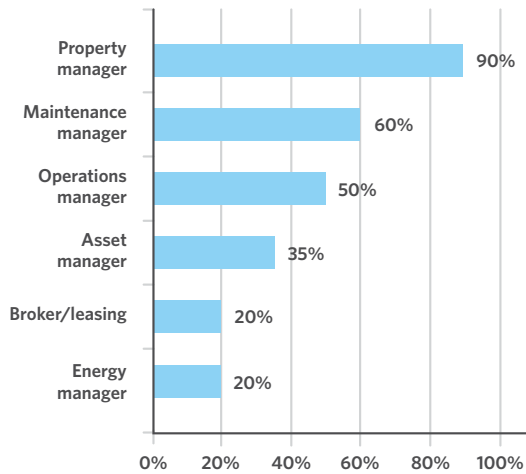


Resources are constrained

While most participants indicated that their organizations had someone responsible for improving energy performance and sustainability, this duty often fell to the property manager, who frequently works off-site and has limited time and resources for energy management. Only 20 per cent of participants reported having a dedicated energy or sustainability manager on site.

Many property managers are overwhelmed by their regular or day-to-day job responsibilities and, although electricity costs are a concern to them, most do not know what can be done to improve building energy performance and how to go about undertaking energy-efficiency projects.

What human resources does your company have?



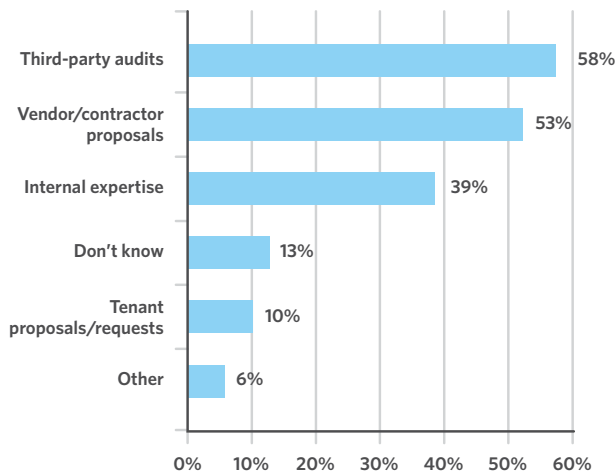
5. Mid-tier CRE organizations don't know who to trust

Key takeaway: When it comes to energy efficiency, many in the mid-tier CRE sector don't know who to trust. They rely heavily on external expertise, primarily equipment vendors, to find energy-efficiency opportunities. Many participants listed industry associations as a key source of reliable information.

Identifying opportunities is a challenge

Identifying energy-saving opportunities and finding qualified contractors has also proven to be a challenge for the mid-tier CRE sector. Participants had low awareness of energy-efficiency opportunities and limited knowledge of technologies and leasing mechanisms to create or extract value from energy-efficiency investments. This finding also revealed an opportunity for organizations in the mid-tier CRE sector to look more broadly for objective information and education on energy efficiency beyond their equipment vendors.

How are energy projects and opportunities identified?





Next Steps

Read the full report

Download the ***Energy Management in the Ontario Mid-Tier Commercial Real Estate Sector*** now.

View the mid-tier commercial real estate webinar

In this one-hour webinar, experts provide insights on how to drive savings and increase the value of projects in the mid-tier CRE sector through energy-efficiency tools, incentives and support.

Watch the recording here.

Take advantage of the Save on Energy Retrofit program

The Save on Energy Retrofit program offers businesses incentives for a variety of energy-efficiency measures, including lighting and HVAC. To find out more, visit **[SaveOnEnergy.ca/Retrofit](https://www.saveonenergy.ca/retrofit)**, call the Save on Energy Support Line at 1-844-303-5542, or email **Retrofit@ieso.ca**.

Participate in the Energy Performance Program

The Energy Performance Program (EPP) incents organizations to make behavioural and operational changes that support capital investment projects, enabling them to grow their energy savings year over year.

Visit **[SaveOnEnergy.ca/EPP](https://www.saveonenergy.ca/EPP)** to find out more or email **energyperformanceprogram@ieso.ca**.

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Save on Energy


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