

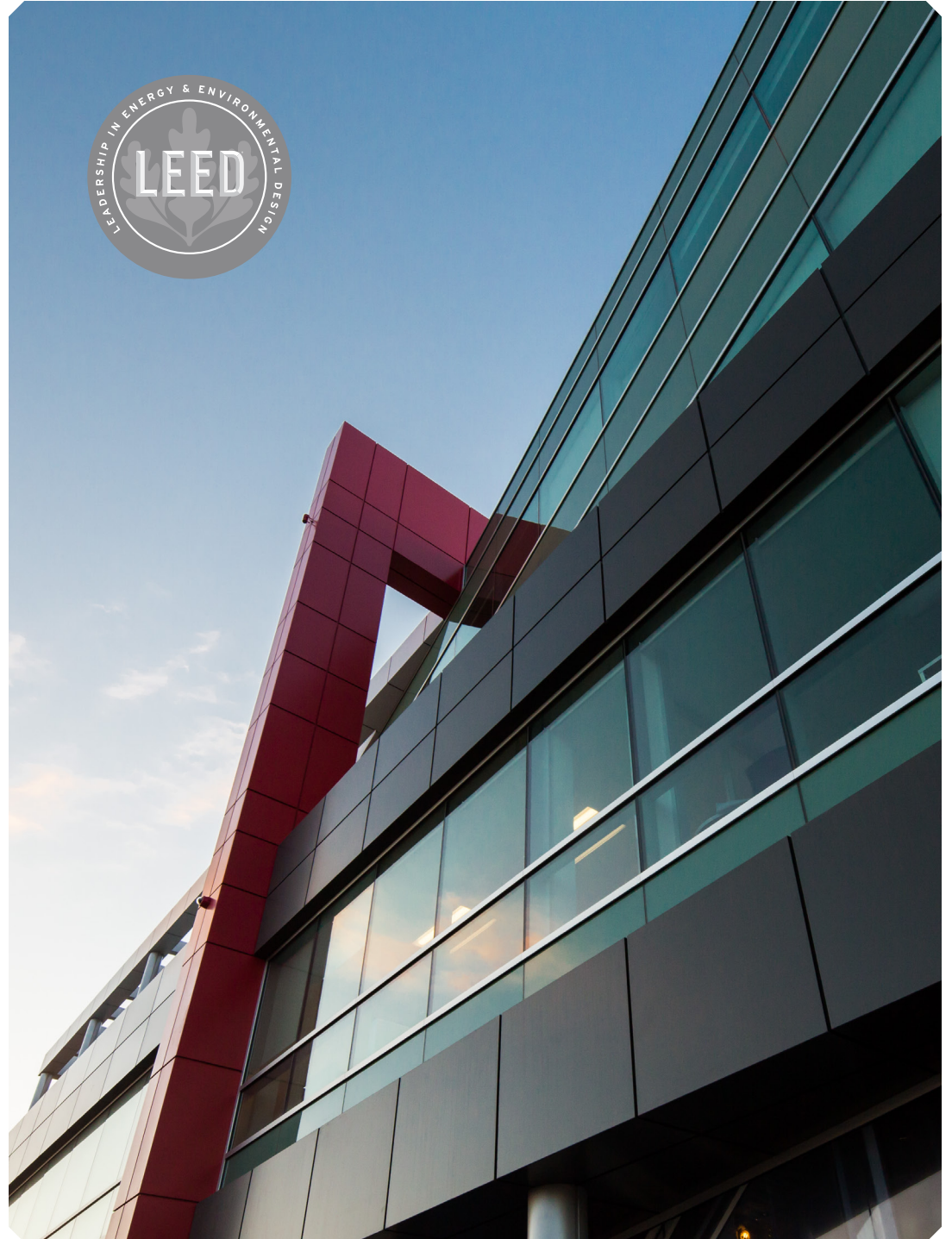
A photograph of a modern glass-walled building with a grid of windows, set against a blue sky with light clouds. The foreground shows a paved plaza with some greenery and a flagpole. The text is overlaid in white on a semi-transparent dark blue background.

# MONTONI

Leadership in Energy and  
Environmental Design (LEED®)  
certification



# LEED®



Developed by the U.S. Green Building Council in 1998, LEED® is a green-building certification system with verification by an independent third party. This voluntary program provides a framework for designing, constructing, managing and evaluating high-performance buildings and applies to all types of projects, including sustainable neighbourhood development. In Canada, LEED® is managed by the Canada Green Building Council (CAGBC), which adapts the system to the local context and the Canadian market.

Each project seeking LEED® certification can follow a different design strategy, depending on the level of certification sought as well as the building's specific features and requirements.

Since its inception, LEED® has been a vehicle for change in the industry, ensuring a legacy of higher-quality built heritage with a lower environmental impact.

# Why LEED®?

Leadership in Energy and Environmental Design certification is a rating system recognized as the international standard of excellence for sustainable buildings in more than 150 countries.

LEED® certification has the potential to help us further reduce carbon emissions from buildings and take a stronger stand on human health.

Industrial, commercial and residential buildings in Canada have a significant impact on the environment.

Generally, buildings constructed in Canada account for:

**50%** of the extraction of natural resources

**33%** of energy consumption across the country

**25%** of the waste generated

**10%** of airborne particles

**35%** of greenhouse gases

# The three challenges of sustainable buildings

## Energy sparing

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- > Controlling operating and energy costs.
- > Constructing more efficient and smarter buildings.
- > Promoting renewable energy and eliminating fossil fuels.
- > Reducing carbon emissions and improving corporate image.
- > Promoting green mobility and public transit.

## Environmental impact

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- > Constructing buildings while generating as little waste as possible.
- > Building with sustainable and locally sourced materials.
- > Choosing materials that have a low impact on the environment and no risk to occupants' health.

## Occupants' comfort and health

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- > Creating an environment that promotes occupants' health, wellness, productivity and happiness.
- > Blending workspaces with nature by inviting light and the outdoors into the heart of the building.





# LEED®: a responsible building

## Energy savings

LEED®-certified buildings use less energy than those built to industry standards. Energy-efficiency measures at the design stage make it possible to combine energy performance and cost control. Energy performance also reduces the building's energy-related operating costs.

## Water management

Protecting and restoring water resources by reducing drinking-water consumption, LEED® buildings effectively manage water through low-flow plumbing fixtures and stormwater reuse. Water is so precious that it must be preserved, rationalized and reused.

## Indoor air quality

Careful selection of building materials promotes an indoor environment that is free of volatile organic compounds (VOCs) and has no impact on occupants' health. Mechanical systems are designed to optimize the thermal comfort and air quality of indoor spaces. A healthy and comfortable work environment improves employee productivity and reduces absenteeism.

## Transport

Connected buildings geared towards the transportation of the future. The proximity of LEED® buildings to public transit networks favours collective mobility. LEED® buildings promote green transport through the installation of bicycle shelters and showers, as well as charging stations for plug-in electric vehicles.





## LEED® buildings built by MONTONI have, on average, achieved the following:

**35%**

lower energy costs compared to a standard building.

**110 tonnes**

of construction waste diverted from landfills, the equivalent of 15 40-cubic-yard containers.

**±231 tonnes**

fewer greenhouse gas emissions, the equivalent of taking 58 cars off the road.

**478K litres**

of water saved per year, the equivalent of 15 swimming pools.



# LEED®: a healthy environment

A healthier, more comfortable and brighter indoor environment. LEED® buildings provide a healthy and productive environment through the following:

## Air quality and ventilation

- > Reduced VOCs from materials
- > Controlled CO<sub>2</sub> concentration in indoor air
- > Better indoor air quality by controlling outdoor contaminants

## Thermal comfort

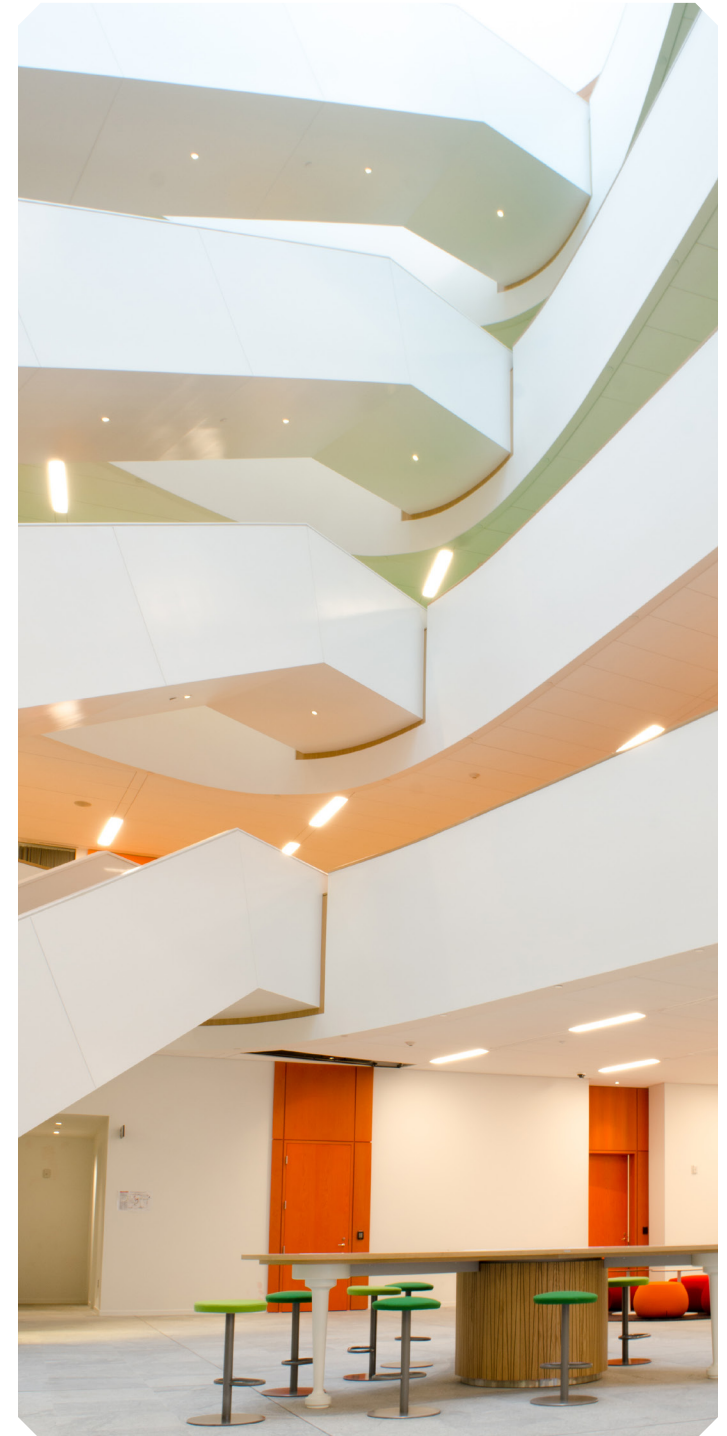
- > Room temperature adapted to occupants' activity
- > Adapted air-supply rate

## Interior design and active design

- > Ergonomic workspace
- > Space that promotes occupants' wellness
- > View to the outside
- > Space open to nature

## Interior lighting

- > Maximized exposure to natural light
- > LED lighting
- > Superior-quality lighting



# LEED®: well-being above all

## Impact on the company's organization and finances

The financial impacts are reflected in the following:

- > Less absenteeism
- > Better employee retention
- > Increased revenues
- > Lower medical costs
- > Fewer medical complaints
- > Increased productivity and adherence to deadlines

## Effects on occupants' well-being and perception

A sense of well-being is as important as occupants' physical health, which is why the LEED® environment provides a pleasant atmosphere for occupants:

- > Perception of good health
- > Perception of psychological well-being
- > Perception of productivity
- > Perception of corporate culture

## Effects on occupant health

The health benefits of LEED® buildings can be seen on a daily basis through the following:

- > Fewer headaches
- > Less eye strain
- > Less skin irritation
- > Less fatigue
- > Less stress and depression
- > Fewer complaints

## Operating costs



Health, Wellbeing and Productivity in Offices by World Green Building Council.





## Green buildings: the benefits

Several LEED® concepts produce significant productivity gains. Here are some results of studies that demonstrate this:

**11%**

Productivity gains attributable to fresh-air supply

**23%**

Improved productivity due to good lighting and views to the outside

**25%**

Improved memory when workers have views to the outside

**18%**

Increased productivity due to access to natural light and windows that can be opened





# The smart building

**Innovation: for more efficient buildings and enhanced employee well-being**

- > Increased energy efficiency
- > Reduced operating costs
- > Extended asset life
- > Reduced greenhouse gas emissions
- > Efficient use of water
- > Transparent, accessible and orderly information
- > Positive image of the building
- > Increased occupant comfort and satisfaction
- > Social responsibility of managers and owners



# MONTONI: your green partner

To date, MONTONI has built more than 4 million square feet of LEED®-certified green buildings. MONTONI is one of the great pioneers of the sustainable construction industry.

As a member of the Canada Green Building Council, our team has been involved in construction projects incorporating LEED® standards and norms since 2006.

Mindful of the need to protect the environment for future generations, MONTONI is constructing a growing number of green buildings, most of which are LEED® certified.

**50+**

LEED®-certified buildings

**14.5M**

litres of drinking water saved annually, the equivalent of nearly 500 swimming pools

**30M**

kWh of energy saved each year, the equivalent of the consumption of 1,400 homes

**3,500  
tonnes**

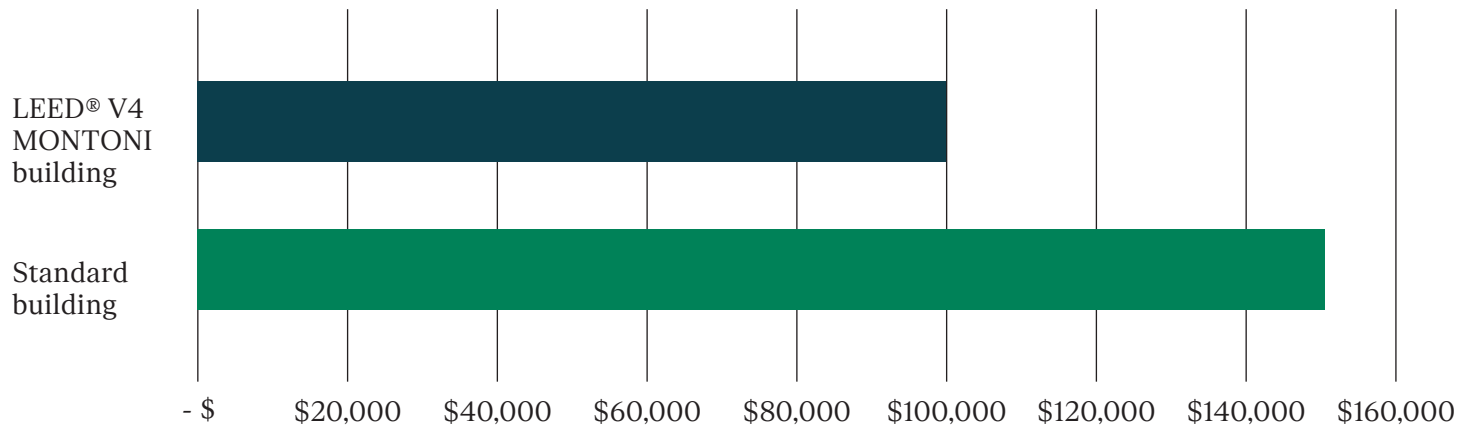
of waste diverted from landfills

# Energy efficiency: cost-effective in the short term

Project under study:

- > Industrial building
- > 43,000 sq. ft. of warehouse/production
- > 15,000 sq. ft. of office space

Annual energy costs (\$)



**Return on  
investment:  
6.25 years**

**See case study  
section**

**\*Note that these results are from  
a specific project and are particular to it  
(see Case Study section). Performance  
may differ by project.**

**2x**

The lifespan of LED lighting vs. T5HO lamps

**2x**

The lifespan of heat pumps vs. conventional rooftop units

**+**

Comfort for users

# MONTONI: your green partner

MONTONI's ambition for the future is to reduce the impact of each building on the environment and enhance the well-being of every occupant.

## CLSC des Faubourgs, Montréal

**LEED® NC-certified level for new construction** **Key LEED® features:**

**Area: 100,341 sq. ft.**

- > Savings of 891,000 litres of water per year
- > The project received 19 LEED® points for its location. The project is close to a large number of services and ample public transit. The project also includes facilities for cyclists and electric-vehicle owners.
- > 407 tonnes of construction waste diverted from landfills
- > 1.8 million kWh saved annually







## ELOPAK, Boisbriand

**LEED® NC Silver level for new construction**

**Area:  
306,632 sq. ft.**

**Key LEED® features:**

- > Savings of 745,000 litres of water per year
- > 200 tonnes of construction waste diverted from landfills
- > Over 37% recycled materials
- > Nearly 60% local materials
- > 5 million kWh saved annually



## Tour X, Complexe Maurice-Gauvin, Laval

**LEED® NC Silver level for new construction**

**Area:  
86,070 sq. ft.**

**Key LEED® features:**

- > Savings of 546,000 litres of water per year
- > 178 tonnes of construction waste diverted from landfills
- > Over 27% recycled materials
- > Nearly 60% local materials
- > 743,000 kWh saved annually

# Abipa, Boisbriand

Area: 58,000 sq. ft.

## CALCULATION OF RETURN ON INVESTMENT:

Additional costs related to energy-efficiency measures	
Heat wheels	\$141,000
High-efficiency units	\$44,000
CO <sub>2</sub> sensors	\$8,000
Solar preheating	\$50,000
LED lighting	\$22,000
Additional insulation	\$49,000
<b>TOTAL</b>	<b>\$314,000</b>

Annual energy savings	
Standard building cost	\$152,039
LEED® V4 project costs	\$101,763
<b>Annual savings</b>	<b>\$50,276</b>

**RETURN ON INVESTMENT: 6.25 YEARS**





# Abipa, Boisbriand

Area: 58,000 sq. ft.

Monthly energy savings (\$50,276 annually)	\$4,189
Monthly cost of investment (25-year term at a rate of 5%)	\$1,828
Monthly gain	\$2,361

## Additional benefits:

- > Increased productivity
- > Lower employee turnover
- > Lower operating costs
- > Positive company image





A photograph of a modern, multi-story building with a glass facade, set against a dark, overcast sky. The building's interior lights are visible through the windows. The word "MONTONI" is overlaid in large, white, sans-serif capital letters across the middle of the image. Below it, the words "Thank you" are written in a smaller, white, sans-serif font. The foreground shows a grassy area and the building's entrance area with several columns.

**MONTONI**

Thank you