



# 2020 Real Estate *Sustainability* Report

June 2020

# *Message* from our Global Head of Real Estate

## Message

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**Bill McPadden**, Global Head of Real Estate

**Our vision** is to drive leadership in sustainable real estate across our global organization. Our vision drives our objectives. Our vision drives our commitments. Our vision defines the “what” and “how” of our sustainability program within Real Estate.

**Our purpose** is our people. Our purpose fuels our passion for creating more sustainable communities, and for creating a better future. Our purpose is the “why”.

**This year**, more than ever, we’ve seen the importance of working together towards a common goal. We’ve seen the impact that our efforts can have on the ground and in the hands of those who need it most.

**In 2019**, we worked to minimize our environmental footprint by certifying 15 new buildings to a LEED standard. This includes the first ever certification awarded for LEED v4.1. To date, over 80% of our global portfolio carries a green building certification and we are actively working to maintain momentum in this area.

We also focused on stakeholder engagement through the creation of an internal recognition program celebrating excellence in sustainable leadership. For the first time ever, the Green Champion Leader Award was awarded to Christina Harricharran who’s Think Big attitude helped earn the 220 Bloor Toronto Head Office our first ever Fitwel Certification.

Finally, we are demonstrating responsible business practices through our participation in the UN Environment Programme – Finance Initiative (UNEP FI) climate risk pilot group.

In the midst of these unprecedented times, I am proud of the progress we have made. I am proud of our employees, our tenants and our partners who have come together in support of a better tomorrow.

We recognize there is more to do. This is a never-ending journey requiring our continuous commitment and dedication. As I’ve previously mentioned, we are surrounded by an amazing team and I know that when we think big, anything is possible.

**Stay safe and be well.**

# 2019 Performance *Highlights*

## Message

We are pleased to share that we have been making great progress towards advancing our five Sustainable Real Estate commitments.

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## Minimize our Environmental Impact

### 13,850 MWh of energy saved

Equivalent to the energy used by approximately 540 Canadian homes.<sup>1</sup>

### 27,920 m<sup>3</sup> less water consumed

Equivalent to the water needed to fill 164 thousand bathtubs.<sup>2</sup>

### 48.7 M SF certified

Certified 15 new buildings to LEED®, including the first Canadian building certified LEED v4.1 Churchill Office Park (1600 Carling Avenue) in Ottawa. Increased our total certification rate to 81% of our global portfolio - totaling over 48 million square feet.

### 7,900 MT of waste diverted

From landfill, achieving an average portfolio waste diversion rate of 45%.

### 45,300 MWh

Purchased 45,300 MWh of renewable energy.

## Support Health and Wellness

### Fitwel® Certified

Achieved Fitwel Certification at our 220 Bloor Street East, Global Headquarters in Toronto and developed an internal Fitwel certification guide.

## Engage our Stakeholders on Sustainability

### 150 Green Champions

Launched our internal Real Estate Sustainability Awards, which acknowledged the efforts of Green Champions within our global team of employees.

### Tenant collaboration

Rolled out a portfolio-wide tenant engagement calendar across over 250 internally-managed properties.

## Promote Responsible Business Practices

### PRI Score of A

Achieved a PRI score of “A” in the Direct Property Investing module.<sup>3</sup>

### Climate resilience

Participated in a UN Environment Programme – Finance Initiative (UNEP FI) pilot group with 12 other institutional investors to evaluate physical and transition real estate climate change risks.

## Be Accountable for our Performance

### GRESB “Green Star”

Improved GRESB scores, earning a “Green Star” ranking in six submissions and three, five-star ratings.

### Sustainable Building Standards

Improved our Sustainable Building Standards scores across all property types and met our 2019 office, industrial, and retail year-end targets.

This report details sustainability practices and performance for all real estate holdings owned or managed by Manulife Investment Management's real estate arm as of December 31, 2019. All facts and figures are as of December 31, 2019, unless stated otherwise. Details on our reporting methodology can be found on our Sustainability website: [manulifeim.com/realestate/en/sustainability](https://manulifeim.com/realestate/en/sustainability)

<sup>1</sup> Source: [www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=2510006001](https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=2510006001)

<sup>2</sup> Source: [www.watercalculator.org/save-water/shower-bath](https://www.watercalculator.org/save-water/shower-bath)

<sup>3</sup> PRI: Principles for Responsible Investment. This organization works to understand the investment implications of environmental, social, and governance factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions.

# Objectives and Progress

Message	2019	Status
2019 Performance Highlights  <b>Objectives and Progress</b>  Our Approach  Managing Sustainability  Sustainability in Action  Performance	Achieve a higher level in Sustainable Building Standards (achieve average Level 3 for office, 2 for residential and maintain 1 for industrial and retail)	<b>Achieved</b> – Office, industrial and retail <b>In progress</b> – Residential
	Launch an annual tenant engagement program with a monthly campaign calendar and track participation	<b>Achieved</b>
	Achieve an average of 2% energy and 1.5% water reduction as part of our five-year targets	<b>Achieved</b>
	Create an internal sustainability recognition program	<b>Achieved</b>
	Pursue the Fitwel® health and wellness standard at five buildings	<b>Achieved</b>
	Improve or maintain GRESB scores across all submissions	<b>Achieved</b>
	2020	Status
	Improve average Sustainable Building Standards score for each asset class	<b>In progress</b>
	Set long-term greenhouse gas reduction target	<b>In progress</b>
	Integrate climate mitigation and adaptation into our Sustainable Building Standards	<b>In progress</b>
	Improve portfolio energy management	<b>In progress</b>



# Our Approach

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## Vision

Our vision is to drive leadership in sustainable real estate across our global organization. Our employees, in collaboration with our tenants and local communities, work to provide healthy and efficient properties—today and into the future.

## Approach to sustainability and responsible investing

We incorporate ESG considerations into each stage of the real estate value chain, from the development or acquisition of a building, through to property management and leasing. Our Sustainable Real Estate Framework outlines our five sustainability commitments and details our key areas of focus. We then validate practices and performance through public reporting and industry benchmarking.

To ensure that we are accountable to all stakeholders, we report on our performance using globally accepted standards, including the Principles for Responsible Investment (PRI), CDP (formerly Carbon Disclosure Project), and the Global Real Estate Sustainability Benchmark (GRESB) Assessment.

## Everything we do and everything we aspire for is aligned with our five Sustainable Real Estate Commitments:

1. Minimize our environmental impact
2. Support health and wellness
3. Engage our stakeholders on sustainability
4. Promote responsible business practices
5. Be accountable for our performance

# Our Sustainability Journey

## 2005

- Manulife Public Accountability Statement
- Energy tracking and management system
- CDP Participation
- First BOMA BEST certification
- First LEED building

## 2006

- First renewable energy purchase

## 2007 - 2014

- Set an annual energy reduction target of 2%
- Established ongoing utility performance tracking and reporting processes
- Achieved LEED certification across 21 buildings

## 2015

- Participated in GRESB Assessment for the first time
- Became a PRI signatory
- Installed 75 electric vehicle charging stations
- Purchased renewable energy credits for 6% of electricity use

## 2016

- Achieved GRESB “Green Star” ranking for all submissions

## 2017

- Published first Real Estate Sustainability Report
- Launched Sustainable Building Standards
- Set five-year energy, water and waste targets

## 2018

- Hired a Real Estate Sustainability Director
- Increased our total certification rate to 80% of our global portfolio
- Received the Green Lease Leader Award

## 2019

- Launched our annual tenant engagement program
- Achieved three “5-star” GRESB scores
- Launched Real Estate Sustainability Awards recognition program
- Achieved Manulife’s First Fitwel® Certified building
- Certified the first Canadian building to LEED version 4.1
- Participated in TCFD pilot with UNEP FI
- Achieved “A” in the PRI Direct Property Module for third straight year

# Managing Sustainability

Message	ESG management spans our organization, from top-down strategy to on-the-ground operations. It addresses both regulatory obligations and voluntary commitments. For more information, visit our website.		
2019 Performance Highlights	<u><b>Real Estate Sustainability</b></u>	<u><b>Manulife Investment Management Sustainable Investing</b></u>	<u><b>MFC Sustainability</b></u>
Objectives and Progress	<div> <div> <b>Executive Sustainability Steering Committee</b>  Manulife Investment Management's Global Head of Asset Management, Real Estate chairs the Real Estate Executive Sustainability Steering Committee (ESSC), which consists of senior representatives from key business functions and regions. The Committee sets annual objectives and oversees progress towards achieving our sustainability vision. </div> <div> <ul style="list-style-type: none"> <li>Set sustainability vision and commitments and strategy</li> <li>Set annual objectives and report</li> <li>Monitor sustainability efforts and performance</li> </ul> </div> </div>		
Our Approach	<div> <div> <b>Sustainability Director</b>  The Sustainability Director develops and implements our sustainability strategy, managing the programs and initiatives that support our commitments and vision. </div> <div> <ul style="list-style-type: none"> <li>Set strategy and programs with ESSC</li> <li>Lead program development and implementation</li> <li>Coordinate sustainability programs with business units and portfolio</li> </ul> </div> </div>		
<b>Managing Sustainability</b>	<div> <div> <b>Sustainable Building Standards</b>  The Sustainable Building Standards act as our guide to advance sustainability within all buildings and regions. Consists of 13 standards covering our material sustainability aspects. </div> <div> <ul style="list-style-type: none"> <li>Meet industry expectations</li> <li>Drive leadership across our five Sustainable Real Estate Commitments</li> <li>Build a consistent sustainability experience for tenants, employees and visitors</li> <li>Enable benchmarking of sustainability performance and understanding of business outcomes</li> <li>Provide tools and resources for property teams</li> </ul> </div> </div>		
Sustainability in Action	<div> <div> <b>Green Champion Community</b>  Our Green Champion Community consists of 150 people across our properties that act as local sustainability stewards. The Green Champion Community works with the Sustainability Director and other organizational experts to execute on sustainability programs at the property level. </div> <div> <ul style="list-style-type: none"> <li>Act as the liaison between the building and the Sustainability Director</li> <li>Communicate sustainability program information to property employees</li> <li>Implement and report on our Sustainable Building Standards</li> <li>Work with tenants on property sustainability initiatives</li> </ul> </div> </div>		
Performance	<div> <div> <b>Property Teams</b>  Our local property teams support our sustainability programs while also managing building operations and tenant and community relations. </div> <div> <ul style="list-style-type: none"> <li>Manage day-to-day property operations and tenant programs</li> <li>Implement property sustainability programs</li> <li>Support our Green Champion Community</li> <li>Achieve LEED, BOMA BEST, ENERGY STAR certifications</li> </ul> </div> </div>		

# Case Study #1

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### **Sustainability in Action: California's leading the charge with their state-of-the-art battery system**

Since 2016, The Michelson, a LEED Gold Certified property in Irvine California, has leveraged a state-of-the-art battery system known as Powerpack to save on energy.

Built by Tesla, Powerpack is a fully integrated, AC-connected energy storage system that allows our property management team to reduce peak electricity demand. The system's batteries are charged during low demand periods when energy rates are cheaper. Then, during peak demand times when costs are higher, the Powerpack draws on the stored energy to power the building. Managing demand in this way reduces our electricity bills by an average of 9% each month, with some months seeing reductions of up to 16%. This battery system not only helps to reduce our operating costs, it also reduces the need for new energy generation capacity.

We are proud to support California's ambitious emissions reductions target and to be part of the state's transition to sustainable energy. With results like this, The Michelson is a model for future operational improvements across our portfolio.





# Case Study #2

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### Sustainability in Action: Urban gardening reaches new heights in Montreal

In 2017, Manulife Investment Management partnered with Alvéole to install honeybee hives at many of our properties across North America. To further support our honeybees and make use of additional space on our rooftops, we extended our partnership to MicroHabitat—a local organization specializing in urban farming.

In 2019, five of our downtown Montreal properties installed an urban gardening system on their remaining rooftop space. These gardens consisted of a variety of organic fruits, vegetables and herbs that were cared for daily and watered by a custom-built irrigation system.

Our seasonal growing efforts were extraordinary: 2,500 plants and 1,500 pounds of fresh fruits and vegetables were harvested and donated to local community organizations, including Breakfast for Learning. We also held specialized garden tours and hands on workshops for our tenants, which promoted the importance of supporting our local communities and food sources.

Given the outstanding success of this program, we will be examining how this can be expanded across additional buildings in North America with other local partners.





# Case Study #3

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## **Sustainability in Action: Churchill Office Park – Canada's first LEED v4.1 Certification**

In January 2019, 1600 Carling Avenue made history as the first building in Canada to become certified under the LEED version 4.1 for Building Operations and Maintenance.

With v4.1, LEED has streamlined certification by focusing on five data-driven performance outcomes: transportation, water, energy, waste, and human experience. The new methodology streamlines the credits and prerequisites, making certification—and recertification—more straightforward.

Drawing on lessons learned from 1600 Carling, we created an internal LEED v4.1 Certification Guide and supported teams across Canada to certify another 15 buildings. This included the first Canadian LEED v4.1 Platinum recertification at 55 Metcalfe, also in Ottawa.

Our new LEED program provides better visibility into our buildings' performance and empowers property teams to collaborate more effectively with tenants. Based on our success with the program, we plan to continue the roll out across Canada and the U.S. in 2020.





# Case Study #4

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### **Sustainability in Action: Partnering with Habitat for Humanity to support Women's Build Day**

Supporting our local communities is part of who we are. We believe that giving back to the places we live and work strengthens our teams and enriches our employees' lives. We also believe that access to safe and affordable housing is a basic human right, and we are pleased to partner with others who share our values.

Started in 2009, Habitat for Humanity's Women Build Day brings participants of all genders together in a shared mission to help families in need of a decent and affordable place to call home. It promotes spirit, empowerment, solidarity, fun, learning and pride—all while working alongside future Habitat homeowners to build new affordable housing.

Ten determined women within our Ottawa office saw the importance of this initiative and picked up their hammers to join the effort. In addition to volunteering their time, the team also coordinated the collection of a monetary donation.

It is because of their meaningful contribution that local Ottawa families will have a safe place to call home, and we are proud to see them sharing their humanity.



# Case Study #5

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## **Sustainability in Action: Announcing Manulife Investment Management's Real Estate Sustainability Awards**

In an effort to thank our Green Champion Community and local property teams for their leadership in sustainability, we launched an internal recognition program known as the Real Estate Sustainability Awards.

Our first annual Green Champion Leader Award went to Christina Harricharran in our Toronto Head Office. Christina's innovative approach and hard work were instrumental in Manulife earning its first ever Fitwel Certification at 220 Bloor Street East in Toronto. She also helped the Global Headquarters in Toronto achieve a LEED Gold certification while also delivering numerous tenant engagement initiatives throughout 2019.

In addition, two property teams were the proud recipients of the Sustainable Building Standards Leader Award. Calgary's Nikki Sincovich and Allison Gammage won for the industrial asset class while California's Chalinee Kember and Nicole Macaulay were recognized in the office category. This award recognizes those properties and teams that are taking proactive measures to reduce their environmental impact and engage with stakeholders. The Michelson in California boasted an impressive Sustainable Building Standards average level of 4.6 (out of 5), achieving a perfect score in 9 of our 13 sustainability standards.

Congratulations to all of our 2019 winners! It is with their continuous commitment to deliver on our sustainable objectives that we will get it done, together.





# Our *Performance*

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## Energy

	2019	2018	2017
Absolute energy use (eMWh) <sup>1</sup>	<b>795,931,784</b>	834,492,962	795,894,698
Normalized energy use intensity (ekWh/sf) <sup>2</sup>	<b>24.1</b>	24.6	24.7

Buildings consume substantial amounts of energy and water and generate approximately 40% of greenhouse gas emissions, globally. As building owners and managers, we seek to minimize our environmental impact by investing in resource efficiency and look to embed conservation practices into our operations.

Our total energy consumption in 2019 was 796,000 eMWh. Comparing our normalized portfolio, this is a reduction in energy consumption of 1.9%, which is equivalent to the energy required to power 540 Canadian homes.

Across our global portfolio, we decreased normalized energy use intensity by 2% to 24.1 ekWh per square foot, meeting our annual energy target of 2%. Since 2017, we decreased energy use by 2%, progressing towards our five-year, 10% reduction target.

<sup>1</sup> Energy data includes electricity, natural gas, heating oil and steam consumption.

<sup>2</sup> Energy intensity is normalized for weather, occupancy (where data is available) and extraordinary use.

<sup>3</sup> Water intensity is normalized for occupancy (where data is available) and extraordinary use.

## Water

	2019	2018	2017
Absolute water use (m3)	<b>2,432,761</b>	2,573,773	2,556,907
Normalized water use intensity (L/sf) <sup>3</sup>	<b>63.3</b>	67.9	70.9

In 2019, we continued to reduce our water consumption, decreasing our like-for-like water use by 1.2%. This is equivalent to nearly 7.4 million gallons, which is enough water to fill 164,000 bathtubs.

Our normalized water use intensity decreased by 6.8% between 2018 and 2019 to 63.3 litres per square foot. With this reduction, we surpassed our annual 1.5% water reduction target and have already reduced our water intensity by 10.7%, exceeding our five-year 7.5% reduction target.

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## Waste

	2019	2018	2017
Recycled waste (tonnes)	<b>7,888</b>	8,836	8,520
Waste to landfill (tonnes)	<b>8,132</b>	8,140	7,504
Waste diversion rate (%)	<b>45</b>	46	47

Waste management continues to be a key area of focus, starting with data collection and reporting. In 2019, we reported on an additional one million square feet for waste diversion, which resulted in a 4% increase since 2018 and 14% since 2017.

Even with an increase in waste reporting, our total waste generation decreased by 950 metric tonnes. Our average diversion rate for 2019 was 45%, a 1% decrease from 2018. In 2020, we plan to continue our waste performance measurement and identify opportunities to increase diversion and reduce waste generation where possible.

## Greenhouse gas emissions

	2019	2018	2017
Scope 1 emissions (tCO <sub>2</sub> e) <sup>1</sup>	<b>33,551</b>	31,403	28,492
Scope 2 emissions (tCO <sub>2</sub> e) <sup>2</sup>	<b>116,993</b>	148,519	146,904
GHG intensity (kgCO <sub>2</sub> e/sf)	<b>5.0</b>	5.3	5.4

In 2019, our greenhouse gas (GHG) emission was 150,550 tCO<sub>2</sub>e. Comparing our like-for-like portfolio, we reduced our footprint by 17,400 tCO<sub>2</sub>e in 2019, the equivalent of taking 3,700 cars off the road.

The decrease in GHG emissions is a result of our reduction in energy consumption as well as the electricity grids in select regions having a lesser carbon intensity compared to 2018.

<sup>1</sup> Scope 1 includes emissions from natural gas, diesel and refrigerant emissions. Refrigerant and diesel emissions are only included in 2019.

<sup>2</sup> Scope 2 includes emissions from purchased electricity and steam.

[www.manulifeim.com/realestate/en/sustainability](http://www.manulifeim.com/realestate/en/sustainability)

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