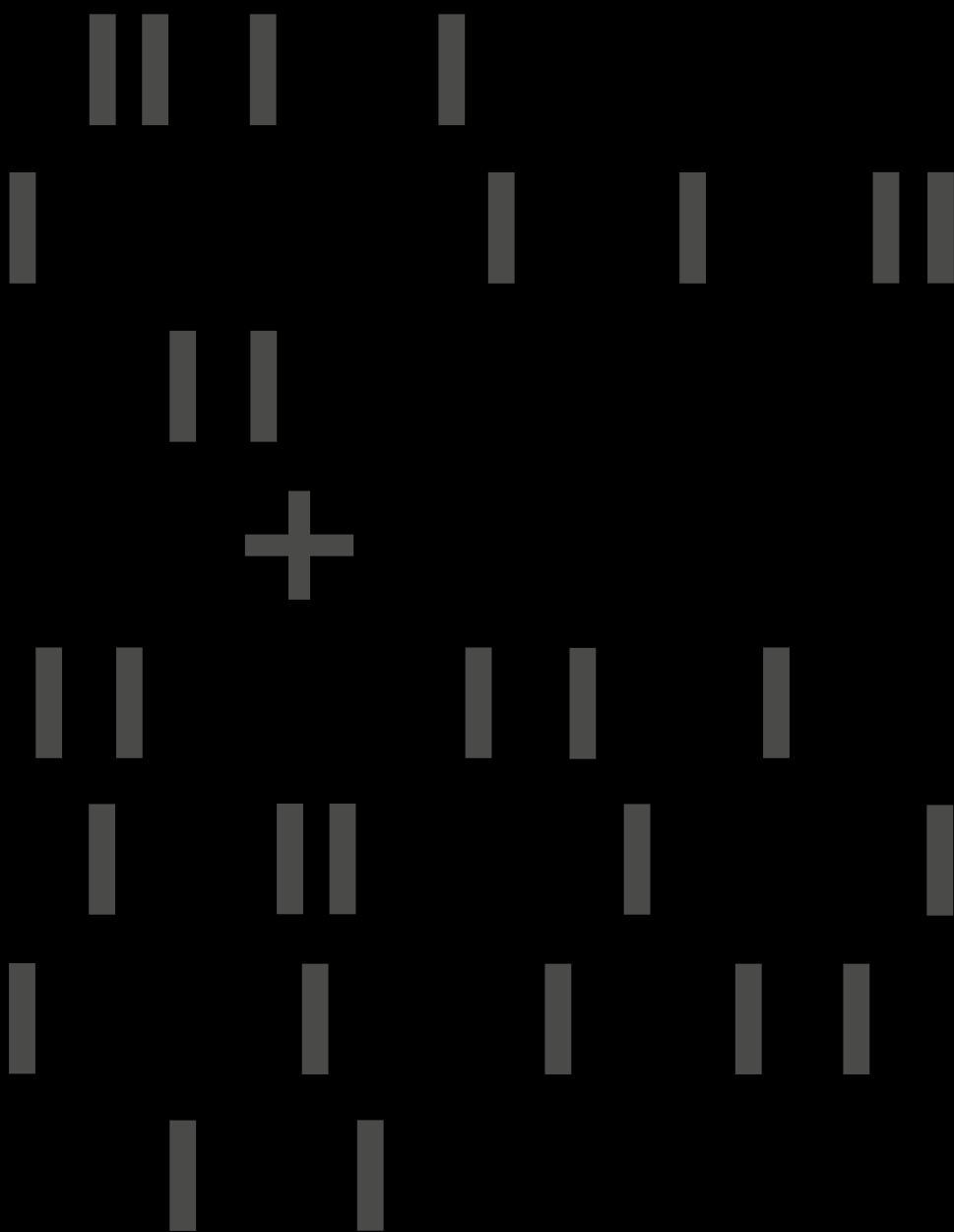




NET POSITIVE

2020
DRIVING A DECADE
OF ACTION

lemay



FOREWORD

Lemay formalized its longstanding environmental leadership in Spring 2019 with the launch of Net Positive: a framework for prioritizing and tracking health, environmental benefits and carbon reduction in everything we do.

As detailed in the following report, this approach quickly gained traction with our clients, partners and the media. We built on that traction with events, certifications, case studies and awards.

Under pandemic conditions, Net Positive's objectives of high-quality air and water, biophilic design, active lifestyles and sustainability have become more pressing than ever. Our 2030 commitment to concrete action via the American Institute of Architects (AIA) 2030 Challenge, and our adoption of the World Green Building Council's framework for Net Zero operating emissions by 2030, reflect our recognition of the urgent need for even broader action in the next decade, as laid out in the United Nations 2030 agenda.

With growing support for this action from governments and businesses, and with this first year's worth of Net Positive data and learnings, we intend to follow through. Our first Net Positive report was about scaling up. This next one focuses on the need for action.

Louis T. Lemay

President and excellence facilitator





NET POSITIVE



NET POSITIVE

A framework to yield
a decade of action

Five principles to deliver on our commitment to sustainable development, focusing on health, environment and carbon

- **Pledge** - Commit to best practices, training of our resources
- **Measure** - Track key performance indicators
- **Act** - Develop roadmaps, integrate key actions, outline milestones
- **Verify** - Report data, demonstrate progress
- **Advocate** - Show leadership, facilitate transition



lemay

| 4

A photograph of a modern interior space, possibly a lounge or common area, featuring wide concrete steps leading up to a seating area. The ceiling is high with exposed pipes and ductwork. Large windows in the background offer a view of greenery outside. The entire image is overlaid with a semi-transparent teal color.

NET POSITIVE

Focusing on **health**, the **environment** and **carbon emissions reduction**, we seize every opportunity to generate positive benefits for clients, users and the community.

NET POSITIVE

An approach that informs our practice and guides our decisions

Drawing on its own solid expertise in sustainability and experience in carrying out projects with high environmental ambitions, Lemay has developed a rigorous approach that allows it to reach a higher level in the integration of sustainable strategies into its projects.

NET POSITIVE GENERATES CONCRETE AND TANGIBLE INITIATIVES IN THREE AREAS:



HEALTH

As the human experience is at the heart of our mission, we design healthy living environments where everyone can flourish.



ENVIRONMENT

As the planet's balance is fragile, we apply our expertise to protect all its components.



CARBON

As the challenges related to climate change are particularly critical, we focus on the carbon footprint to assess both our concepts and the real impact of our projects.

BENEFITS

OUR NET POSITIVE APPROACH HAS BEEN PROVEN TO:

- **Reduce the ecological footprint of projects** - a collective responsibility and a priority for future generations;
- **Achieve social acceptability** and facilitate the project's approval process;
- **Enhance project brand image** - potentially enhancing overall status and attractiveness;
- Deliver projects at **a capital cost identical to comparable projects**, and with significant savings in operating costs;
- Provide a **higher and long-term return on investment** that translates into higher market value.

Performance measurement and visualization

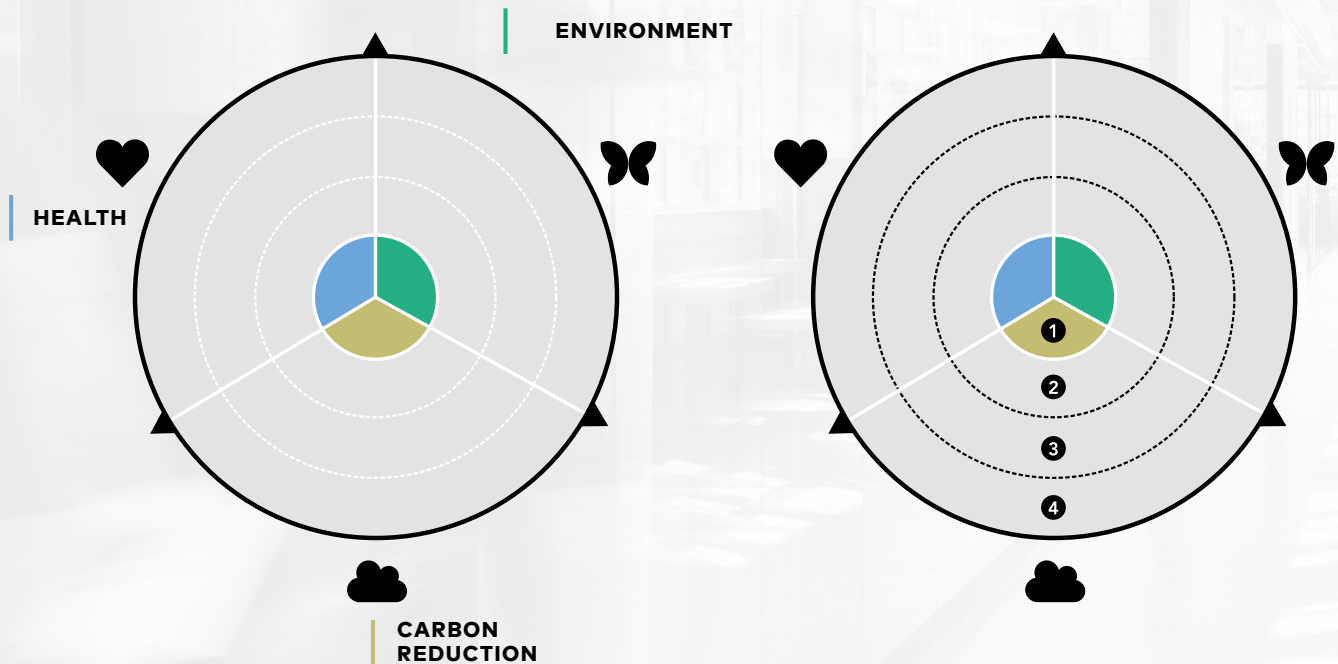
LEMAY'S NET POSITIVE APPROACH ALSO SIMPLIFIES THE VISUALIZATION OF PROJECT PERFORMANCE.

Our simple graphics illustrate project performance in our three areas of focus using measurable Net Positive values.

**PRINCIPLE 1:
3 AREAS OF PERFORMANCE**

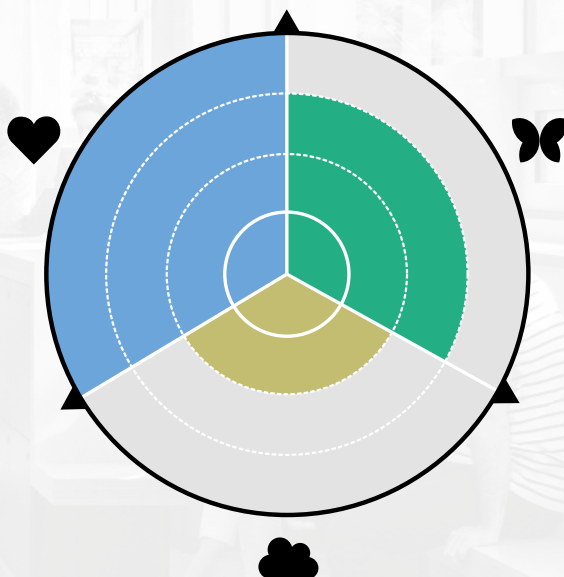
**PRINCIPLE 2:
4 LEVELS OF PERFORMANCE**

8



This rating system is not intended to define the overall level of environmental performance of a project, but rather to provide a quick understanding of its strengths. It is aligned with established and recognized industry certification systems.

EXAMPLE OF NET POSITIVE VISUALIZATION FOR PROJECTS



Examples of **health**-related criteria:

- Eco-friendly materials
- Natural light
- Biophilic design
- ...



Examples of **environmental** criteria:

- Responsible stormwater management
- Reduction of heat islands
- Protection and development of biodiversity
- ...



Examples of **carbon**-related criteria:

- Carrying out a carbon assessment
- Reducing carbon footprint
- Adapting design to climate change
- ...

TRANSDISCIPLINARY COMMITTEE

NET POSITIVE

Potential realized

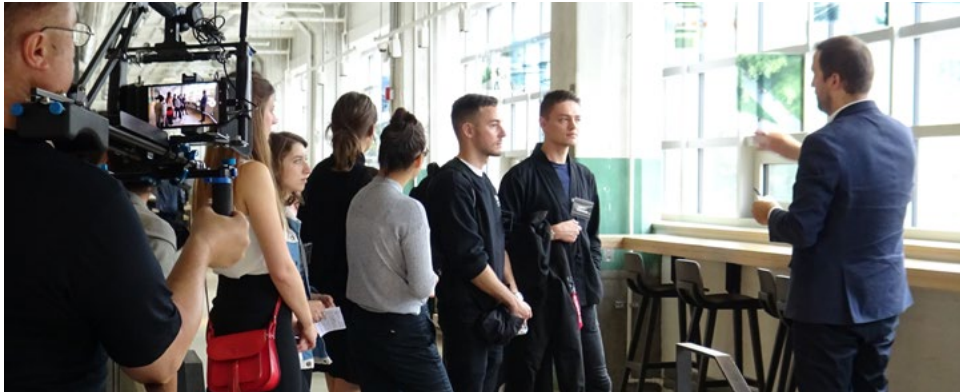
WITH NET POSITIVE, LEMAY HAS THE MEANS TO CREATE SUSTAINABLE VALUE IN ALL ASPECTS OF ITS PRACTICE.

Lemay's overall commitment goes beyond regulations, standards and certifications. Our firm systematically applies Net Positive in our daily actions and in the development of our projects, to maximize positive benefits for our clients, users and the community.

In support of this approach, Lemay has set up a transdisciplinary committee whose mission is to promote the spirit of Net Positive internally and externally. With members from all of Lemay's offices across Canada, it promotes our professionals' continuous skills development via training, presentations and publications. In the last year, it hosted **six Net Positive lunchtime presentations**, organized **10 training sessions** and helped Net Positive to receive widespread mainstream, specialized and social media attention.



Our first-ever **Net Positive Day**, in September 2019, was an unqualified success that brought together some **200 urban planning and design professionals**, environmental and cultural leaders, educators and students, public officials and healthcare practitioners to explore how to make our cities more sustainable.



Soon after its inception in 2019, Lemay Net Positive was named one of the year's top 20 solutions with an impact, an award from **Novae** recognizing innovation as part of a socially responsible Quebec economy.

More recently, the approach was a finalist of the **2020 Mercuriades**, Quebec's most prestigious business competition, celebrating innovation, ambition, entrepreneurship and business performance.

The Phenix, Lemay's Montreal office and the embodiment of Net Positive, also won two separate international awards in 2020, for biophilic design and active design, as well as the **2020 CaGBC Award** for Green Building Excellence - New Construction. It has been the subject of a "game-changer" case study by the **World Green Building Council** and a separate case study by the **Canada Green Building Council**. The multi-certified building will be featured in a **BBC** documentary in 2020-2021.

These activities, awards and the coverage Net Positive has received, help to raise the approach's profile while ensuring our clients and projects benefit from the most up-to-date best practices and, ultimately, lead to more sustainable living environments.

The Phenix, a case in point

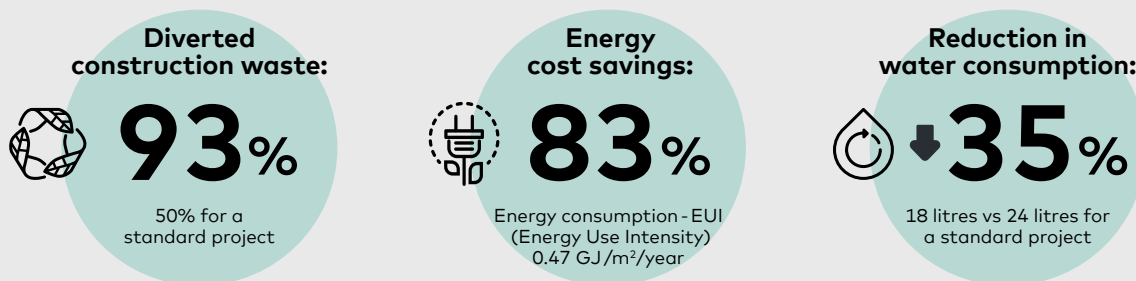
THE PHENIX, LEMAY'S MONTREAL OFFICE, IS A TRULY UNIQUE LABORATORY FOR THE FIRM'S INNOVATIONS IN SUSTAINABLE STRATEGIES AND COLLABORATIVE WORKSPACE DESIGN.

Instead of designing a new building, Lemay chose to transform an abandoned 1950s warehouse into offices for its transdisciplinary team, thereby reducing the firm's carbon footprint (construction and operation).

The project is a clear demonstration that it is possible to renovate an old building to the highest standards of sustainable development. It is a good example of adaptive reuse and how it can significantly reduce the environmental impacts of raw material extraction on a large scale.



12





CERTIFIED 3 OUT OF 3 STARS
(131 POINTS / 144)



LEED CERTIFICATION
PLATINUM LEVEL TARGETED



**ZERO CARBON
BUILDING STANDARD**
Canada Green Building Council®

ZERO CARBON
CERTIFICATION OBTAINED







The Phenix's innovations make it one of the most ambitiously sustainable buildings in North America.



**Green Building
Excellence Award
(New Construction)**
Canada Green Building
Council, 2020



**Best in Building
Health Award**
Center for Active Design
(Fitwel), 2020



**Stephen R. Kellert Biophilic
Design Award**
International Living Future
Institute, 2019



**Eureka! Green
Building Award**
Écotech Québec, 2019



**"Game Changer" Case study
(Health and Zero Carbon)**
World Green Building Council,
2019



**Zero Carbon Building
Case study**
Canada Green Building
Council, 2019



INOVA Award
Quebec's urban development
institute, 2018





CERTIFIED 3 OUT OF 3 STARS
(131 POINTS / 144)



INTEGRATION OF
WORKS OF ART



MULTIFUNCTIONAL
RELAXATION AREAS



NET POSI+IVE

HEALTH

USER COMFORT AND WELL-BEING ARE TWO VALUES THAT SHAPED THE DESIGN OF THE PHENIX INTERIORS.

The proximity of the Parc du Premier-Chemin-de-Fer guided the biophilic approach for the project: the workspaces benefit from views of this linear park and the abundant vegetation surrounding the Phenix. The facilities have been designed to ensure thermal comfort as well as air quality and healthy living habits.

ABUNDANT NATURAL LIGHT



GLARE CONTROL (SOLAR SCREENS
FOR WINDOWS)



OPERABLE WINDOWS
(NATURAL VENTILATION)





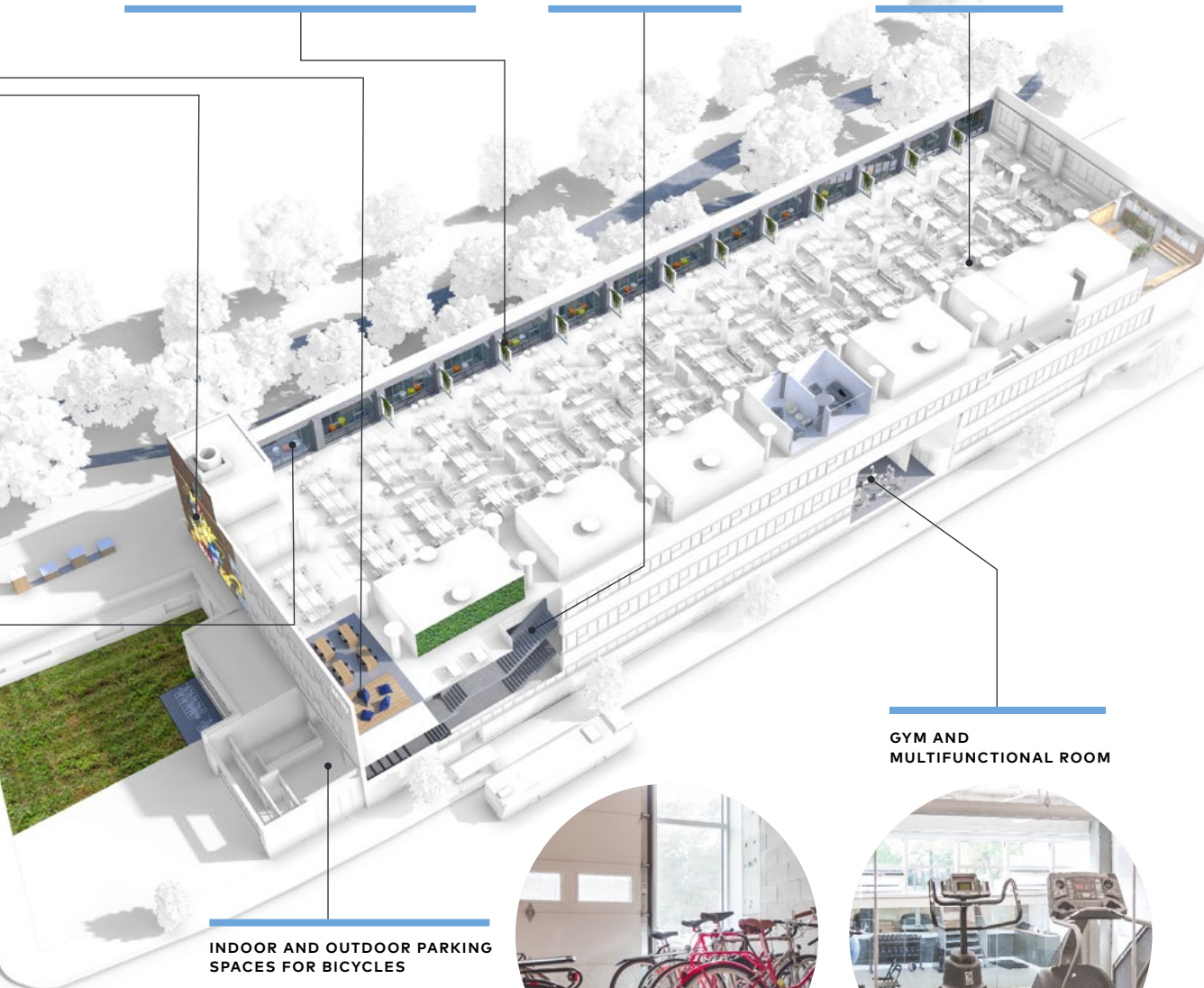
**VEGETATION, MATERIALS AND TEXTURES
INSPIRED BY NATURE (BIOPHILIA)**



**STAIRS THAT PROMOTE
PHYSICAL ACTIVITY**



**PROMOTING HEALTHY
EATING**



**INDOOR AND OUTDOOR PARKING
SPACES FOR BICYCLES**

**GYM AND
MULTIFUNCTIONAL ROOM**





LEED CERTIFICATION
PLATINUM LEVEL TARGETED



REHABILITATION OF
CONTAMINATED SOIL



NET POSI+IVE

ENVIRONMENT

THE PHENIX PROJECT IS EXEMPLARY IN TERMS OF
NEIGHBOURHOOD REVITALIZATION.

As part of this transformation project, an abandoned building is now fully occupied, soils are decontaminated and vegetated areas provide respite from the surrounding heat islands. A white roof and deliberately limited parking further reduce the heat island effect.

REDUCTION IN THE
NUMBER OF PARKING SPACES
(22 INDOOR SPACES)



2 HYBRID CARS, AVAILABLE FOR
BUSINESS TRAVEL, AND 4 ELECTRIC
VEHICLE RECHARGING STATIONS



RACKS FOR
60 BICYCLES





REUSE OF AN EXISTING BUILDING



PROMOTION OF BIODIVERSITY (BEEHIVES)



DENSE DISTRICT WITH DIVERSIFIED SERVICES



WASTE MANAGEMENT (RECYCLING AND COMPOSTING)



WATER-EFFICIENT APPLIANCES



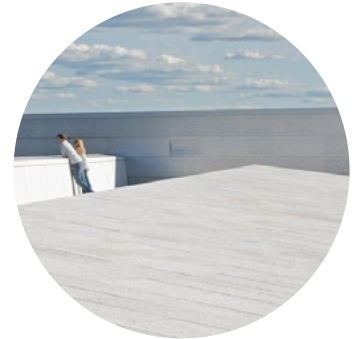


**ZERO CARBON
BUILDING STANDARD**
Canada Green Building Council®

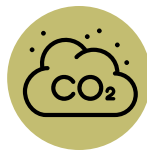
**ZERO CARBON
CERTIFICATION OBTAINED**



PHOTOVOLTAIC PANELS



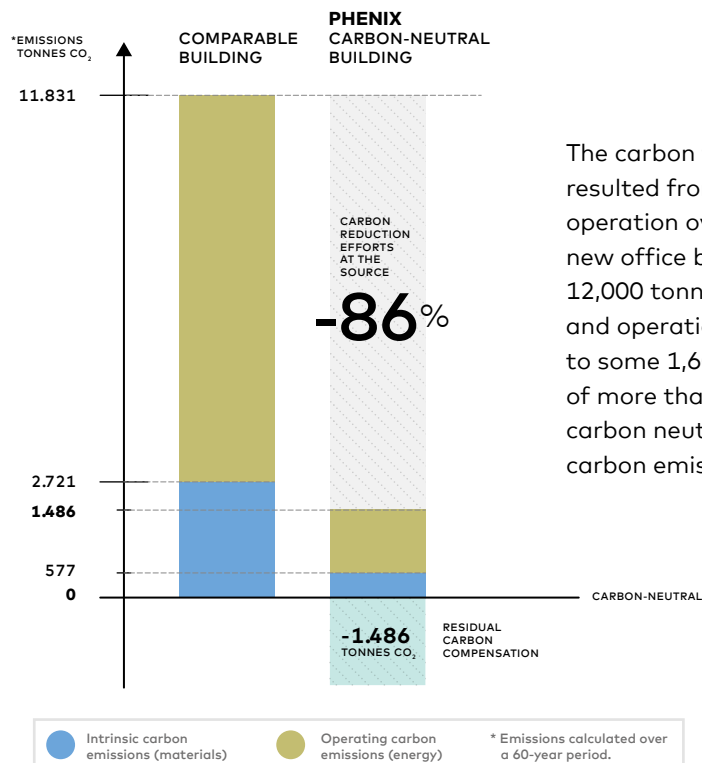
REINSULATED ROOF



NET POSITIVE

CARBON

**THE RENOVATION OF AN EXISTING BUILDING AND REUSE
OF AN EXISTING STRUCTURE AND BUILDING ENVELOPE
HAVE PREVENTED SIGNIFICANT CARBON EMISSIONS.**



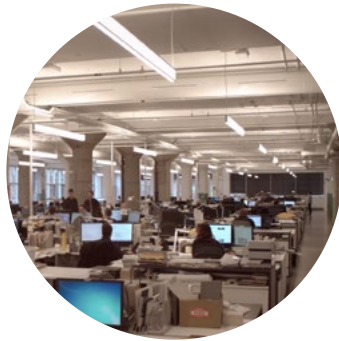
The carbon footprint that would have resulted from the construction and operation over 60 years of a comparable new office building equals to nearly 12,000 tonnes of CO₂, while renovation and operation over the same period equate to some 1,600 tonnes of CO₂: a reduction of more than 86%. In order to achieve a carbon neutral balance, Lemay offsets its carbon emissions on an annual basis.



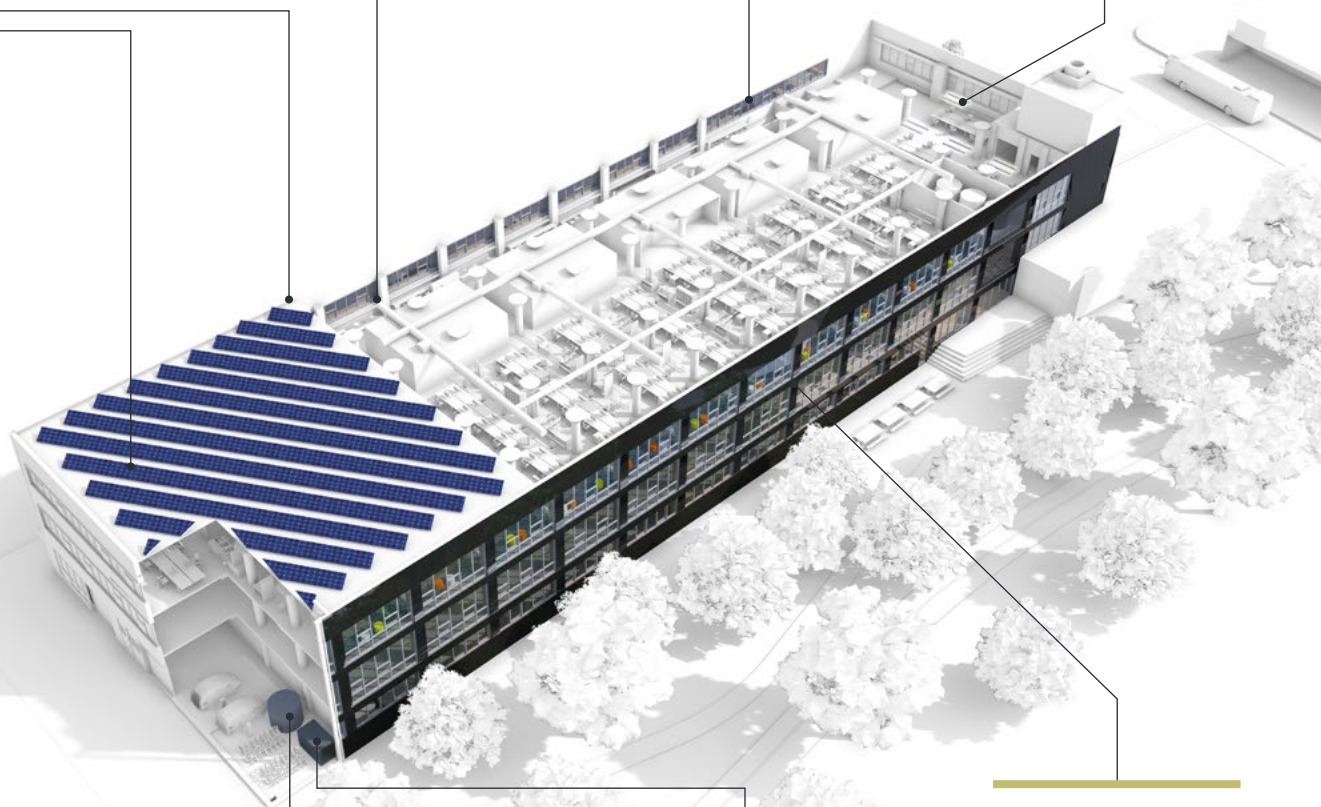
HYDRONIC RADIANT HEATING



TRIPLE GLAZING (NORTH SIDE)



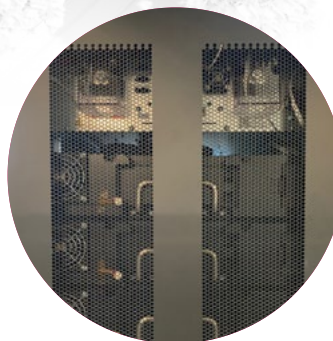
ADVANCED CONTROL OF THE LED LIGHTING



THERMAL STORAGE

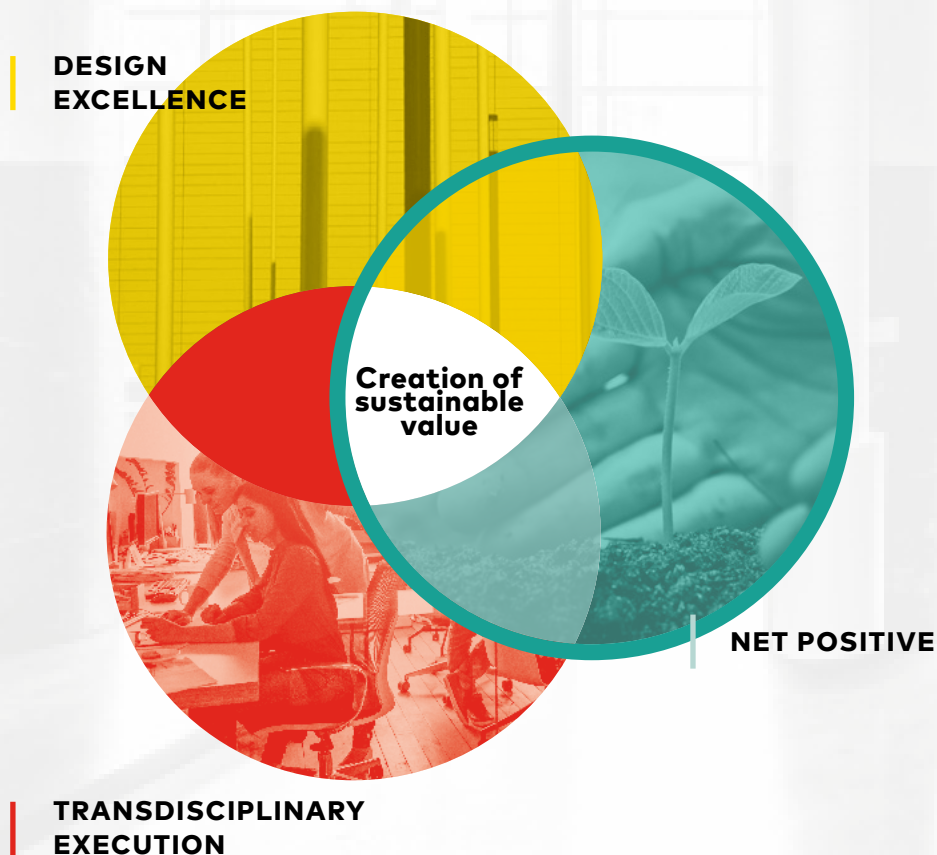
ELECTRICITY STORAGE

SOLAR THERMAL WALL (PREHEATED AIR SUPPLY)



Beyond the Phenix... how we live Net Positive

NET POSITIVE IS ONE OF THE THREE PILLARS OF OUR DISTINCTIVE APPROACH,
WHILE SUSTAINABLE VALUE CREATION IS AT THE HEART OF EVERYTHING WE DO.



OUR COMMITMENTS

In addition to our Net Positive commitment, Lemay has formalized agreements with several industry-recognized organizations:



Lemay is a signatory to the **AIA 2030 Charter**, which seeks to deploy zero-carbon buildings.



Lemay is a signatory to the World Green Building Council's **Net Zero Carbon Buildings Commitment**.



As a **Fitwel Affiliate member**, Lemay is a "forward-thinking, innovative company that leverages its experience and technical expertise to guide clients' use of Fitwel."



Lemay is actively involved in the initiative to promote the **use of sustainable building materials**, as part of the Quebec chapter of the Canada Green Building Council.

OUR OWN HEALTH AND WELLNESS

We take well-being seriously, and not just in our projects. Our employees benefit from longstanding measures to keep them healthy and promote wellness habits:

- Flexible work hours and casual dress code.
- Customizable group insurance program with annual amount for transit passes, extended health coverage, fitness or wellness activities.

In normal times, we were proud to offer, and we look forward to reinstating:

- Regular sports and social activities, funding and support for charitable activities.
- Access to high-quality, locally prepared frozen meals.
- Daily fresh fruit basket, coffee and tea.
- On-site fitness centre and showers.
- Indoor and outdoor bicycle storage.
- Access to hybrid company vehicles and electric bicycle during work hours.

Under pandemic conditions, employees have had:

- Access to IT and office equipment to work comfortably from home.
- Regular surveys to monitor employee wellness and evolving needs.
- Several weekly live online boot camp and yoga classes.
- Twice-weekly online employee forums for IT, social and general discussions.
- COVID resource, FAQ and teleworking best practices special section on employee intranet.
- High-quality anti-bacterial face masks by Quebec designer Marie Saint-Pierre, mailed in pairs to each employee's home.
- Guidance with accessing financial assistance measures.





REDUCING CARBON FOOTPRINT

Lemay offsets the amount of paper it uses, as well as some of its air travel and long-distance transportation, based on the carbon emissions generated. Its clients and partners also budget for carbon offsetting in their projects. One example is through Lemay's Nicaraguan reforestation efforts via partner organization *Enracine - Taking Root*.

COMMUNITY ACTION

Social involvement is part of Lemay's DNA. At both the corporate and employee level, it supports charities, research, community projects and local volunteer organizations. It deliberately chose to put down roots in a central area of Montreal undergoing revitalization, which now benefits from the company's beautification efforts and increased demand for local services.



Highly qualified professionals

OUR TEAM RELIES ON THE EXPERTISE OF NUMEROUS SUSTAINABILITY-ACCREDITED PROFESSIONALS.

29

LEED AP*

LEED (LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN)

Benchmark evaluation system for interior design, buildings and neighbourhoods. It is distinguished by its rigour, national and international recognition and holistic nature.

*AP : Accredited Professional

26



1 FELLOW

Honorary
Distinction



9 GA

Green
Associate



14 BD+C

Building
Design and
Construction



3 ND

Neighbourhood
Development



1 HOMES

Housing



2 O+M

Operations
and
Maintenance



1 ID+C

Commercial
Interior
Design and
Construction

NET POSI+IVE



Lemay now boasts
45 professional accreditations,
a 15% increase over 2019.



WELL

Launched in 2014, WELL certification works as a complement to LEED ecological certifications, by targeting the health and well-being of the users in a built environment.

 **2 WELL AP**  **1 WELL FACULTY**

FITWEL

Certification aimed at encouraging the improvement of new or existing buildings by focusing on both built environment measures and healthy corporate policies.

 **9 FITWEL AMBASSADORS**

SITES RATING SYSTEM

Certification issued by Green Business Certification Inc (GBCI) which recognizes the sustainability of landscaping.

 **2 SITES AP**

ENVISION

Certification dedicated to the integration of sustainability strategies into infrastructure projects. It focuses on social acceptability and resilience as fundamental project values.

 **3 ENVISION SP**

BUILDING RESEARCH ESTABLISHMENT ENVIRONMENTAL ASSESSMENT METHOD (BREEAM)

The first and most widespread system for evaluating and certifying the environmental performance of buildings worldwide.

 **1 BREEAM AP**  **1 BREEAM ASSESSOR**

HAUTE QUALITÉ ENVIRONNEMENTALE (HQE)

Certification recognizing the environmental performance of projects for the sustainable design or renovation of buildings and the sustainability of territories.

 **1 HQE AP**  **1 HQE AUDITOR**





Substantial
certified area

— 2,747,230 m² —

28

— of projects certified or in the process of being certified —

— the equivalent of approximately

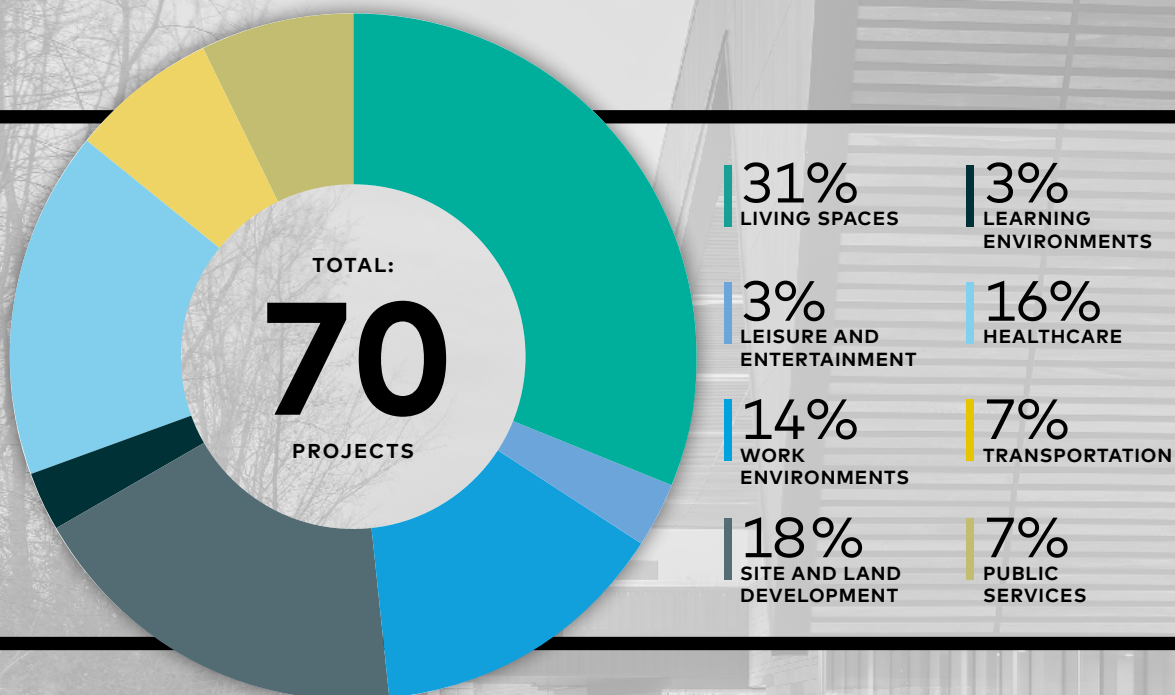
385 —

— football fields —

IN THE PAST YEAR,

9 Lemay projects obtained certifications, for a
37% increase in the firms' certified project surface area.

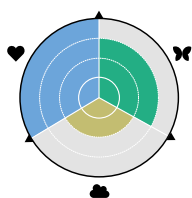
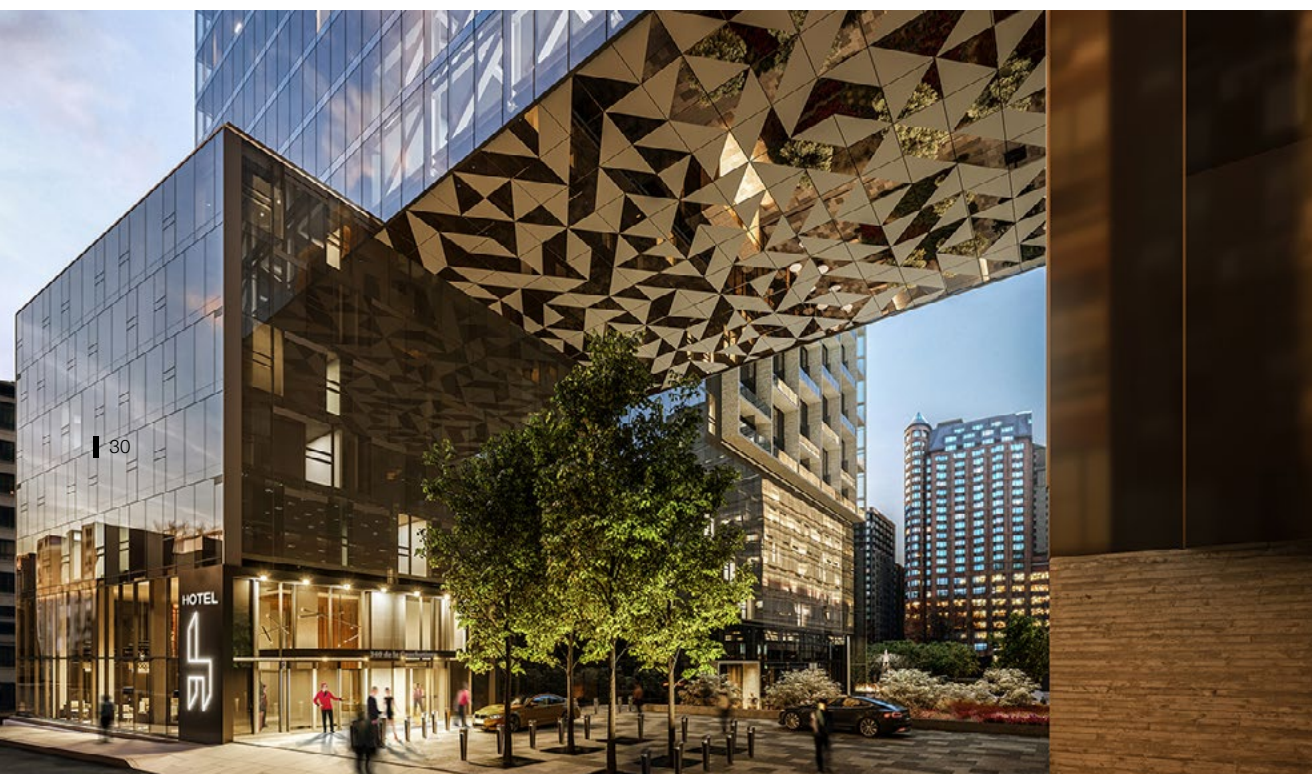
DISTRIBUTION OF PROJECTS CERTIFIED AND IN THE PROCESS
OF CERTIFICATION BY MARKET



Sustainable projects

PROJECTS PRESENTED HERE ALL HAVE ONE OR MORE TRULY EXEMPLARY SUSTAINABLE STRATEGIES.

Beyond obtaining certification, they are distinguished by the use of local materials, the reduction of their carbon footprint and their approach focused on the health and well-being of users.



CERTIFICATION

LEED v3 Silver
certification targeted

HUMANITI COMPLEX, Montreal

First smart vertical
community
(5 occupancy types)

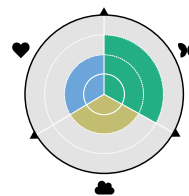
- First project registered for WELL certification in Quebec for its residential rental component



SCIENCES COMPLEX, MIL CAMPUS UNIVERSITÉ DE MONTRÉAL, Montreal

Setting a new standard

- Revitalizes an entire sector with high-quality urban spaces
- Extensive greenspace planted with native species
- Lightweight, high-performance curtain wall
- A first campus building setting the standard for those to follow
- In line with Lemay's multiple national award-winning campus master plan (also aiming for LEED v4 ND Gold certification)



CERTIFICATION

LEED v4 ND for
Neighbourhood Development
Gold certification targeted

LEED v4 BD+C Gold
certification targeted

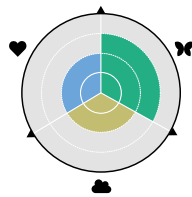
In consortium with MSDL and NFOEs



CASABLANCA OCEANFRONT PROMENADE, Morocco

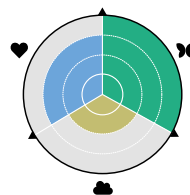
International design competition winner
for the development and revitalization
of a five-kilometre coastline

- Designed to maximize waterfront views and character
- Accommodates events, rest areas and sports facilities in an urban framework
- Use of local materials and plants
- Revitalization of natural environments



Multifunctionality,
sustainability,
innovation





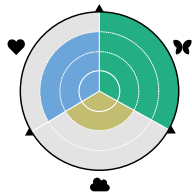
CERTIFICATION
LEED v3 NC
Platinum certification

BIBLIOTHÈQUE DU BOISÉ, Montreal

"Greenest library in Canada"

- Use of low-emissions materials with regional and recycled content
- Water recovery and wetland recharge system
- Energy-saving measures, including a geothermal system
- Sustainable landscaping
- Biophilic approach: abundant natural lighting, extensive use of wood inside and out, integrated with park and forest

Cardinal Hardy Labonté Marcil
Eric Pelletier architectes* in
consortium (*now Lemay)*



CERTIFICATION

LEED v4 BD+C Gold
certification targeted

BELLECHASSE TRANSPORT CENTRE, Montreal

Revolutionary and award-winning

- Introduces precious greenspace in lieu of a traditional garage
- Futuristic, spiral-shaped design conceals heavy vehicle operations underground
- Offers employees a high-quality work environment
- Integrates with surrounding residential neighbourhood



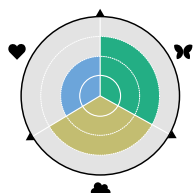




BILL-DURNAN ARENA, Montreal

Taking it further

- Was aiming for LEED-Silver certification, but our team's added value resulted in LEED Gold
- Outdoor drinking water consumption reduced by 100% compared to reference project, indoor drinking water consumption reduced by 35%
- 56% reduction in annual energy costs through improved energy performance
- Indoor environmental quality improved through indoor air-quality management during and after construction

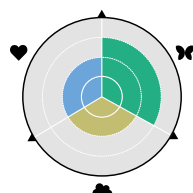


CERTIFICATION
LEED v3 NC Gold
certification

BOUTIQUE CHANEL MONTREAL, Montreal

Discreet features that matter

- Central location and access to public transportation
- Energy-efficient systems
- Ecological cleaning program



CERTIFICATION
LEED v4 ID+C
certification
targeted





CERTIFICATION
Certification LEED OR
pour l'aménagement
des quartiers

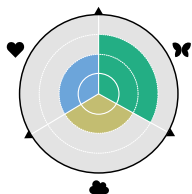
LES BASSINS DU HAVRE, Montreal

Master plan

- Certified LEED-Platinum
- Rebuilds harbourfront's destructured and contaminated areas, balances ecosystems
- Diversity of housing typologies, including social and affordable housing
- Bio-filtration basins collect rainwater from roofs and street as they enhance port-inspired landscape

Architecture, landscape architecture, urban design, sustainability

- Several phases LEED-certified: a rarity for residential development
- Heat pumping system completed by solar panels
- Efficient envelopes and preheating systems for household water and outdoor air
- Sound groundwater management



CERTIFICATION

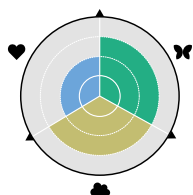
LEED v3 ND Platinum
certification

Several phases certified
LEED v3 NC: a rarity for
residential development

*Masterplan in consortium with L'OEUF
Architecture in consortium with MSDL*

SOPREMA PLANT, Woodstock

A factory designed for wellness



CERTIFICATION
LEED v4 BD+C
certification
targeted

- Quality views for users and biophilic approach
- Green roof and employee social area
- Adapted office lighting
- Low-emissions materials
- Local and recycled materials
- Ecological cleaning program
- Carbon assessment performed





BDO BUREAU NATIONAL, Toronto

Biophilic beauty

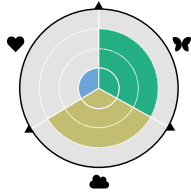
- Adapted to the firm's multi-generational needs and the preferences of different professionals (flexibility and mobility)
- Advanced biophilic approach
- Natural light for 100% of employees
- Central staircase design to encourage active habits

BIOPHILIA IS

a "love of life or living systems." It's our inherent human connection to the natural world. In an urban world of technology and industrial architecture, this fundamental connection can sometimes feel all but lost. Biophilic design is an innovative way to harness this affinity in order to create natural environments for us to live, work and learn.

SOURCE: INTERFACE.COM





CERTIFICATION

Silver level Envision v2
certification targeted

*In consortium with
Jodoin Lamarre
Pratte architectes*

P4 PARKING GARAGE, MONTRÉAL-TRUDEAU AIRPORT, Montreal

An uncommon parking structure

- Future-proof design to facilitate future requalification
- Heat island reduction and stormwater management
- Green and white roof, biodiversity and native species
- 22% reduction in carbon emissions' impact compared to similar projects
- 25% water use reduction
- Superior client experience

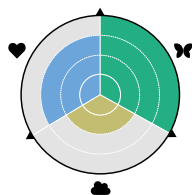


QUARTIER DES LUMIÈRES, Montreal

CERTIFICATION

LEED v4 ND Platinum
for Neighbourhood
Development – Design

3-star Fitwel Community Certification – Design



An urban wellness pioneer

- Master plan for mixed-use neighbourhood supported by sustainable strategies
- Record-setting three-star rating under pioneering Fitwel Community certification
- Priority given to pedestrians and cyclists
- Green alleyways and access to high-quality public spaces
- Modulated density and large areas set aside for sociocultural projects



NET POSITIVE

Next steps

With the groundwork of this past year and others laid out in this report, Lemay is poised to deliver consistently improving results as it applies Net Positive in everything it does, in line with the following objectives it has set for the next decade:

- Maintaining carbon-neutral offices
 - Further reduction of its own carbon emissions by 7% per year
 - Continuing annual offset of its residual carbon emissions
- Net Positive projects
 - Net Positive Score increase of 2% by the firm's projects every year
 - Net Positive approach adopted by 10% more Lemay projects per year
 - 7% annual reduction in projects' carbon emissions
- Continued research and development activities via two new post-pandemic committees:
 - Internal Change Management Committee
 - Sustainable Practices Committee

We thank you for sharing this exciting journey with us!



PCF



**CREATIVE
THINKING.
COLLECTIVE
VALUE.**