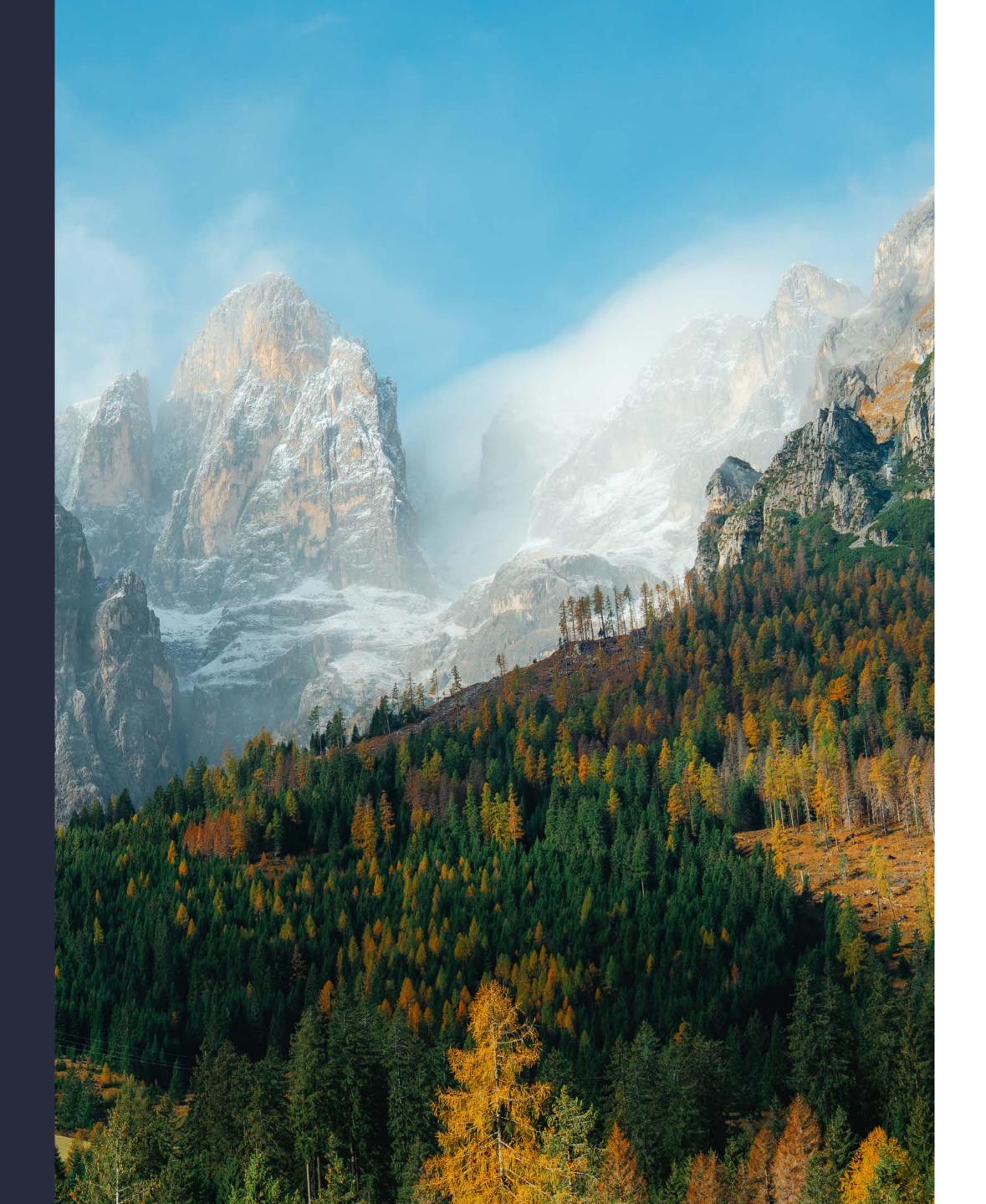


Manulife Investment Management

Sustainable and responsible investing report 2022



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The disclosures in this report cover the activities of the investment management teams of Manulife Investment Management's public and private markets businesses. The report does not cover the activities of nonaffiliated investment managers who manage some client assets on our behalf. All information in this report is as of December 31, 2022, unless otherwise indicated. Report published December 2023.





I'm pleased to present our latest sustainable and responsible investing report—our fourth annual statement covering our global asset management business across public and private markets.¹

Highlights of our recent activities span advancements in the integration of environmental, social, and governance (ESG) factors, the launch of several new sustainability-themed strategies, and our involvement in active stewardship on behalf of our clients and in our capacity as an operator of private assets.

In ESG integration, we enhanced our infrastructure and private equity and credit due diligence processes through our participation in the ESG Data Convergence Initiative (EDCI). In addition, we participated in the <u>Leading Harvest</u> pilot program in Australia for global standards of farmland certification. We also launched new thematic strategies, including a forest climate strategy and a global climate bond strategy. Furthermore, as a function of our commitment to strong principles of asset stewardship and related disclosure, we maintained our signatory status with respect to the UK Stewardship Code, established by the U.K. Financial Reporting Council.

1 The disclosures in this report cover the activities of the investment management teams of Manulife Investment Management's public and private markets businesses. The report does not cover the activities of nonaffiliated investment managers who manage some client assets on our behalf.

A *message* from Paul R. Lorentz

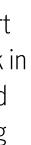
In our view, climate change and nature loss represent clear financial risks that pose systemic challenges. We understand that systemic risks such as climate change and nature loss can compound and be compounded by human factors. Consequently, we remain committed to being involved in a variety of global collaborative initiatives focused on the intersection of these issues, including initiatives such as Climate Action 100+ and the Finance for Biodiversity Pledge, as well as board diversity initiatives that understand how taking action on diversity goals is a proven path toward better corporate governance.

Our conviction in sustainable investing is evidenced by our actions. As a global asset manager, we believe sustainable investing helps build portfolio resilience to systemic risks and enhances long-term value creation potential. This report communicates both the fundamental processes of our work in this regard and the latest updates on our outcomes-focused stewardship practices. We hope you find it useful in learning more about our approach to sustainable investing.

Paul R. Lorentz

President and CEO Manulife Investment Management

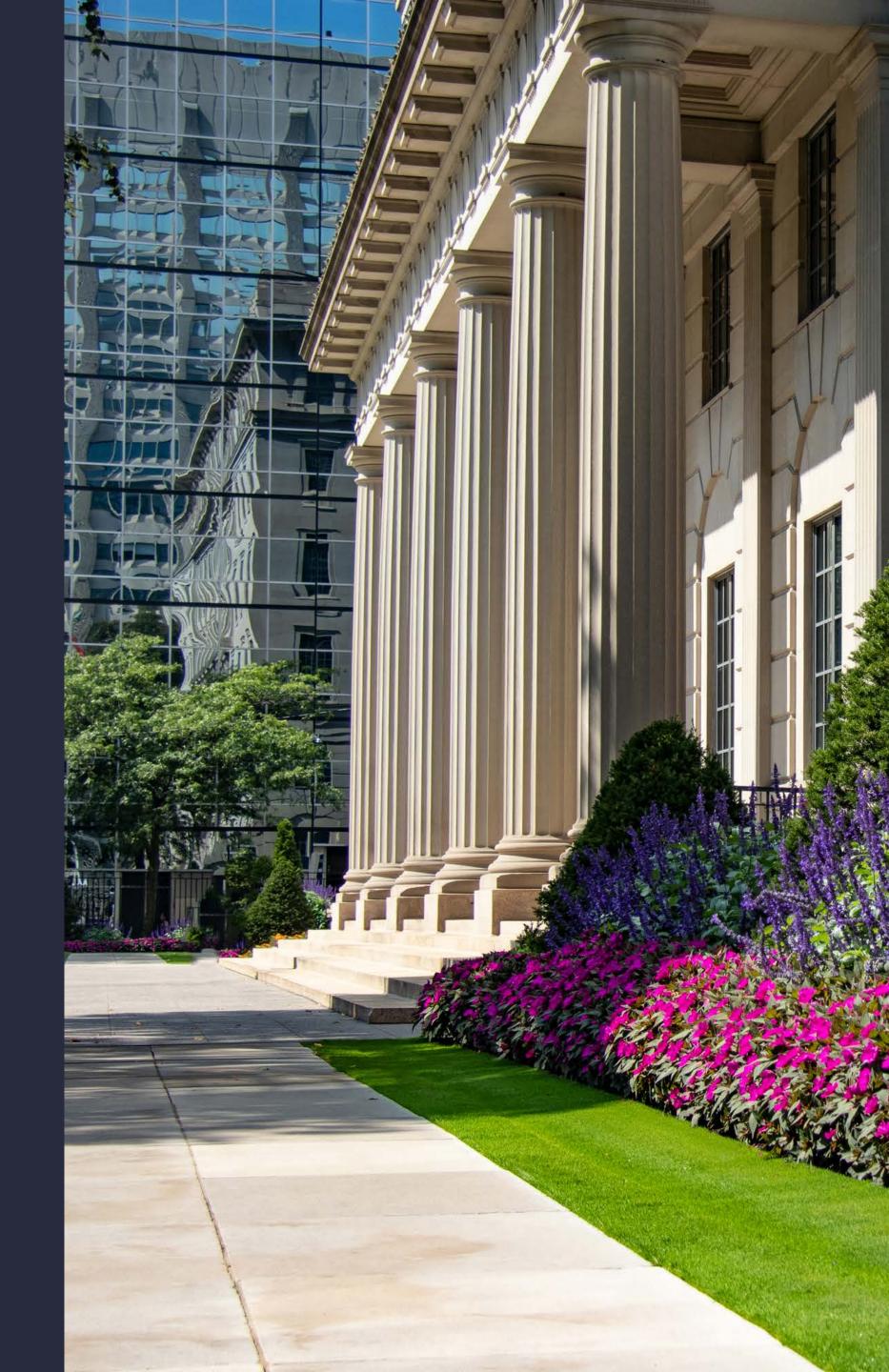






Who we are





About Manulife Investment Management

Manulife Investment Management is the brand for the global wealth and asset management segment of Manulife Financial Corporation (Manulife). Our mission is to make decisions easier and lives better by empowering investors for a better tomorrow.

Serving more than 17 million individuals, institutions, and retirement plan members, we believe our global reach, complementary businesses, and the strength of our parent company position us to help investors capitalize on today's emerging global trends. We provide our clients access to public and private investment solutions across equity, fixed-income, multi-asset, alternative, and sustainability-linked strategies, such as natural capital, to help them make more informed financial decisions and achieve their investment objectives. Not all offerings are available in all jurisdictions. For additional information, please visit <u>manulifeim.com</u>.



Manulife Investment Management at a glance

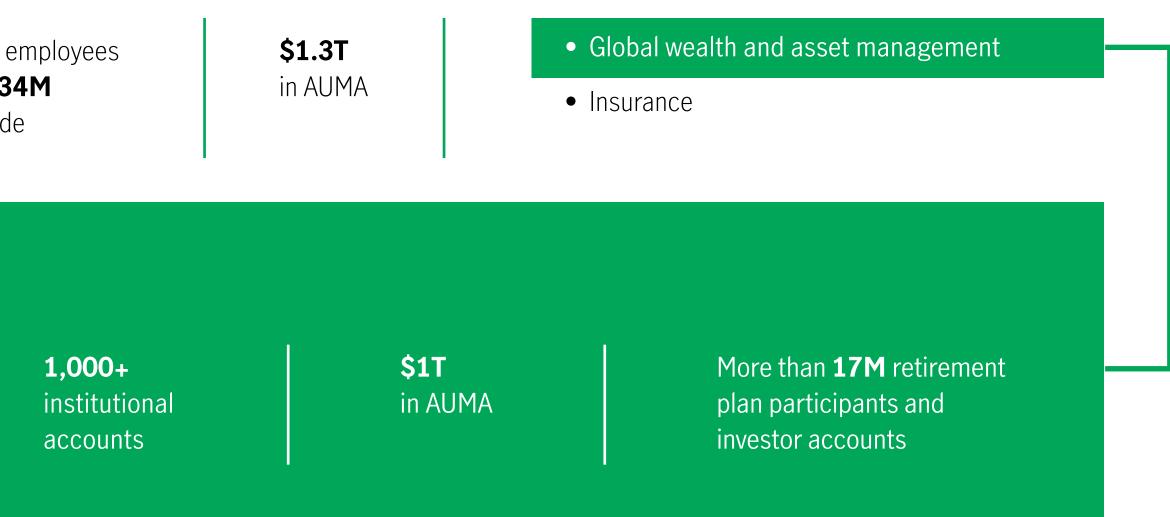
Manulife

Protecting customer assets since 1887 More than **40,000** employees serving more than **34M** customers worldwide

Manulife Investment Management

- Institutional asset management
- Retirement
- Retail investments

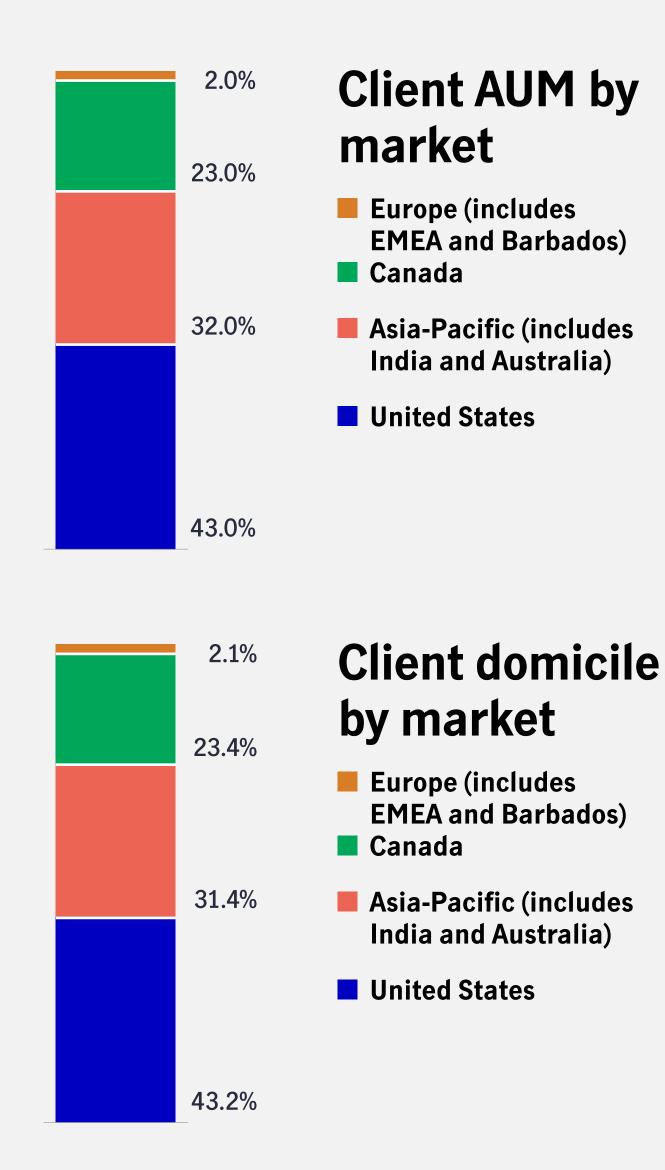
Source: MFC statistical information package. Manulife Investment Management is the unified global brand for Manulife's global wealth and asset management business, which serves individual investors and institutional clients in three businesses: retirement, retail, and institutional asset management (public and private markets). Global wealth and asset management assets under management and administration (AUMA) are as of December 31, 2022, and include \$229.5 billion of assets managed on behalf of other segments and \$170.2 billion of assets under administration. Assets are shown in Canadian dollars.







Source: Manulife Investment Management, as of December 31, 2022. Manulife Investment Management's global investment professional team includes expertise from several Manulife Investment Management affiliates and joint ventures; not all entities represent all asset classes.



Totals may not sum to 100 due to rounding.



\$600B

in institutional AUM

1,000+ institutional accounts

Assets under management (AUM) include assets internally managed by Manulife Investment Management on behalf of external clients, the Manulife general account, and other affiliated businesses, but they exclude assets under management and administration (AUMA). The methodologies used to compile the total AUM are subject to change and may not reflect regulatory AUM as reported on certain affiliates' Form ADV. Manulife Investment Management AUMA is as of December 31, 2022, and includes CAD\$598.9 billion in AUM and CAD\$0.7 billion in AUA.

What makes us unique?

Manulife, our parent company, has a storied history dating back more than 130 years in Canada, 125 years in Asia, and 155 years with the John Hancock brand in the United States. Manulife Investment Management is an important part of this history. We have strong footholds in North America and Asia, which include some of the fastest-growing economies in the world, and our commitments extend to clients around the globe.

At Manulife Investment Management, we seek to provide solutions for clients using a wide breadth of capabilities, and our commitment to sustainable investing is rooted in our belief in the financial materiality of ESG factors. In addition, our manager-investor/operator model in some sectors gives us a dual perspective on sustainable business practices and concerns. Beyond investing, we're also stewards of assets—such as real estate, timberland, and agriculture—and so we have a deep appreciation of the challenges and potential benefits of adhering to sustainable operating practices.



We're committed to sustainable investing

Our latest summary scorecard from the Principles for Responsible Investment (PRI) demonstrates the depth of our commitment.

Manulife Investment Management 2022 PRI summary scorecard

AUM (%)	Module name	Median (%)	Our score (%)	Our score (stars)	0	100
	Investment and stewardship policy	60	86	****		
Direct mod	lules					
10%-50%	Listed equity, active fundamental—incorporation	71	89	****		
10%-50%	Listed equity, active fundamental—voting	54	70	****		
10%-50%	Fixed income—corporate	62	93	****		
10%-50%	Fixed income—SSA	50	88	****		
<10%	Fixed income—securitised	55	71	****		
<10%	Fixed income—private debt	67	84	****		
<10%	Real estate	69	87	****		
<10%	Infrastructure	77	55	***		
<10%	Private equity	66	42	***		
<10%	Listed equity, passive—voting ²	57	70	****		
<10%	Listed equity, passive—incorporation ²	35	0	*	•	

Manulife Investment Management is a signatory to the Principles for Responsible Investment (PRI) and pays a signatory fee calculated based on assets under management as reported in the PRI's 2021 Annual Reporting and Assessment Framework, published in September 2022. It is compulsory for signatories to report on their responsible investment activities annually. The PRI assesses a signatory's activities according to its assessment methodology, and its output includes the <u>PRI Assessment Report</u> and <u>Transparency Report</u> from which this summary scorecard was sourced. Visit the <u>PRI website</u> for details and assessment methodology.

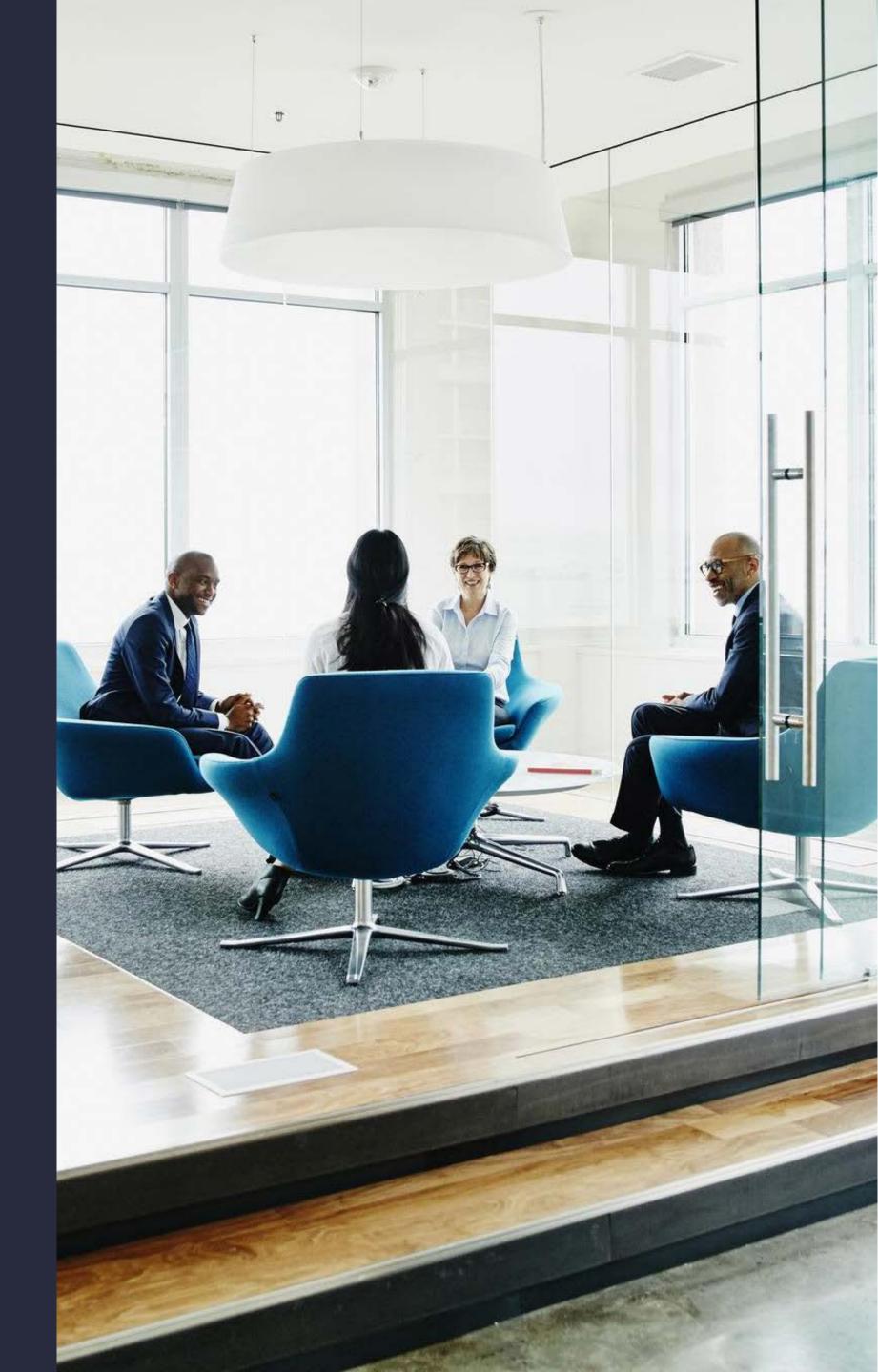
The scoring thresholds define at which percentage boundary a grade is allocated. 1 star: do not do ESG or 0% < 25%; 2 stars: 25% < 40%; 3 stars: 40% < 65%; 4 stars: 65% < 90%; 5 stars: 90% < 100%.

2 For assets managed by our passive listed equities strategies, we are an active steward where we review and vote proxy and engage investee companies. Manulife Investment Management does not currently manage any passive equity strategies in which the investment mandates or policies permit us to incorporate ESG considerations into investment decisions.

Median (%)
 Our score (%)



9



Our sustainable investing teams

To better serve our clients, we have two sustainable investing teams—one dedicated to publicly traded securities and asset allocation and another dedicated to supporting private markets asset classes, including real estate, private equity, private credit, timberland, agriculture, and infrastructure. These teams comprise professionals with broad and diverse skill sets that make them well suited to address the dynamic and complex requirements of sustainable investing and asset stewardship at a global firm. Some have diverse backgrounds from investments, while others have worked as sustainable investing data providers, possess legal backgrounds, or bring scientific credentials to their roles.

These skill sets are complemented by varying degrees of tenure and regional expertise. Taken holistically, our teams have the skill and experience to support complex investment research, asset management, robust client reporting, product development, financial modeling, proxy voting decision-making, issuer engagement, and collaboration with peers through industry initiatives.

Our sustainable investing teams work across our investment strategies as well as across geographies. We seek to integrate all financially relevant data, including sustainability data, into our investment processes where applicable. To that end, we disseminate analytical tools and data resources on sustainability issues to our investment teams, and we provide support to the same in terms of research and stewardship activities and best practices.



Our sustainability-focused professionals support our asset management teams globally

27 dedicated sustainable investing professionals

400+

investment professionals are advised on sustainability



with expertise across regions and asset classes

Source: Manulife Investment Management, as of December 2022.

3 We seek to incorporate material sustainability considerations throughout the stages of our investment and asset ownership lifecycles, taking into account the characteristics of the asset class and investment process in question, as well as industry and geography, among other factors. Each investment team operates in different markets and with different nuances to its approach to investing. Accordingly, each team integrates sustainability factors into its investment process in a manner that best aligns with its investment approach. Exceptions to this are strategies where a sustainability integrated investment approach is impractical or impossible; for example, in relation to certain instrument types where sustainable comparable alternatives are unavailable, passive products, funds that invest in derivative instruments, products managed in accordance with specific client objectives, and delegation to third-party investment managers. Refer to Manulife Investment Management's <u>sustainability risk statement</u> for further details.



Sustainability research and analysis



Implementation of sustainability practices



Training and education sessions



Proxy voting research

Stewardship practices for operation of real assets

Investment teams

Integrating sustainability factors and stewardship in their investment activities³

- Listed equity
- Fixed income
- Multi-asset solutions
- Real estate
- Infrastructure
- Private equity and credit (PE&C)
- Timberland
- Agriculture

Real asset operation teams

Integration of sustainable investing within asset classes such as real estate, timberland, and agriculture





Our governance approach

Manulife Investment Management has established a governance structure to support our investment teams' sustainable investing activities and our ongoing stewardship activities.

We view the involvement of leaders in all asset classes, as well as representatives from functional areas such as operations, legal, compliance, risk, and technology, to be crucial to supporting our sustainable investing activities across the organization and ensuring the buy-in and commitment required for success.

In addition, the sustainability governance structure of Manulife Investment Management is connected to larger sustainability governance at Manulife. The president and CEO of Manulife Investment Management is joined by other senior Manulife leaders on the Manulife executive sustainability council, and the leaders of our sustainable investing teams in Manulife Investment Management work closely with Manulife's chief sustainability officer. In this way, Manulife Investment Management's governance structure is well connected to the broader sustainability community and leadership across Manulife.

The governance structure is supported by teams of sustainable investing professionals that facilitate the implementation of Manulife Investment Management's sustainable investing agenda. This occurs through a variety of activities and projects, which include preparing annual business plans, identifying and developing sustainable investing best practice, supporting investment teams to develop tools and methodologies to adopt these practices across the investment lifecycle, advising on product development, and leading the participation in external initiatives or collaborative industry engagement.



12

Our sustainability governance

Corporate governance and Auconominating committee		Audit co	udit committee		Management resources and compensation committee				Risk committee	
Executive sustainability council										
General counsel	Chief marketing officer—chair	Chief human resources officer	Chief executive officer	Manulife I	and CEO, nvestment gement	Chief sustainability officer	Chief financial officer	Chief operations officer	Chief investment officer	Chief risk officer
Sustainabi	lity center of	expertise			Legal a	nd compliar	ice centei	r of experti	se	
 Composed of sustainability professionals across public markets, private markets, the general account, and the Manulife organization Provides a forum for information sharing and consultation on sustainability initiatives, performance, and reporting 				 Composed of legal and compliance members from each business unit and region Legal, compliance, and regulatory affairs consultation Provides a forum for information sharing and consultation on legal and compliance related to Manulife sustainability matters 						

Our committees and working groups are convened to enable regular decision-making oversight

ESG regulatory committee

- Composed of functional department heads from public mar investment, private markets sustainable investment, produc legal, compliance, and manager research
- Monitors regulatory implementation
- Provides advice and guidance to sustainability regulatory ch across the global organization

Manulife Manulife Investment Management

	Public markets sustainable investing committee				
arkets sustainable luct, operational risk,	 Integral to public markets strategic oversight Focuses on key sustainability initiatives and strategy Comprises senior cross-functional leads and sustainability team members; meets monthly 				
change initiatives	Proxy voting working group				
	 Members include cross-functional business heads in public markets Reviews escalated voting decisions 				
	Private markets sustainable investing committee				
	 Supports sustainability integration across private markets Led by the global head of private markets Includes global heads of private asset classes, sustainability specialists, and representatives from strategy, risk, distribution, legal, and marketing 				









We strive to build a diverse, equitable, and inclusive culture

Across our global offices—and in alignment with the beliefs and practices of our parent company—we focus on a shared set of six core values that helps engender high employee engagement and define who we are and how we work together:

- **Own it**—We feel empowered to make decisions and take action to deliver our mission.
- **Think big**—Anything is possible. We can always find a better way. 2
- **Share your humanity**—We build a supportive, diverse, and 3 thriving workplace.
- Get it done together—We're surrounded by an amazing team. We 4 do it better by working together.
- **Obsess about customers**—We predict their needs and do 5 everything in our power to satisfy them.
- **Do the right thing**—We act with integrity and do what we say. 6

We strive to live these values daily and incorporate them into our investment decision-making processes.

We value getting things done together as investment teams and believe collective action offers a powerful model for asset management. Through regular collaboration, including across asset classes and investment disciplines, we collectively work toward establishing a sense of shared and individual ownership, as well as a personal sense of involvement, as we strive to meet the needs of clients. This is how we want to operate our business for the long term: fostering a collaborative culture around meeting the needs of our clients. And we're committed to striving to always do the right thing, both by our clients and our broader stakeholders.

We value innovation and thinking big because we believe these modes of thought and action are central to the project of mitigating and adapting to systemic risks such as climate change and biodiversity loss.

As part of our culture, we place an emphasis on sharing our humanity—which is another way of saying practicing empathy and acting authentically with our colleagues.

Drawing strength from these values, our goals and efforts toward fostering better diversity, equity, and inclusion (DEI) at our firm demonstrate our commitment to our employees' health and professional growth as well as to the strength of the communities in which we live and work. We believe we're stronger when we embrace our differences and that diversity in gender, race, religion, identity, and ability plays a key role in driving innovation and growth within our company.

Our employee resource groups (ERGs), which are founded within the greater Manulife organization and include Manulife Investment Management employees, play an integral role in championing diversity and building an inclusive work environment.

These voluntary networks involve employees united by a common identity, trait, or interest and are a much-used resource at the firm. Our ERGs enable us to work together to address barriers to advancement and provide personal and professional development opportunities.





14

Our employee resource groups

ERG	Description
Ability	Building a culture of different
AMP	Association of Multicultural P
EMBRACE	For ethnic minorities living ar cooperation help members b
Family	A community to share family
GenerationNEXT	Mobilizing our young profess
GWA	The Global Women's Alliance network and opportunities in
ΙΡΤΑ	Indigenous Peoples and Thei increasing the awareness of i
LatinX	Promoting the education and
Male Allies	Creates safe spaces to discu
MiLE	Military Employment Commu
PACES	The Pan-Asian Community fo
PROUD	Aims to promote an inclusive
Sustainability Hub	The Manulife Sustainability H with Manulife's sustainability
VIBE	Valuing the Inclusion of Black increase awareness of variou

ntly abled inclusion (visible and invisible)—for employees, families, and customers

Professionals (AMP) champions member development, promotes cultural awareness, and advocates for unity through open dialogue and events

and working in the Hong Kong business segment, as well as for their allies—aims to create an environment in which communication and bridge race and culture and support each other in fully living their identities at work and beyond

y experiences and support member challenges

ssionals to be the next generation of leaders through education, networking, and volunteerism

e (GWA) supports and encourages the recruitment, development, and advancement of women throughout our organization by providing a in which women can be mentored, share experiences, and have fulfilling careers

eir Allies (IPTA) aims to better enable our indigenous employees to advance professionally and have open and honest conversations while f indigenous peoples for all employees

nd awareness about Latin American diversity and culture while demystifying myths, misinformation, and unconscious bias

uss gender issues and raise men's understanding of them and to encourage men and women to be vocal, visible role models for change

unity (MiLE) is building a strong network of support for all employees who are current service members, veterans, their families, and supporters

for Employee Success (PACES) builds the presence, influence, and leadership potential of Pan-Asian employees

ve workplace for lesbian, gay, bisexual, and transgender employees in order to promote their full and unencumbered contribution

Hub is a forum for Manulife employees to engage with sustainability, aiming to provide education about sustainability, employee engagement y strategic goals, and a venue for passionate employees to collaborate and propose ideas to make Manulife a more sustainable place to work

ck Experiences (VIBE) better enables our black employees to advance professionally, support the aspirations of potential employees, and ous black cultures



Building a working environment in which everyone thrives

In 2020, our parent company, Manulife, announced DEI commitments focused on talent, culture, and community and in 2022 made the following progress toward those commitments:

37% 32% 19%

0.8%

achieved toward our goal of 40% women representation at the AVP level

achieved toward our goal of 34% **women representation** at the VP+ level

achieved toward our goal of 30% **racially and ethnically diverse representation** in North America in director+ by 2025 against a 2020 baseline

achieved toward our goal of 1% **disability representation** in Asia in 2022 (for 2023, our target is 1.5% disability representation)

Manulife also maintains a microsite available to all employees that features DEI news, events, recordings, and other learning resources.

Some of the strategic activities focused on talent recruitment, retention, and development include focused recruitment efforts from diverse post-secondary schools across North America; offering our employees trainings on allyship, unconscious bias, and inclusive leadership; and an inclusive language initiative that we launched globally for all employees.

Manulife Investment Management embraces the DEI goals adopted by our parent company, Manulife

We aspire to create an inclusive culture and brand with diverse talent that drives high performance



Talent

Diversity at all levels in the organization that's reflective of the communities in which we serve



Culture

We seek to foster a culture where employees belong and can bring their authentic selves to work

\oplus

Community

Strong partnerships and DEI support in the external communities in which we live, work, and serve



Employee recognition 90% of our employees

were recognized through Podium during 2022, with 12,578 awards given.

Source: Manulife Investment Management, as of December 31, 2022.

Employee engagement scores

 2021
 2022

 4.19
 4.22

which puts us in the 66th percentile against Gallup's financial and insurance company benchmark.

Source: Manulife Investment Management, as of December 31, 2022. Engagement scores are rated on a five-point scale.

Gender statistics for Manulife Investment Management

	Female (%)	Male (%)	Another gender (%)
By region			
All	46.5	53.3	0.2
Asia	56.5	43.5	
Canada	50.6	49.0	0.3
Europe	55.4	44.6	
United States	61.0	38.9	0.1
Other	28.0	72.0	
By organizational level			
VP and above	27.7	72.3	
AVP, director, manager	37.9	62.1	<0.1

Source: Manulife Investment Management, as of December 31, 2022. Data excludes staff who chose not to respond/preferred not to disclose; globally, this represented 0.6% of staff. Other includes Australia, New Zealand, Chile, and Brazil.



2

3





Recent sustainability milestones

Since we became a PRI signatory in 2015,⁴ we've enhanced our sustainability practices across asset classes and deepened our involvement in initiatives addressing global sustainability challenges, which we believe can materially affect financial value.

2022

- Participated in the <u>Leading Harvest</u> pilot program in Australia for global standards of farmland certification
- Published our <u>first nature statement</u>, in which we articulate our commitment to assess and manage nature-related risks and opportunities across our investments
- Published our <u>carbon principles</u>, a high-integrity climate benefit methodology
- Launched new thematic strategies
 - Forest climate strategy
 - Climate bond strategy
 - Global climate balanced strategy
 - Sustainable Asia equity strategy

4 Manulife Investment Management was formerly Manulife Asset Management, which signed on to the UNPRI in 2015.

5 Based on GRESB results released October 2022 that cover the 2021 calendar year. Manulife Investment Management paid a per fund submission fee, per year. The GRESB Rating is an overall measure of how well sustainability issues are integrated into the management and practices of companies and funds. For more information about the GRESB Real Estate Assessment, please see <u>gresb.com/nl-en/real-estate-assessment</u>.

6 GRESB. Manulife Investment Management has submitted to the GRE reporting period 2012 through 2022.

7 Based on GRESB results released October 2022 that cover the 2021 calendar year. Manulife Investment Management paid a per fund submission fee, per year. The GRESB Rating provides the basis for systematic reporting, objective scoring, and peer benchmarking of the ESG management and performance of infrastructure funds around the world. For more information about the GRESB Infrastructure Assessment, please see gresb.com/nl-en/infrastructure-fund-assessment.

- Maintained acceptance as a signatory to the <u>UK Stewardship Code</u>
- Developed an internal tool that enables strategies to track underlying emissions metrics
- Received GRESB 5 Star rating for 5th consecutive year⁵
- Recognized as a 10-year GRESB member⁶
- Launched a microsite that illustrates our asset stewardship activities through sustainable investing <u>case studies</u>
- Became a signatory to the <u>EDCI</u>
- The firm's GRESB infrastructure management score for its Infrastructure Fund I earned 29 out of a possible 30 points; its Infrastructure Fund II scored 30 out of a possible 30 points⁷
- Became a signatory to the Institutional Limited Partners
 Association's <u>Diversity in Action</u>

6 GRESB. Manulife Investment Management has submitted to the GRESB Real Estate Assessment at the fund level since 2012, operating as Standard Life until 2015. Recognition given on October 12, 2022, was based on the



2021

- Awarded <u>GRESB</u> Sector Leader designation by placing first in the global real estate peer group⁸
- 100% of our U.S. farmlands is certified under the Leading Harvest Farmland Management Standard⁹
- Published our inaugural stewardship report and accepted as a signatory to the UK Stewardship Code
- Published our first Task Force on Climate-related Financial Disclosures (TCFD)-aligned <u>climate risk report</u> for our real estate portfolio
- Timberland group makes its inaugural impact-first investment to be used primarily for carbon storage
- Launched our first global climate strategy for listed equities
- 82% of global real estate assets held a third-party green building certification¹⁰

8 Based on <u>GRESB results</u> released October 2021 and cover the 2020 time period. GRESB Sector Leaders are the best performers by sector, region, and nature of ownership from across the GRESB Assessments. The entity with the top score, as well as the entities with a score within 1 point of the top score in a category, are recognized as Sector Leaders. The most current data is shown. Manulife Investment Management paid a fee to be considered for the ranking.

9 Certification as of May 17, 2021, by Leading Harvest and is based on an annual assessment of the conformation to the Farmland Management Standard. The most current data is shown. Please see leadingharvest.org. 10 Data is as of December 31, 2021. Based on square footage or building size of the gross floor area of properties in the global portfolio. Totals from different certification standards do not sum as properties with multiple certifications are only counted once. Certifications are provided by LEED, ENERGY STAR Certification, BOMA BEST, GBCA Green Star, BCA Green Mark, NABERS, CASBEE, BOMA 360, and Fitwel.





2020

- Named to the <u>PRI Leaders' Group 2020¹¹</u> for excellence in climate reporting
- Launched new sustainable thematic products
- Joined the Informal Working Group catalyzing the launch of the Taskforce on Nature-related Financial Disclosures (TNFD)
- Began providing sustainability reporting for institutional clients
- First participated in <u>GRESB's Infrastructure Asset Assessment</u>

2019

- Launched internal framework for integration of sustainability factors across equities and fixed income¹²
- Published our inaugural sustainable and responsible investing report
- Joined the Investor Advisory Group of the Sustainability Accounting Standards Board (SASB) Alliance (now known as the International Sustainability Standards Board Investor Advisory Group (ISSB IIAG))
- Rolled out a methodology to incorporate sustainability factors into our sovereign credit model

11 Rating was assessed in September 2020 based on data from 2020 by the Principles for Responsible Investment (PRI) and was based on review of publicly disclosed responses to the PRI's reporting framework on climate change. The most recent data is shown. Manulife Investment Management pays an annual fee to be a signatory of the PRI. For more information on the PRI Leaders' Group 2020 award and methodology, please visit unpri.org.

12 Referenced integration framework for equities and fixed income and sovereign credit refer to Manulife Investment Management's public markets.

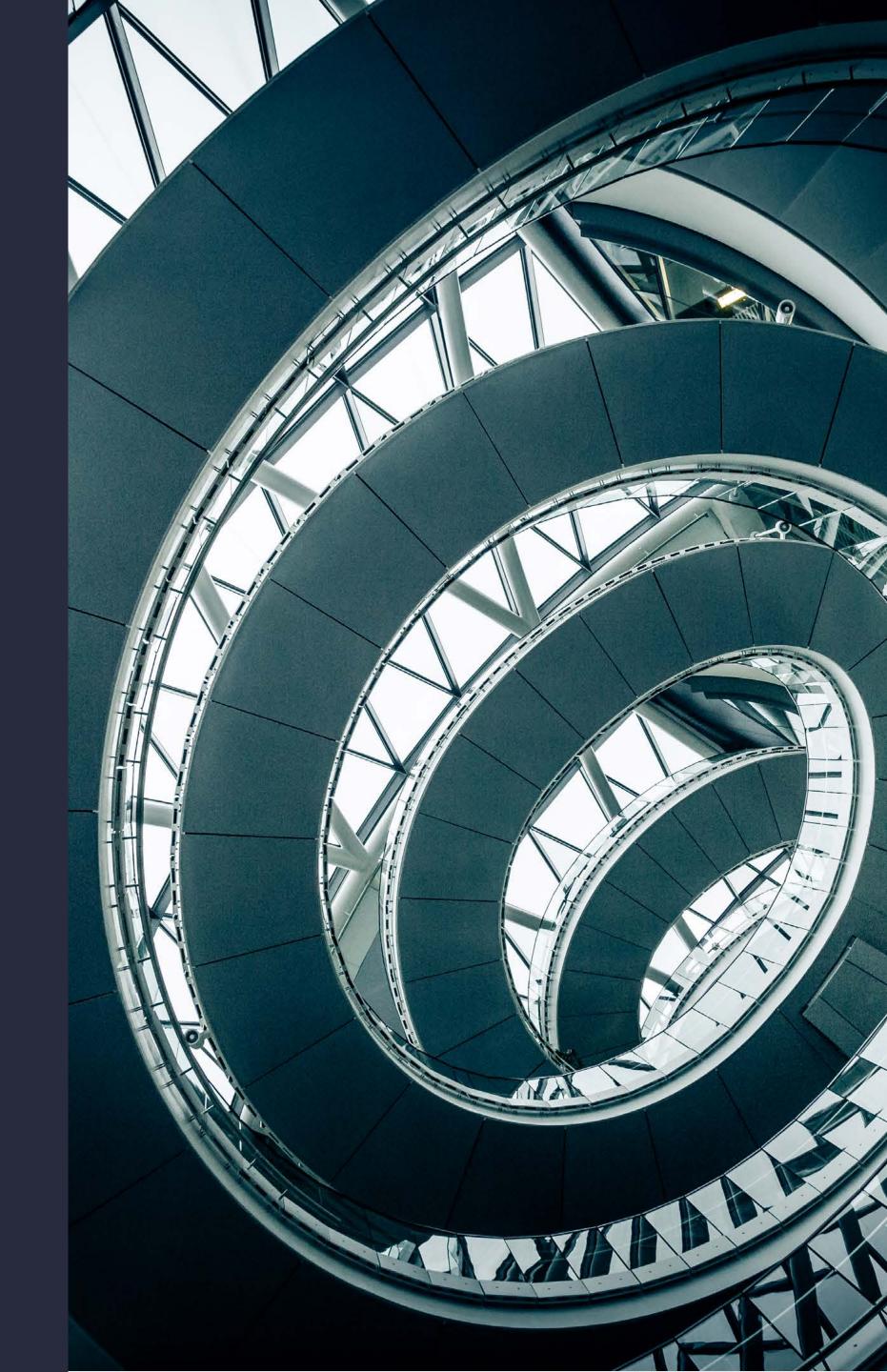






Our sustainability highlights





Advancements in ESG integration

We continued to train our investment professionals on the latest sustainable investing practices and ESG integration. In 2022, training included topics in ESG materiality, carbon standards, emerging sustainability regulation, and climate science and policy. The sustainable investing teams also support an internal ESG information hub in which they collect research and related discussions on sustainability topics.

Our public markets sustainable investing professionals developed a tool to evaluate climate risk at a portfolio and issuer level. This tool is housed on a central global research platform that investment teams and professionals can access.

For private markets, we've added a tool that provides a portfolio view of our sustainability data for real estate. In addition, the tool was updated to our Sustainable Building Standards framework for real estate, which defines requirements and best practices for our third-party property managers and encourages improvement while addressing the need for advancement, guidance, tools, and consistency.

We also added a new physical climate risk tool within our infrastructure, timberland, and agriculture businesses.



New strategies

Forest climate strategy

We launched our forest climate strategy to provide investors with the opportunity to promote climate change mitigation through sustainably managed forests, where carbon sequestration is prioritized over timber production. The strategy seeks to invest in a globally diversified portfolio of sustainably managed timberland assets with strong carbon sequestration potential and high conservation value in the United States, Canada, Australia, New Zealand, and select countries in Europe and South America. The main objectives of the strategy include sequestering carbon, ensuring long-term protection of sensitive habitats, creating additional environmental and social impact through non-timber activities, and providing attractive risk-adjusted returns to investors.

One of the core features of the strategy—and investment philosophy—is our focus on integrity of carbon credits, which is why the strategy also adheres to the principles of the Greenhouse Gas (GHG) Protocol, carbon market protocols, and our proprietary carbon principles, which are aligned with <u>The Integrity Council for the Voluntary Carbon Markets</u> (IC-VCM).

Global climate bond strategy

In meeting client demand for investment in climate change-related solutions, we've developed our global climate bond strategy, which combines elements of climate action and ESG integration.

Understanding that the world's path to net zero needs capital expenditure in green infrastructure, clean technology solutions, and other initiatives by corporate issuers to reduce emissions, the strategy generally focuses on what the management team believes are climate leaders and that exhibit any of the following characteristics:

- Low GHG emissions intensity relative to the portfolio benchmark
- A science-based emissions reduction target
- At least 20% of revenues derived from green solutions and clean technology

In addition, the strategy may invest in thematic bonds where the use of proceeds has climate-related objectives.

Global climate balanced strategy

This asset allocation strategy invests 40% to 60% of assets in our global climate equity strategy (launched in 2021) and 40% to 60% of assets in our global climate bond strategy.

Sustainable Asia equity strategy

Our sustainable Asia equity strategy generally seeks to identify and invest in equity securities for issuers incorporated, located, or listed in Asia that demonstrate strong or improving sustainability attributes.

We believe the emerging and developing nature of economies and companies in the Asia ex-Japan region create many inefficiencies that can be exploited through fundamental analysis, including the analysis of sustainability factors, and we integrate this into our investment process. The strategy has an active focus (positive tilt) on (1) issuers that meet long-term sustainable objectives relative to peers and (2) businesses showing improvement in sustainable practices relative to peers, and the strategy aims to avoid negative impact through normative screening (exclusions). As part of our active stewardship efforts, we strive to engage portfolio companies on material sustainability topics and pursue positive impact through different sustainability themes.



Stewardship

781

82%

certification¹⁴

unique issuers engaged¹³

38

unique influencers, regulators, nongovernmental organizations (NGOs), governments, and vendors engaged¹³

100%

of our 5.4 million acres of sustainably managed timberland is third-party certified¹⁵

479,000

rate of global green building

acres of sensitive lands protected¹⁶

308,000

acres of farmland certified under the Leading Harvest Farmland Management Standard¹⁷

13 Engagement data as of December 31, 2022. Represents equity and fixed-income engagement by Manulife Investment Management's public markets. **14** As of December 31, 2022. Based on square footage or building size of the gross floor area of properties in the global portfolio. Totals from different certification standards do not sum as properties with multiple certifications are only counted once. Certifications are provided by LEED, ENERGY STAR Certification, BOMA BEST, GBCA Green Star, BCA Green Mark, NABERS, CASBEE, BOMA 360, Fitwel. **15** As of December 31, 2022, 100% of our forests were certified under either Sustainable Forestry Initiative® (SFI®) (3.2 million acres in the U.S. and Canada) or Forest Stewardship Council® (FSC®) (2.2 million acres in Australia, New Zealand, Brazil, and Chile). The most current data is shown. **16** Sensitive lands are critical habitat or lands with high cultural value on our properties that are protected or managed for purposes outside of timber production. We work closely with environmental groups to consummate conservation transactions that will protect these lands. **17** Manulife Investment Management worked collaboratively with sector peers and nonprofit organizations to develop the standard while completing our inaugural examination in 2019. As of June, 2022, more than 300,000 acres have been third-party certified to the Leading Harvest Management Farmland Standard. Oliver Williams, senior managing director and head of agriculture investments, is on the Leading Harvest Economic Chamber. Please see leadingharvest.org.



Accepted as a signatory to the UK Stewardship Code



Global collaboration

To help inform our sustainable investing practices, we engage with sustainability-focused organizations including:

<u>30% Club Canada Investor Group</u>—We're an active member and participant.

<u>AIGCC</u>—We're a member of the Asia Investor Group on Climate Change (AIGCC) working groups and chair the physical risk and adaptation working group. We helped develop the Expectations on National Adaptation Plans in Asia, which was brought to COP 27 in late 2022.

<u>CDP Non-Disclosure Campaign</u>—We supported the campaign to boost transparency and drive up rates of corporate disclosure of carbon emissions.

<u>**Ceres' Valuing Water Initiative**</u>—We're a member of the Investor Water Hub, Private Equity Working Group, and founding member of the Valuing Water Investor Working Group.

<u>**Climate Action 100+**</u>—A founding member since 2017, we've continued to engage and encourage firms to improve climate-related governance and disclosures and reduce emissions across their value chains.













Finance for Biodiversity Pledge—We joined the advisory board of the Finance for Biodiversity Foundation.

PRI—We're a member of <u>several working groups</u>:

- Infrastructure Advisory Committee (chair)
- Real Estate Advisory Committee (member)
- Sovereign and Sub-Sovereign Debt Advisory Committees (member)
- Listed Equity Advisory Committee (member)
- Stewardship Initiative on Nature Signatory Advisory Committee (member)

<u>ULI</u>—We're a member of the Mapping ESG Steering Committee for the Urban Land Institute (ULI).

WBCSD—We participate in the <u>World Business Council for Sustainable</u> <u>Development's</u> (WBCSD's) Forest Solutions Group and Nature Action projects.



PR Principles for Responsible

Urban Land

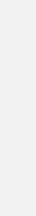


SRI report 2022











Taking action on climate and biodiversity

Nature-positive ecosystem

In 2022, working in partnership with the Delphi Group, we mapped the landscape of opportunities for nature action and released the "<u>Nature-positive ecosystem</u>," a practical guide to major initiatives focused on protecting and restoring nature.

As members of the WBSCD, we collaborate with other members to advance sustainable development. Last year, we co-led a project with other forest sector companies to develop the Forest Sector Nature-Positive Roadmap.

82%

of our global real estate equity portfolio is certified to a green building standard, such as LEED, ENERGY STAR, or BOMA BEST.¹⁴



is the estimated amount of CO₂e removed from the atmosphere by our managed forests and farms on a five-year rolling average.

We adopted our own carbon principles for timberland assets

Published as a high-integrity <u>climate benefit methodology</u>, aligned with <u>IC-VCM</u>, we integrate these principles into our acquisition screening for existing carbon projects and into our new carbon project development processes.

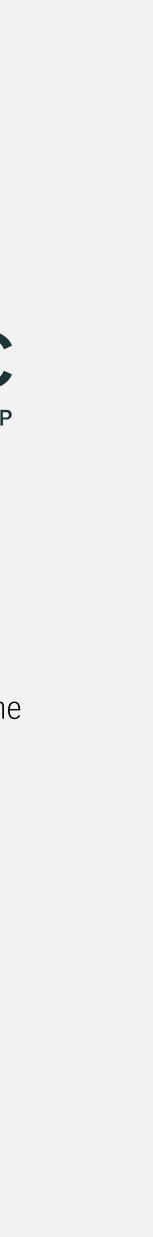
2.1M tCO₂e



We joined the Asian Utilities Engagement Program, which, as part of the AIGCC, focuses on some of the largest emitters in Asia that aren't currently covered by the Climate Action 100+ initiative.

We're currently leading several of these engagements to encourage issuers to make progress toward lowering emissions.

27



Recognition

Retained signatory status to the <u>UK Stewardship Code</u>

Earned a Green Star ranking in all six of our <u>GRESB real estate</u> submissions, including three 5-star ratings for the fifth consecutive year⁵

Recognized as a 10-year GRESB Participant Member¹⁸

Retained our Avant Gardist rating in the <u>2022 Responsible Investment</u> Brand Index¹⁹

18 GRESB. Manulife Investment Management has submitted to the GRESB Real Estate Assessment at the fund level since 2012, operating as Standard Life until 2015. Recognition given on October 12, 2022, was based on the reporting period 2012 through 2022.

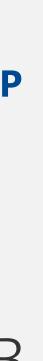
19 Based on Hirschel & Kramer Responsible Investment Brand Index (RIBI[™]) results released on March 2023 covering calendar year 2022. The Brand Index compromises two ratings: the commitment rating and the brand rating. Avant Gardist represents an above-average rating in both categories. Manulife Investment Management paid a fee in order to use the Avant Gardist logo once it had been awarded. For more information on the award and methodology, please visit <u>ri-brandindex.org</u>.







SRI report 2022





Recognition

In response to promoting healthy buildings, in 2022 our real estate portfolio in North America received Fitwel Viral Response Approval across 44 properties, furthering our commitment to the ongoing health and well-being of tenants, employees, and partners.²⁰

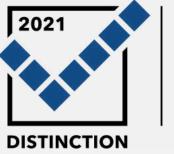
As a result of our focused efforts to support health and wellness within our real estate portfolio in 2022, we achieved the designation of Fitwel Champion.²¹ This achievement demonstrates a commitment to creating healthy spaces. As of December 31, 2022, we achieved 16 Fitwel Scorecard certifications and 67 Fitwel Viral Response Certifications.²²

We were named the world's largest natural capital investment manager by IPE.²³

20 Total rolling certifications since 2020, as of February 28, 2022, by the Fitwel Viral Response Module for our efforts to ensure our properties are ready for a safe and healthy return to work. Certification is valid for 12 months. Please see <u>fitwel.org/viral-response-module</u>.

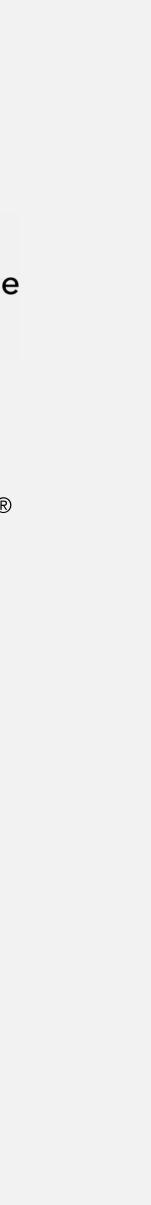
21 Fitwel Champions are companies that own, occupy, or manage commercial and residential properties and have committed to using Fitwel at a portfolio scale. Fitwel Champion status is achieved when a company registers 20 assets when signing and certifying at least 10 or more projects over a 24-month period. Manulife pays a fee by building to be certified.

22 Certification by Fitwel, based on square footage or gross floor area of the building. Certification date varies by property and is valid for 12 months. For more information, visit <u>fitwel.org/certification</u>. **23** IPE research, as of May 5, 2023. Ranking is based on total natural capital AUM, which includes forestry/timberland and agriculture/farmland AUM. Firms were asked to provide AUM, and as of dates vary from December 31, 2021, to December 31, 2022.



Fitwel[®] Viral Response Certified

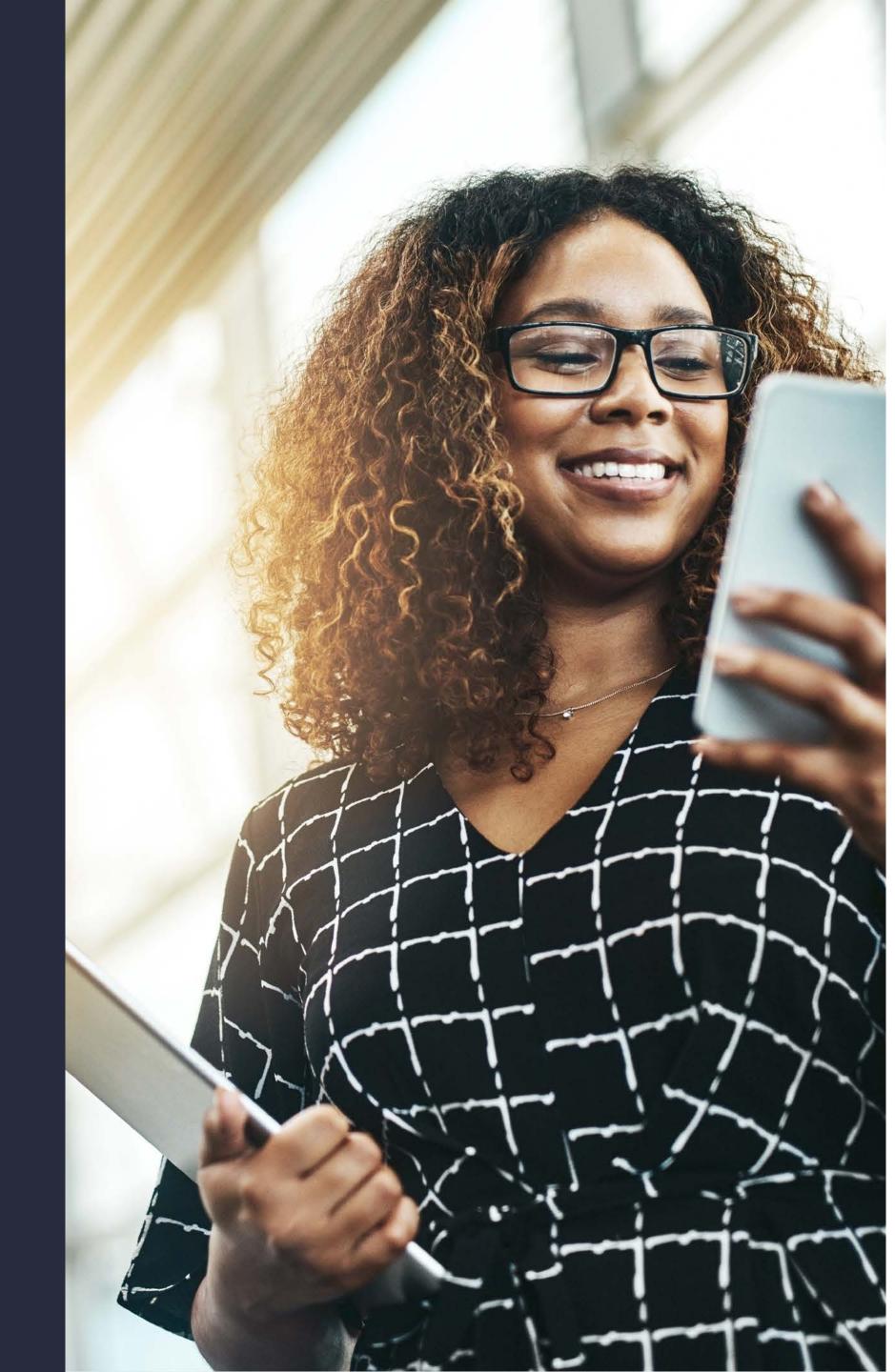






Our role as investors





Our purpose is embedded in our strategy and culture

As a global active investment manager, in-depth research and analysis drive our investment activities and shape our daily decisions.

With a culture steeped in objective analysis, knowledge sharing, and global collaboration, we actively incorporate the careful analysis of sustainability factors in our investment strategies.

In our view, sustainability is an important driver of financial value, while robust stewardship practices help us build strong relationships with all our stakeholders, from clients and employees to tenants, borrowers, and investment partners.

This belief manifests across the different facets of our global business as operators of private assets, equity holders, and debt holders. These different facets of our identity enhance our stewardship efforts as they allow us to leverage fundamentally different perspectives in our daily activities.



Our beliefs support our culture of stewardship

Manulife Investment Management's commitment to sustainable investing is driven by our beliefs.

Sustainability factors can have a material impact on financial value

We believe sustainability factors can materially affect financial value; therefore, we see value in integrating the analysis of sustainability risks and opportunities into our investing processes.



A sustainability risk is any ESG event that, if it occurs, could or will have a material negative impact on the value of investments we make for our clients (sustainability risks). Sustainability or ESG factors include environmental, social, and employee matters; respect for human rights; and anti-corruption and anti-bribery matters (sustainability factors). Please see our sustainable investing and sustainability risk statement for further details.

Active managers have a stewardship advantage

We believe active managers are well placed to manage stewardship effectively, as we're able to bring our experience to work with company management to encourage effective change. Where we operate assets, we believe it's our responsibility to pursue the best sustainability processes and standards for our firm, our employees, and our clients.



We believe in offering clients sustainable investing choices

We believe in offering choices to investors, from ESG integration to impact investments. A broad range of products enables investors to better meet an equally broad range of goals.







How we help our clients

Our sustainable investing capabilities are broad, ranging from ESG integration to thematic investing.

- We seek to support our clients' objectives by leveraging our sustainability and investment expertise across a broad range of public and private asset classes, as well as by offering multi-asset solutions.
- We continuously seek to enhance our product offerings and our reporting in line with industry standards and best practices.
- We take a consultative approach to meeting our clients' sustainability objectives.
- We host sustainability education and training for our employees, clients, and other industry participants.

One of our core Manulife values is that we obsess about customers. This value drives us to collaborate with our clients and beneficiaries to understand and strive to meet or exceed their needs and to work with them on accessing that part of our sustainability offering that's most suitable for pursuing their objectives.

Robust communications

We work hard to understand the needs and objectives of our clients through regular interactions and endeavor to speak directly with each client on an annual basis. In these discussions, we elicit clients' feedback on their investment goals and will specifically review sustainable investment goals as directed by individual clients.

We're a global asset manager investing not only across multiple asset classes but also serving clients across geographies, and the awareness and understanding of sustainable investing among our clients vary. Some clients are very knowledgeable about sustainable investing and integration and may request specific actions or

ESG data metrics or ask us to fill out a questionnaire on our ESG practices. Others will articulate requirements in an investment policy statement that can cover preferences ranging from investment objectives and time horizons to risk tolerance and asset mix. We use this to better inform our client reporting and ensure that we're continually educating as well as being transparent.

- **PRI assessment**—As signatories to the PRI, we publish our annual assessment report in line with the PRI's reporting cycle. Clients will sometimes use this report as a springboard to a deeper dive into our active ownership and investing activities.
- Asset class-specific sustainability reports—We publish annual reports for our agriculture, real estate, and timberland asset classes.
- Stewardship report—On an annual basis, we publish a report focusing on our culture of stewardship, risk management, and how our active ownership practices are driven by our client and stakeholder focus.
- **<u>Proxy voting dashboard</u>**—We disclose our quarterly public markets proxy voting records, which can be accessed through our institutional investor website.
- **<u>Climate-related financial disclosures report</u>**—This annual public report uses the TCFD framework to report on strategy, governance, risk management, and metrics and targets related to climate change in our business.
- **<u>Case studies website</u>**—We regularly publish new case studies on our institutional investor website that highlight the issues, actions, and outcomes at the core of our sustainability and stewardship efforts.

Our clients routinely request customized reporting to supplement our public reports. On request from a client, for example, we'll provide more detailed information of the engagement and proxy voting activities we undertake in relation to holdings in that client's portfolio. We may share specific engagement outcomes or a review of votes on shareholder proposals to provide information as to how we practice stewardship on behalf of an asset owner. For private markets assets, we provide ESG data collected from our sponsors and portfolio companies to the EDCI.



33

Our approach to sustainable investing



Our approach to sustainable investing rests on three pillars: integration, stewardship, and collaboration. While their expressions may vary by asset class and investment team, each pillar is fundamental to our investment approach and forms the basis on which we pursue our sustainability objectives and those of our clients.

Integration

- In alignment with our clients' financial objectives, we incorporate material ESG considerations throughout the stages of our investment and asset ownership lifecycles³
- Seek to strengthen the potential risk/reward profile of our clients' portfolios
- Exercise rights to encourage best practices in sustainability factor reporting and management (e.g., proxy voting)



Stewardship

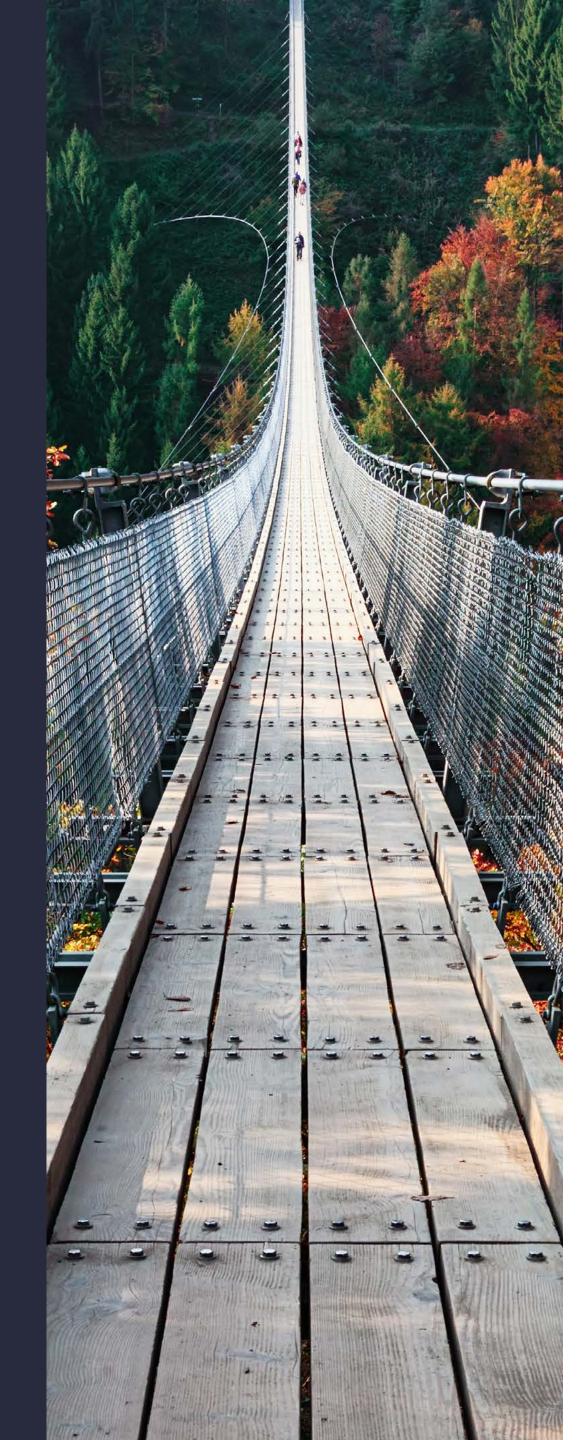
- Engage with companies to address sustainability-related challenges and enhance sustainability-related opportunities
- We seek to protect and enhance the value of assets we operate

Collaboration

- We seek to collaborate with organizations across the world to amplify our impact on global, systemic issues
- This work allows us to expand the scope of our sustainability-focused activity as we strive to build more resilient portfolios







Our integration practices grow from the investment philosophies and approaches of our investment teams across asset classes. The approach of each team practicing this integration is informed by the global and regional perspectives of our 27 sustainability professionals. This support extends across the investment, product, and asset class lifecycles and includes:

- Training and education
- Guidance on exercising rights

Internal assessments of our ESG integration efforts

Manulife Investment Management has developed a proprietary, internal system to assess and monitor the level of each team's ESG integration efforts in public markets asset classes. We understand that sustainable investing requires ongoing change and improvement, and we look forward to implementing a number of additional assessment criteria to assess and measure our investment teams' progress. Most recently, our multi-asset team achieved our highest level of ESG integration, using a framework for evaluating aspects of sustainability risks and opportunities that align with their investment process.³

In private markets asset classes, all of our strategies are ESG integrated.

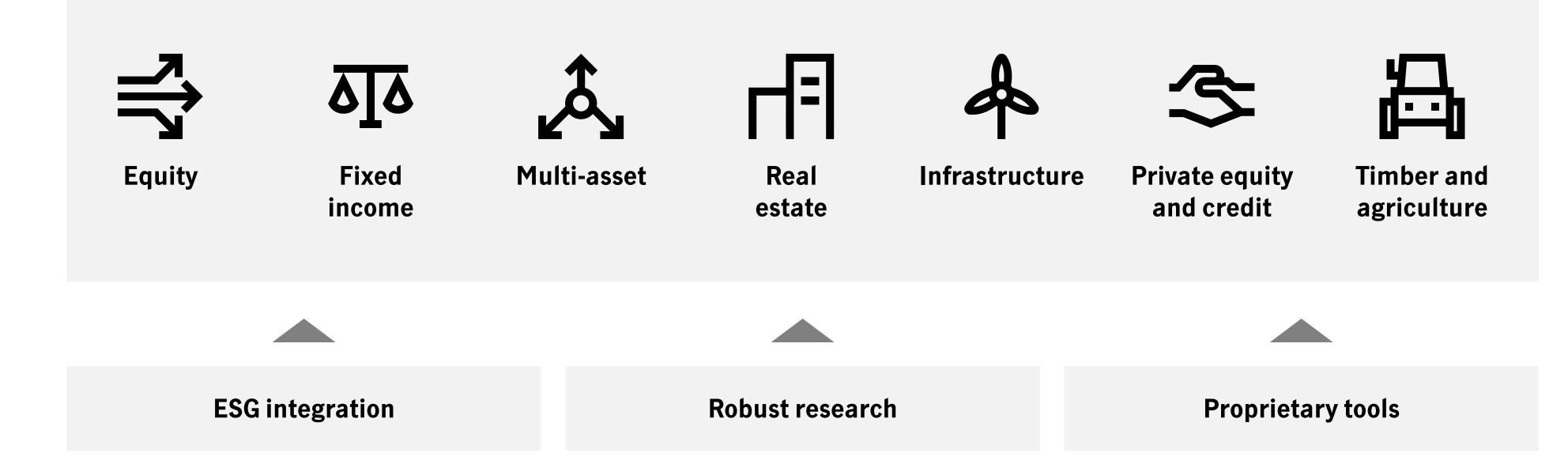
Integration

We combine active investment management with a deep understanding and integrated analysis of sustainability issues.

- Analysis of sustainability risks and opportunities
- Development of tools to aid sustainable investing
- Frequent communication of ESG information
- Engagement with management teams



Integration of sustainability analysis is owned and applied by each investment team²⁴



24 For illustrative purposes only. We seek to incorporate material sustainability considerations throughout the stages of our investment and asset ownership lifecycles, taking into account the characteristics of the asset class and investment process in question, as well as industry and geography, among other factors. Each investment team operates in different markets and with different nuances to its approach to investing. Accordingly, each team integrates sustainability factors into its investment process in a manner that best aligns with its investment approach. Exception to this are strategies where a sustainability integrated investment approach is impractical or impossible; for example, in relation to certain instrument types where sustainable comparable alternatives are unavailable, passive products, funds that invest in derivative instruments, products managed in accordance with specific client objectives, and delegation to third-party investment managers. Refer to Manulife Investment Management's sustainable investing and sustainability risk statement for further details. Integration of equity and fixed income is by Manulife Investment Management public markets only. Integration of real estate, infrastructure, private equity and credit, and timberland and agriculture is by Manulife Investment Management private markets only.



The spectrum of our sustainability offering

ESG integration (including active ownership)

Consideration and analysis of financially material sustainability risks and factors as part of investment decision-making Negative (and normsbased) screening²⁵

Industry sectors or companies excluded/ divested from to avoid risk or to better align with client values

For illustrative purposes only. A sustainability risk is any ESG event that, if it occurs, could or will have a material negative impact on the value of investments we make for our clients (sustainability risks). Sustainability or ESG factors include environmental, social, and employee matters; respect for human rights; and anti-corruption and anti-bribery matters (sustainability factors). Please see our sustainable investing and sustainability risk statement for further details.

25 Applicable to public markets strategies.

Positive or best-in-class (and normsbased) screening²⁵

Investments that target companies or industries with better sustainability performance Thematic/ sustainabilitythemed investments

Investments that specifically target sustainability themes (e.g., clean energy, green property, climate mitigation, Sustainable Development Goals (SDGs)-aligned solutions)



Stewardship

We recognize the critical connection between deciding to invest and maintaining a strong program of stewardship to protect each of our investments. The central objective of our approach is to strengthen the potential risk/reward profile of our clients' portfolios.

In public equities and fixed-income portfolios, one aspect of our stewardship efforts is to engage with company management. We use our findings from these engagements to help determine intrinsic valuation, and we also collaborate with issuers through these conversations to encourage best practices related to issuer-specific sustainability factors.

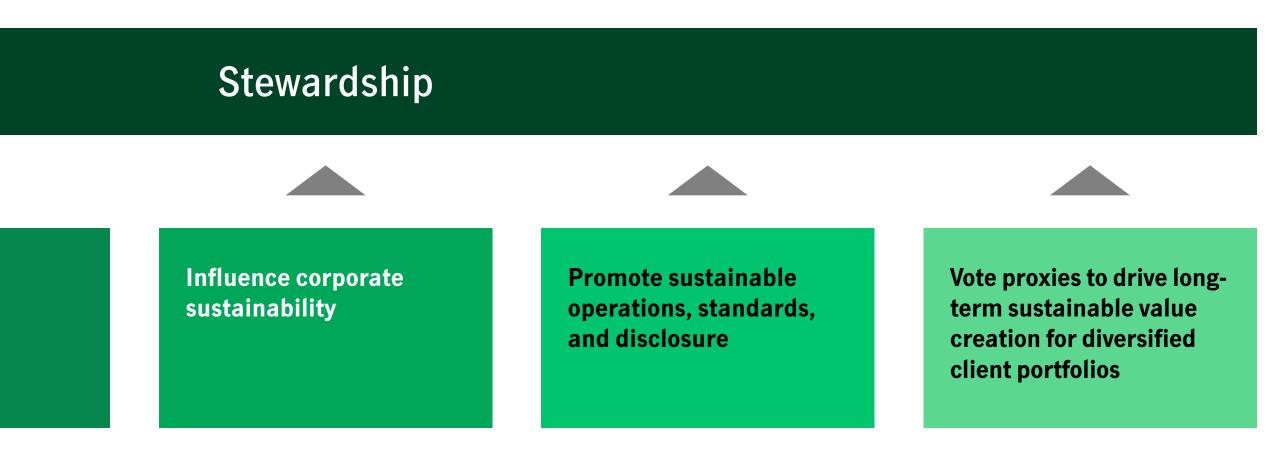
In our private markets portfolios, we're frequently investors in and simultaneously operators of assets, which we believe gives us a unique perspective on sustainable business practices and concerns. For example, where we invest assets in our real estate, timberland, and agriculture portfolios, we seek to enhance the value of our assets while, in turn, having a positive impact on our stakeholders. In our infrastructure and PE&C investments, we focus on building strong relationships with companies, sponsors, and co-investors, which enables us to take a meaningful approach to sustainability and enhances our influence over key assets and portfolio companies.

Moreover, as long-term investors and as a steward of our clients' capital, we're able to use our broad experience with sustainability implementation, research, governance, and collaboration to manage sustainability risks and opportunities over extended time horizons across asset classes.

Stewardship activities can advance financial objectives and operating strength

ESG integration and engagement

Participate in collaborative engagements and working groups





From engagement volume to a focus on outcomes

Both the investment and sustainability professionals at Manulife Investment Management have conversations with issuers across our holdings. We shifted our focus from scaling up the volume of conversations to outcome-oriented engagement and seeking to influence firms to enhance their practices and mitigate the impact of material sustainability risks. Although we recognize that this focus on outcome-based engagements can take months—if not longer—to achieve our desired results, we believe our focus on collaboration with firms to mitigate risk is beneficial to our portfolios and clients over the longer term.

You can find highlights of our engagement activities on our case studies website.

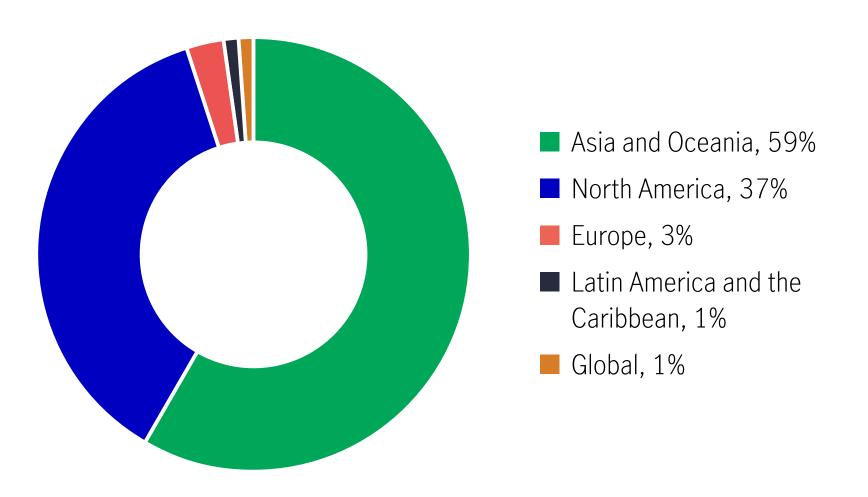
1,271 781

total engagements in 2022²⁶

unique issuers engaged

unique influencers, regulators, NGOs, governments, and vendors engaged

All engagements by region²⁷



26 May have multiple engagements with a single party. 27 The global category includes vendors, nongovernmental organizations (NGOs), and influencers with a worldwide focus and coverage. Mexico is included in the Latin America and Caribbean category. Percentages may not add up to 100% due to rounding.



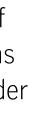


Thoughtful execution of proxy voting rights

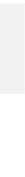
Manulife Investment Management's public markets teams execute proxy voting rights in accordance with our global proxy voting policy and procedures. Where Manulife Investment Management is granted and accepts responsibility for voting proxies for client accounts, we'll seek to ensure proxies are received and voted in the best interests of our clients. We take a thoughtful approach to voting that involves voting decision reviews and suggestions from our investment and sustainability professionals through the lens of our proxy voting principles. Our proxy voting principles outline our general approach to proxy voting matters, including director elections, executive remuneration, shareholder rights, and sustainability issues. Some high-level voting trends for accounts where we have proxy voting authority across shareholder proposal types are listed below.

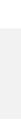
	Shareholder proposals	Number of proposals	Votes contrary to management	Reasons voted contrary to management
Environmental	Reporting on climate change	53	68%	Disclosure would help shareholders assess governance and strategy related to the management of physical and transition risks associated with climate change
	Greenhouse gas emissions	39	77%	Adoption of mid-term and long-term targets encourages emissions reductions and reduces risk
Social	Diversity, equity, and inclusion (DEI)	62	79%	 Disclosure could provide reporting on gender pay gap risk Reporting on DEI could help shareholders assess human capital management
	Health and safety	24	46%	Information on product safety can help shareholders assess risks to human health and consumption patterns
Governance	Compensation	84	69%	 Disclosure of compensation details helps shareholders assess alignment of management with shareholders Support robust clawback policies
	Shareholder rights	130	88%	 Support expanding right of shareholders to call a special meeting Support simple majority vote standard to elect directors

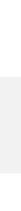
Source: Manulife Investment Management, as of December 31, 2022.



































Collaboration

Around the globe, we participate in a wide variety of collaborative engagements with industry peers, nonprofits, NGOs, and supranational entities. This work allows us to expand the scope of our sustainability-focused activity as we seek to build more resilient portfolios. Our collaborative engagements may focus on individual investments or systemic risks—and sometimes both.

Market education We engage with a wide range of industry participants and seek to be a leading voice



While participating in a variety of collaborative engagements, we retain discretion and make unilateral and independent investment decisions.

We seek to amplify our impact through global collaboration



Regulatory/policy focus

We consult and collaborate globally to influence the regulatory landscape and encourage sustainability best practices



Issuer focus

We address systemic risks by working toward outcomes at individual issuers

In 2022, we contributed to and supported many collaborative initiatives in our capacity as lead investor, founding member, supporting member, or group participant. Themes included climate, corporate governance, nature and biodiversity, and policy development. For more information, please see our stewardship report.

> Please see the <u>appendix</u> for a list of industry groups and initiatives through which we collaborate on systemic sustainability issues.



Sustainable investing in action

Listed equities

AUM: \$133.2B²⁸ Investment professionals: 165+²⁹

Overview and highlights

- We launched our sustainable Asia equity strategy, which invests in companies that demonstrate strong or improving sustainability attributes.
- We supported a total 56% of shareholder resolutions and over two-thirds of shareholder resolutions related to climate, in aggregate, across all equity holdings in active and passive portfolios. This reflects our view that climate change represents a clear financial risk that poses systemic challenges.

28 Manulife Financial Corporation, as of December 31, 2022. Excludes subadvised AUM. Assets are shown in Canadian dollars. AUM includes certain equity and fixed-income portions of balanced investments. The methodologies used to compile the total AUM are subject to change. 29 Manulife Investment Management's global investment professional team includes expertise from several affiliates and joint ventures; not all entities represent all asset classes.

Integration

The sustainable investing framework employed within our equity portfolios is an extension of our fundamental, bottom-up research. Each equity team bears responsibility for the evaluation of sustainability factors throughout the due diligence and decision-making processes in the pursuit of attractive riskadjusted returns and capital preservation objectives. Each team integrates sustainability factors in a manner that best complements its own unique strategies. Although each team has a unique investment process, the overall approach to ESG integration is consistent for the asset class and occurs throughout the investment lifecycle of due diligence, risk monitoring, and active ownership. Through their fundamental research process, the equity teams derive a risk/reward profile incorporating sustainability risks and opportunities that can help shape the teams' modeling and define sensitivities around their estimates of fair value.

We believe that seeking to address systemic risks is a key element in ESG integration. We also seek to address systemic risks in our thematic products, such as our global climate equity strategy, in which we endeavor to identify climate leaders and those companies that are implementing real-world decarbonization activities.



Listed equities (continued)

Stewardship

We're signatories to various stewardship codes (including the UK Stewardship Code) to support our belief that sustainable investing requires discipline and appropriate governance frameworks. Our stewardship activities are evident in the extensive engagement discussions between the investment teams and the companies they work with. Complementing these engagements are escalation techniques deployed in the event of failure to make progress.

Our stewardship for the equity asset class includes both corporate engagements and proxy voting.

We take our active ownership responsibility seriously. In 2022, we voted contrary to management's recommended vote on 13% of proposals. These include instances where we:

- Voted against directors largely due to board independence and diversity concerns, but also against directors at a subset of companies due to executive remuneration, shareholder rights, and environmental/social issue concerns
- Voted against proposals to approve executive compensation and equity plans where we had concerns of pay-for-performance misalignment, problematic pay practices and plan structures, and potential dilution of shareholders' ownership
- Voted for shareholder resolutions in order to encourage issuers to improve transparency and management of environmental, social, and corporate governance factors. Looking at shareholder climate proposals more specifically, we supported over two-thirds of the resolutions

Collaboration

We believe collaboration on systemic sustainability issues is aligned with our fiduciary duty to our clients as an asset manager. Through collaborative engagement, working with industry partners and sustainability-focused organizations, we seek to amplify our collective impact, reduce the noise of numerous points of view by unifying our message to key corporate management teams, and help companies focus on setting goals with meaningfully positive outcomes. In these efforts, we leverage the full range of knowledge available to us across our global platform. While participating in a variety of collaborative engagements, we retain discretion and make unilateral and independent investment decisions.

During the year, we dedicated a portion of our institutional investor website to feature illustrative examples of engagements, including equity-focused examples in which we met with companies to encourage action to mitigate sustainability risks to enhance long-term value.

PRI Listed Equity Advisory Committee — As a member of the PRI Listed Equity Advisory Committee, we provide input, advice, and insight to support the design and development of an ambitious strategy for listed equities that reflects the need for action to address critical sustainability issues.



Case study Advising on sustainability disclosures at a small-cap tech company

Issue: We initiated a position in an ~\$1 billion market cap developer and manufacturer of semiconductor process equipment in August 2020. At that time, company management efforts on identifying, managing, and reporting on sustainability risks and opportunities were still nascent. The company provided limited disclosures and had yet to complete a materiality assessment. MSCI rated the company BB in October 2019.

Action: We engaged with company management as part of our due diligence to deepen our understanding of ESG issues that underpinned the company's strategy and valuation. The engagement also informed our assessment of the business's quality, as well as opportunities and risks. We also used the engagement to offer our own expertise and views on sustainability practices and disclosure. To that end, we provided an introduction to sustainability factors, walked management through a basic checklist of potential areas of improvement, and assisted in the development of pertinent sustainability information on the company's website.

Outcome: In 2021, the company released a robust corporate and social responsibility (CSR) report with pertinent data, including historical energy usage and gender makeup of the workforce. With continued engagement, the company released a more robust CSR report in 2022 with goals such as increasing renewable energy usage and the female employee count. The company now has one of the most detailed disclosure patterns of any small-cap company we follow.

The company has seen steady improvement in their ESG rating as well. MSCI rated them up three steps, from BB to AA, which places them in the top 20% of all semiconductor companies, regardless of market cap size.³⁰

Our ESG journey with the company will continue through our ongoing support and perspectives on sustainability issues and disclosure.

30 MSCI, as of January 17, 2023.





Fixed income³¹

AUM: \$239.7B³² Investment professionals: 175²⁹

Overview and highlights

Sustainability risk analysis is an integral part of our credit research process (excluding securitized and money market assets). Our fixed-income teams adapt their approach to ESG integration, stewardship, and collaboration with both internal and external stakeholders to meet the unique considerations of their respective strategies and the regions in which they operate.

31 Manulife Investment Management defines fixed income in this context as public fixed income and may include corporate bonds, sovereign bonds, municipal bonds, preferred income, and securitized debt. The information in this section of the report relates to these types of fixed-income investments that are managed by Manulife Investment Management public markets. **32** Manulife Financial Corporation, as of December 31, 2022. Excludes subadvised AUM. Assets are shown in Canadian dollars. AUM excludes liability-driven investing assets and includes certain equity and fixed-income portions of balanced investments.

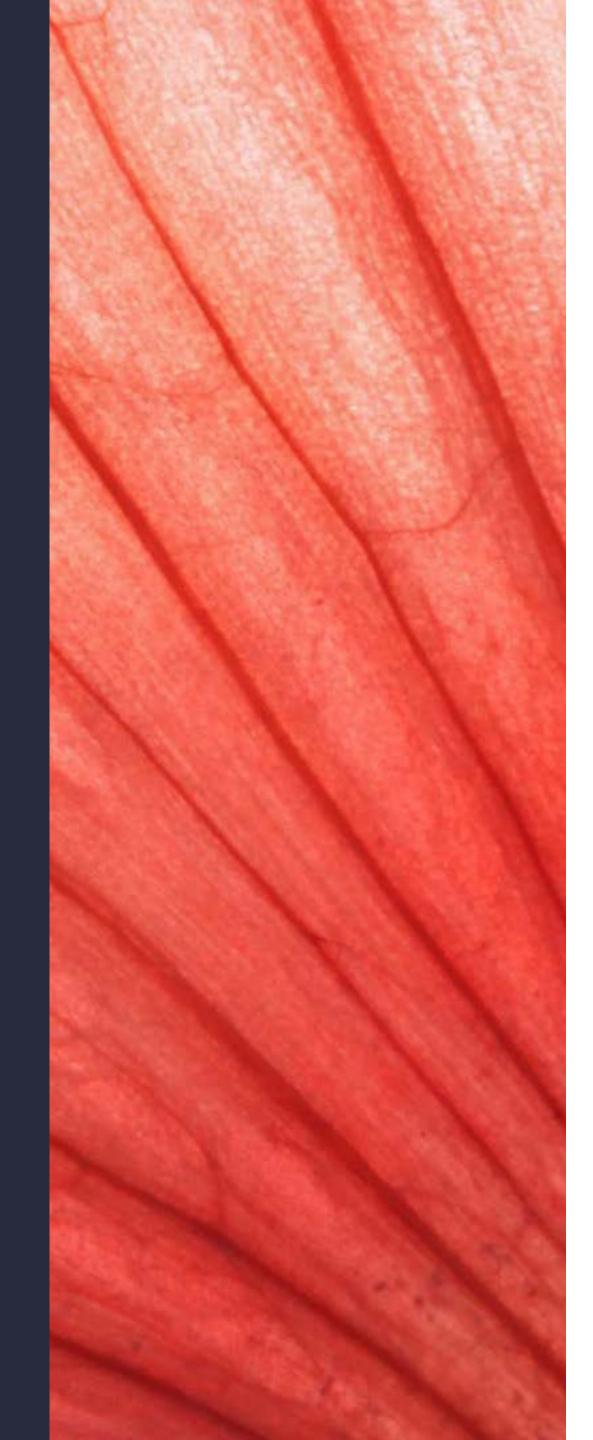
Integration

Our approach to fixed-income ESG integration is adapted to identify the material issues within each industry. In addition to the materiality of sustainability risks, where appropriate, our investment professionals seek to assess the timing of likely impact. Credit analysts are responsible for completing an ESG risk assessment and can use the ESG risk profile to adjust the relative value ranking of names within a given industry.

Across our fixed-income strategies, our investment teams have access to a variety of tools that support their ESG integration processes. Examples include our:

- **Proprietary sovereign ESG risk model**—A unique product of collaborative work between our sustainable investing team and veteran sovereign debt and multi-sector fixed-income professionals
- **ESG credit risk analysis template**—Helps our teams assess the potential impact of sustainability factors on spreads and default risk





Fixed income (continued)

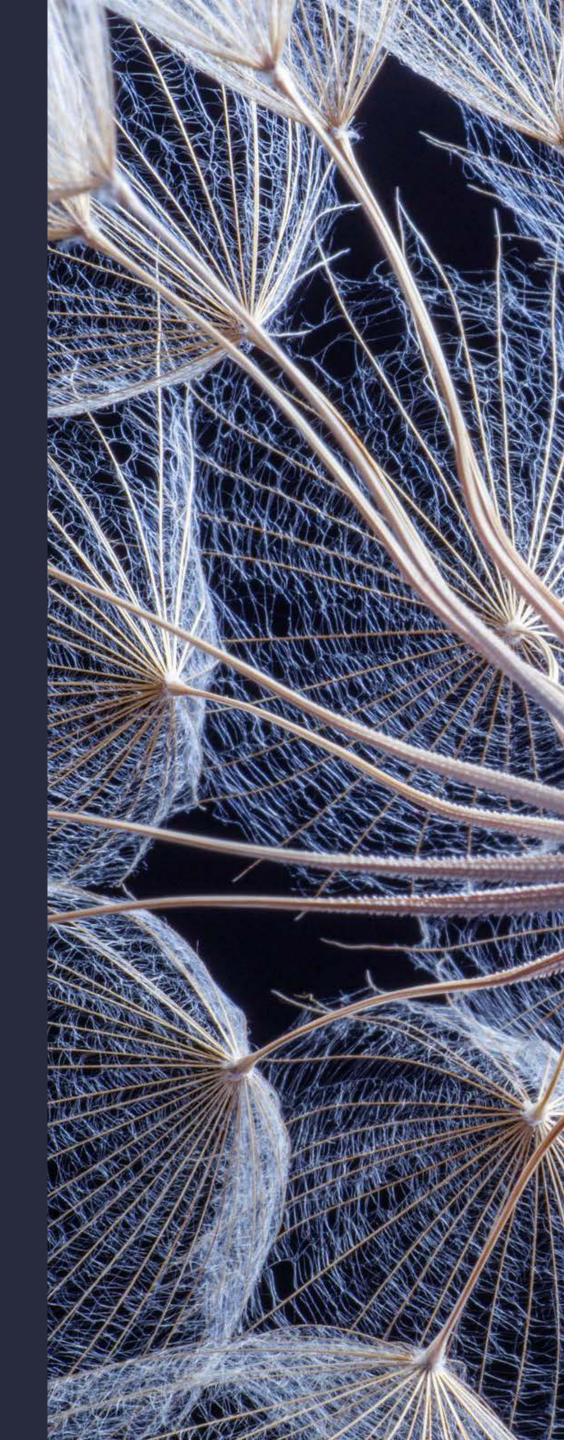
Stewardship

We engage with issuers on various sustainability topics, which gives us insight into their respective business models, strategies, and risk profiles. The representatives with whom we speak can differ by fixed-income asset type: With corporate bonds, we seek to interact with senior management teams. When engaging sovereign and municipal bond issuers, we'll seek to speak with a government representative in an environmental or financial role and local finance and elected officials. For securitized debt, we engage management teams, investment bankers, rating agencies, and industry trade associations. Through our engagements as bondholders, we seek to protect and grow invested capital while also supporting the resiliency of the capital markets.

By engaging with companies when they need to fundraise, we can also influence those issuers to commit to adopting best practices in sustainable risk mitigation. Through credit events, we may also have the opportunity to renegotiate terms or may emerge from the event with equity and voting rights that we exercise to protect our stakeholders' interests. Ultimately, we aim to strategically time our engagements in order to maximize our influence.

We continue to build our influence over debt issuers and are finding that bondholders may be not be fully exercising their rights to advance sustainable outcomes. We've heard from some issuers, for example, that they're generally not engaged by debt holders on sustainability risks and opportunities and can be appreciative when we approach them. This feedback is encouraging to us, and we've learned that firms are generally receptive to our feedback as debt holders.





Fixed income (continued)

Collaboration

We engage collaboratively with other investors, industry experts, and issuers to discuss systemic, secular risks. We may also join a collaborative effort as a means of escalation regarding risks at a single issuer.

• Credit Roundtable—We're a member of the Credit Roundtable, an association of corporate bond market participants focused on education, outreach, and advocacy designed to give debt holders a stronger voice with debt-issuing companies.

• PRI Sovereign Debt and Sub-Sovereign Debt Advisory Committees—Our global head of ESG integration and an associate portfolio manager in our Canadian fixed-income team are on the PRI Sovereign Debt and Sub-Sovereign Debt Advisory Committees, respectively. These committees include representatives from PRI signatories who are focused on promoting more systematic and transparent ESG integration in sovereign/subsovereign debt investing. In their role as committee members, we contributed to published papers, including:

ESG engagement for sovereign debt investors—Assessing current market practices and identifying opportunities for investors to better engage with sovereign issuers

• **The thematic ESG approach in U.S. municipal bonds**—Highlighting tailwinds in municipal bond investors' adoption of a thematic ESG approach and the ways in which municipal bonds can contribute to sustainability outcomes

• **<u>TCFD</u>**—Our Japan fixed-income team is an active participant in the Japanese government-backed TCFD Consortium, which fosters valuable disclosure of climate-related risks by member companies.

• **EMIA**—We're a member of the Emerging Markets Investor Alliance (EMIA), a nonprofit organization that enables institutional emerging-market investors to support good governance, promote sustainable development, and improve the adoption of ESG best practices. We're part of EMIA's debt and fiscal governance working group, which brings together institutional investors, policy experts, and government finance officials with the goal of advancing fiscal transparency and sustainability in emerging markets. We're also a member of the organization's agriculture, ESG, and extractive industries working groups.



Case study

Using debt restructuring and collaboration to secure favorable terms

Issue: A Chilean mobile telecom company announced a plan in 2022 to repurchase about 30% of its outstanding bonds; the offer, however, included a proposal to exclude operating leases from total debt in the leverage covenant. As the largest holder of this issuer's debt, our fixed-income team was concerned that this amendment would grant the issuer leeway to direct future excess cash toward paying dividends to equity shareholders, rather than deleveraging, and significantly alter the risk profile of the debt.

Action: In response, we engaged other debt holders and a third-party advisor to present the issuer with a counterproposal. Our proposal encouraged more fixed-income-friendly leverage requirements, among other points.

Outcome: Ultimately, this collaboration secured more favorable terms for existing debt holders, including the elimination of changes to the leverage covenant. We also believe this set a precedent for other issuers with significant operating leases, indicating that they generally shouldn't exclude those liabilities from total debt.





SRI report 2022



Multi-asset solutions

AUM: \$182.6B³³ Investment professionals: 47²⁹

As allocators of capital, the Multi-Asset Solutions Team (MAST) has taken a top-down approach to constructing diversified portfolios across multiple asset classes and sectors, combining dynamic asset allocation with holistic risk management. The team is focused on evaluating potential opportunities and risks in order to achieve tailored investment outcomes and solutions on behalf of clients. The analysis and integration of ESG factors are a natural complement to the research put forth by MAST. Further, the team believes ESG factors play a meaningful role in the evolution of capital markets and, as such, embraces the principles of sustainability that help drive improved outcomes for stakeholders.

33 Manulife Financial Corporation, as of December 31, 2022. Excludes subadvised AUM. Assets are shown in Canadian dollars. AUM includes \$5.3 billion in nondiscretionary advice for the Manulife general account.

MAST achieved our highest level of ESG integration (based on Manulife Investment Management public markets proprietary integration progression levels,³ which measures investment teams' progress in ESG integration) in 2022 and uses a framework for evaluating aspects of ESG risk and opportunity that align with their investment process that consists of the following:

- Partnership with the internal sustainable investing team
- Coordination across the equity, fixed-income, and multi-asset solutions teams to share sustainable investment views, enabling MAST to develop fundamental top-down viewpoints of risks and opportunities across industries
- Collaboration with the internal global manager research team to assess depth and quality of ESG integration for external, third-party managers of individual actively managed asset classes used in multi-asset solutions
- Research into, and publication of, macroeconomic analyses on ESG topics and their potential impact on the capital markets
- Incorporation of ESG adjustments and scenarios into economic and fundamental market inputs driving asset class forecasts
- Enhancement of data aggregation and analysis, quantitative approaches, and portfolio construction tools to incorporate ESG considerations



ESG integration in multi-asset strategies is different

Notable differences between security selection and asset allocation

Security selector—ESG integration

- Bottom-up security analysis
- Analysis of disclosed financial and sustainability-related statements
- Analysts directly engage with corporate management related to ESG initiatives
- Ability to impact investments through active ownership
- ESG effect incorporated into relevant price targets/discount rates

Asset allocator—ESG integration

- Incorporation of ESG factors within top-down macro research and forecasting
- Build-out of ESG data infrastructure for cross-asset analysis
- Inclusion of ESG factors into MAST's research framework
- Stewardship of capital through engagement with underlying managers
- Portfolio construction that incorporates ESG factors





Infrastructure

AUM: \$17.8B³⁴ Investment professionals: 25³⁵

Overview and highlights

- The infrastructure team has over \$3.2 billion in renewable energy equity investments, including wind, solar, and battery storage.³⁶
- For our annual GRESB Infrastructure Fund Assessment, we received management scores of 30/30 and 29/30 for our first and second funds, respectively.⁷
- In 2022, we increased our commitment to the PRI Infrastructure Advisory Committee by taking on the committee chair role.
- We supported the <u>EDCI</u>, which aims to streamline the private investment industry's historically fragmented approach to collecting and reporting ESG data. Our annual infrastructure ESG questionnaires are now aligned with the initiative.

34 AUM data is on a fair value basis based on a combination of independent third-party appraisals and sponsor valuations as of December 31, 2022, and is reflected in Canadian dollars. Data includes assets managed by Manulife Investment Management and affiliates on behalf of Manulife's Canadian and U.S. general accounts and also certain third-party investors. AUM does not include unfunded commitments. 35 Investment professionals include individuals who manage assets on behalf of both the Manulife general account and external third parties. **36** The infrastructure team manages renewable energy-related private equity investments on behalf of external clients and the insurance business of Manulife. Total includes \$1.87 billion of assets managed on behalf of external clients. For reporting, renewable energy in our infrastructure equity AUM (third party and general account) includes investments in solar power generation and transmission, wind power generation and transmission, hydroelectric generation, biofuel collection, biomass waste to energy, and battery energy storage systems.

Integration

The importance of sustainable investing in infrastructure is particularly apparent due to the long-term nature of the assets and investment horizon. As such, we believe that management of sustainability risks and opportunities in our infrastructure investments can lead to attractive risk-adjusted returns over the long term.

Our team's ESG integration practices include the following key steps and are applicable to all of our investments across all geographies:

- We use an ESG due diligence process focused on materiality that was developed using a combination of external resources from SASB and the PRI and our own expertise.
- We document the outcomes of our ESG due diligence in the investment memorandum that's evaluated during the investment committee approval process.
- Once an investment is made, the infrastructure team continues to monitor all material aspects that might affect an asset or company, including ESG factors.



Infrastructure (continued)

Partnering with our portfolio companies to advance sustainability

As a long-term investor with a commitment to sustainable growth, we seek to integrate sustainability across the investment lifecycle. As part of our postinvestment process, we work together with our portfolio companies to actively monitor and manage material aspects of the investment, including sustainability factors identified during due diligence.

We're mindful that some portfolio companies may be at different points in their sustainability journeys. We view this as an opportunity to help advance their sustainability performance, acting as a trusted advisor to help better align their strategy, governance structure, risk management, and metrics and targets with leading sustainability practices.

Asset stewardship playbook

To provide our investment and portfolio company management teams with a resource to enhance their understanding and advance sustainability in line with leading practices, we've developed our asset stewardship playbook. While the playbook is constantly evolving to stay current with new developments, in 2022 we focused on adding initiatives for portfolio companies that are at earlier stages of their sustainability journey. In particular, we developed:

- **1 Sustainability policy template**—The sustainability policy template acts as a key resource for portfolio companies to help formalize governance and oversight of and commitments across material sustainability factors.
- 2 Sustainability risk management framework—We developed guidance on sustainability-related risk management practices, including a proprietary sustainability risk assessment matrix, that portfolio companies can use to identify, assess, and monitor material sustainability risk factors.
- **3 Support for sustainability data collection and target setting**—To support ESG data collection and target-setting efforts, we use a tailored approach for each portfolio company, focusing on metrics that are most meaningful to their business. This may include GHG emissions, energy consumption, biodiversity, and water management. As a result, our portfolio companies are better equipped to improve performance measurement and monitoring across material sustainability factors.



Infrastructure (continued)

Stewardship

We work selectively with entities in which we invest to help them become more sustainable in the context of our investment horizon.

Our infrastructure team typically seeks to monitor and influence an investment through a board seat, protective controls, or governance—or a combination of these. These rights enable the investment team to exert influence or veto power regarding key decisions made with respect to a company's commercial or financial operations, as well as management and oversight of relevant sustainability risks and opportunities. Board seats, in particular, allow us to engage directly in the activities of a given investment.

To enhance our ESG monitoring practices, our sustainable investing team in private markets is implementing an annual ESG monitoring process to collect ESG-related data across our infrastructure portfolio. The data collected during the monitoring process will be used to track and measure the ESG performance of our investments.

Collaboration

We work with a range of market participants, regulators, and NGOs to address global sustainability challenges.

The infrastructure team recognizes the importance of collaborating with other investors and industry experts, both to gain insight into evolving best practices and to contribute to the development and adoption of ESG integration globally. With this in mind, the infrastructure team has been involved in the following initiatives.

- **PRI Infrastructure Advisory Committee**—Our global head of corporate finance and infrastructure sits on the PRI Infrastructure Advisory Committee as a representative for Manulife Investment Management. The committee advises the PRI on the overall strategic direction of the infrastructure workstream and supports the delivery of key projects and initiatives within the workstream.
- <u>LTIIA</u>—Recep Kendircioglu, our vice president and senior managing director of power and infrastructure, sits on the board of the Long Term Infrastructure Investors Association (LTIIA). The LTIIA works with a wide range of stakeholders—infrastructure investors, policymakers, and academics, among others—to enable the long-term, responsible deployment of private capital in public infrastructure projects around the world.



Private equity and credit

AUM: \$20.9B³⁷ Investment professionals: 69³⁵

Overview and highlights

- During the year, we significantly bolstered the sustainable investing resources that support our PE&C teams by adding a new managing director, associate director, and senior analyst to the organization.
- Our new managing director of sustainable investing for PE&C joined the IFRS Investor Advisory Group to ensure that a private markets perspective is represented in the setting of international sustainability accounting standards. We completed our first carbon footprinting exercise, an important first step to developing a formal climate change strategy for our PE&C group.
- We supported the <u>EDCI</u>, which aims to streamline the private investment industry's historically fragmented approach to collecting and reporting ESG data. Our annual PE&C ESG questionnaires are now aligned with the initiative.

37 AUM data, as of December 31, 2022, reflected in Canadian dollars. Data includes assets managed by Manulife Investment Management and affiliates on behalf of Manulife's Canadian and U.S. general accounts and also certain third-party investors. AUM includes funded committed capital only.

Integration

Within PE&C, the ability to analyze potentially material sustainability issues prior to making an investment allows us to better assess potential downside risks.

Across investments and geographies, the PE&C teams conduct an ESG assessment of each investment during due diligence and incorporate findings into their fundamental analysis. For our co-investments, secondaries, senior credit, and junior credit, an ESG assessment is done of the sponsor as well. To inform their assessments, the teams use an internally developed ESG due diligence tool, which is based on external resources from SASB and the PRI as well as our own expertise.

The outcomes of ESG due diligence are documented in the final investment memorandum, which is presented during the investment committee approval process. ESG documentation in the investment memorandum includes a summary of material sustainability factors, identification and discussion of red flags, areas for improvement, the sponsor's plans to address any gaps, and areas in which the portfolio company is already well advanced.

Once an investment is made, the teams work closely with their investment partners to monitor material items that might affect the investment or company, including sustainability factors. The investment teams leverage a variety of tools such as shareholder rights, board seats, and our broader relationships with investment partners, who typically control the underlying portfolio companies, to help ensure material sustainability issues aren't overlooked.



Private equity and credit (continued)

Stewardship

During the holding period of our PE&C investments, we aim to work with our investment partners and portfolio companies to support sustainability objectives.

To enhance our active ownership practices, we developed an ESG monitoring process. The outcomes of this process will allow us to measure ESG performance across our PE&C portfolios. The data we collect may further enhance our own practices and allow us to report to investors on ESG-related activities and metrics.

We seek to actively engage with the general partners (GPs) of funds that we invest in and GPs and other equity partners for our direct investments. Typical conversation topics may include the firm's recent investment activities, notable business updates, and personnel and quarterly performance updates. If we have board seats or board observer rights, we participate in quarterly board meetings as well as any interim update calls. In some of our investments that don't have boards, we participate in key decisions as a member of the investment company or as a member of the limited partner advisory committee (LPAC); this gives our team access to all key decision makers at the ownership and management levels. When holding a seat on an LPAC, we may specifically review certain matters, including conflicts of interest and waivers of limited partner (LP) restrictions. Although we may be one investor as part of a consortium, most significant decisions are made at the board or member level with the full support of all parties.

Collaboration

We work with a range of market participants, policymakers, regulators, and NGOs to address global sustainability challenges.

The PE&C teams recognize the importance of collaborating with other investors and industry experts in order to gain insight into evolving best practices and to contribute to the development and adoption of ESG integration globally.

In our capacity as an institutional investor, we seek to engage in constructive dialogue with firms and organizations on a variety of investment matters with the goal of enhancing long-term investment value. When appropriate, we may engage with companies to seek positive change in their disclosure, management, and performance related to ESG factors.



Real estate

AUM: \$27.1B³⁸ Investment professionals: 75³⁴

Overview and highlights

- Manulife Investment Management was recognized as a 10-year GRESB Participant Member.¹⁸
- We've been designated a Fitwel Champion²¹ and achieved 16 Fitwel Scorecard certifications and 67 Fitwel Viral Response Certifications.²²
- We updated our Sustainable Building Standards to adapt to industry changes and ensure continuous improvement across our global portfolio. To ensure our sustainability practices are upheld, we include the Sustainable Building Standards in our property management agreements and require them to report on their progress on an annual basis.
- As part of our Sustainable Building Standards, we also rolled out our GHG management workbook across our global portfolio. The workbook helps to educate teams on baseline emissions, models emissions out to 2035 and 2050, inventories planned, and potential efficiency projects, and supports associate capital planning.
- 100% of our Canadian-managed fund properties continued to hold a green building certification.³⁹

38 AUM data is on a fair value basis as of December 31, 2022, and is reflected in Canadian dollars. Data includes assets managed by Manulife Investment Management and affiliates on behalf of Manulife's Canadian and U.S. general accounts, as well as certain third-party investors. The real estate equity team manages \$1.2 billion in AUM on a discretionary basis. The methodologies used to compile the total AUM are subject to change and may not reflect regulatory AUM as reported on certain affiliates' Form ADV. **39** Data is as of December 31, 2022. Based on square footage or building size of the gross floor area of properties in the global portfolio. Totals from different certification standards do not sum as properties with multiple certifications are only counted once. Certifications are provided by LEED, ENERGY STAR Certification, BOMA BEST, GBCA Green Star, BCA Green Mark, NABERS, CASBEE, BOMA 360, and Fitwel.

Climate resilience through an adaptation and management approach in real estate

Climate resilience can be best thought of as the ability to prepare for, endure, and recover from the shocks and stressors of climate change, including the long-term effects of climate change and the business risks associated with it.

In our real estate business, we've built a three-step approach for resilience management:

- **Raise awareness**—To arm our teams with the right information and build internal capacity to manage climate risk and improve resilience
- **Evaluate risks and opportunities**—To identify and understand climate risks 2 and opportunities
- **Integrate best practices**—By embedding resilience into our business through tools and processes to mitigate and manage climate risks

Resilience is about more than just property operations. We also focus on embedding resilience into other aspects of our real estate businesses. Within our portfolios, we conduct physical climate risk evaluations during our standard due diligence process. We've also begun to incorporate climate risk and resilience into our real estate development process, are looking to incorporate physical climate assessments when evaluating site selection, and are in the process of identifying standard resilience measures to include in the design process.



Real estate (continued)

Stewardship

As asset managers, we follow five sustainable real estate commitments:

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

Our approach to sustainability in real estate is based on responsible property investment and aligns with global standards and benchmarks, including GRESB. Across our global portfolio, we set energy reduction targets, as well as targets for water use and waste diversion; we set a long-term GHG-reduction target of 80% by 2050. We report on progress toward these targets annually in our publicly available real estate sustainability report.

Collaboration

We work with a range of market participants, policymakers, regulators, and NGOs to address global sustainability challenges. For example, we sponsored a collaborative industry initiative led by the <u>ULI</u> to review the use and coverage of the available ESG certifications and reporting frameworks across the real estate investment value chain to create more transparency and enhance understanding and sharing of market practice. We're also chair of the Real Property Association of Canada (REALPAC) Zero Carbon Working Group, which convenes Canadian real estate owners and managers to advance industry knowledge on carbon reduction in real estate.

Focusing on the social component

In 2022, we undertook a two-pronged approach to integrating social factors within our investment process. First, we expanded our partnership with third-party certification provider Fitwel, which provides science-based strategies for developing healthy spaces. We believe centering decisionmaking that prioritizes people can create significant value for landlords, tenants, developers, and investors alike while helping to fulfill their responsibility toward promoting positive social impact. Second, we completed a materiality assessment to better understand our stakeholders' needs and prioritize strategies with positive social outcomes.

Making strides

As a result of our focused efforts with Fitwel in 2022, we're proud to share that we've been designated a Fitwel Champion.²¹ This achievement requires companies to achieve a minimum of 10 certifications in the span of two years and demonstrates a commitment to creating healthy spaces. As of December 31, 2022, we achieved 16 Fitwel Scorecard certifications and 67 Fitwel Viral Response Certifications.²²

Using the results of our social impact evaluation, we developed initiatives that we could implement and embed into the "People and communities" section of our Sustainable Building Standards. This includes considering diversity and representation of marginalized groups in procurement decisions and affordable housing allocations in residential properties. By integrating these initiatives into our standards, our asset management and third-party property management teams can better understand the tangible actions they can take to improve their socially responsible business practices.



Timberland

AUM: \$14.4B⁴⁰ Investment professionals: $33+^{35}$

Overview and highlights

- We launched our forest climate strategy, providing investors with the opportunity to promote climate change mitigation through sustainably managed forests where carbon sequestration is prioritized over timber production.
- We supported Manulife's <u>1t.org</u> (trillion trees initiative) pledge to scale nature-based solutions for mitigating climate change and aiming to scale our carbon-focused forestry investments over the next five years.
- We released our carbon principles, a high-integrity climate benefit methodology aligned with <u>IC-VCM</u>. We integrate these principles into our acquisition screening for existing carbon projects and into our new carbon project development processes.
- We acquired a climate risk tool to assist us in carrying out quantitative scenario analyses systematically across our global portfolio.
- We continued to achieve 100% sustainability certification for all our global timberland properties.¹⁵

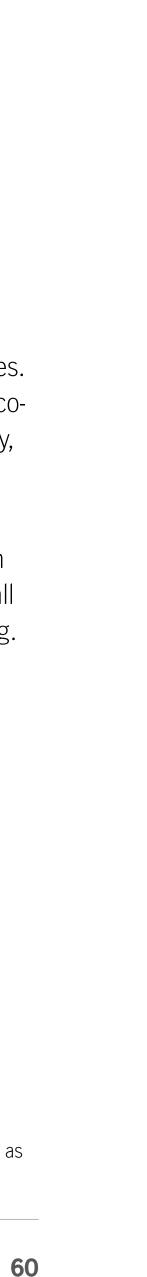
40 AUM data is on a fair value basis as of December 31, 2022, and is reflected in Canadian dollars. Data includes assets managed by Manulife Investment Management and affiliates on behalf of Manulife's Canadian and U.S. general accounts, as well as certain third-party investors.

Integration

Sustainability begins where we begin—when we evaluate new investment opportunities. In our investment process, since 2021 we've used a proprietary question-based tool codeveloped in house by our sustainability, acquisitions, and operations teams to identify, assess, and score ESG components of every deal we consider.

This tool kit highlights both potential risks and opportunities, and it enables us to quantify risk through stoplight indicators used to rate inherent risk, risk mitigation potential, and residual risk. We then aggregate these upward to produce an overall numerical sustainability score for the asset, which can be used in our underwriting. The completed tool kit is provided in every deal package presented to our natural resource investment committee to ensure that investment decisions explicitly consider relevant sustainability risks and opportunities.

Together with our <u>deforestation policy</u>, carbon principles, and carbon tool kit, this approach ensures we systematically consider all identified material sustainability factors in our investment process.



Timberland (continued)

Investment process

Acquisition teams Preliminary due diligence and valuation

Timberland and agriculture investment committees Feasibility and confirmatory diligence

Natural resource investment committee Final valuation offer and close

Stewardship

Good stewardship is good business. Our clients' financial success directly depends on the health of our forests and farms. Our vertically integrated teams give us the ability to craft and execute long-term asset management plans that promote forest and farm health and resilience, which are intrinsic to generating financial returns. Our sustainable investment practices are in line with key environmental and social objectives set out by third-party sustainability standards, such as the Sustainable Forestry Initiative (SFI) and the Forest Stewardship Council (FSC).

In order to ensure that we operate consistently within these standards, we follow a comprehensive set of stewardship principles that integrates the development, management, and operation of working lands for useful products with a commitment to conserve soil, air, and water quality; biological diversity; wildlife habitats; and participation in vibrant, healthy communities. These principles inform more granular stewardship policies that guide our property management professionals in day-to-day asset management decisions.



Sustainability tool kit

Evaluation of ESG risks and opportunities using our sustainable investing considerations

Sustainable investing considerations

Climate

- Climate change impacts
- Emissions
- Deforestation
- CO₂ sequestration



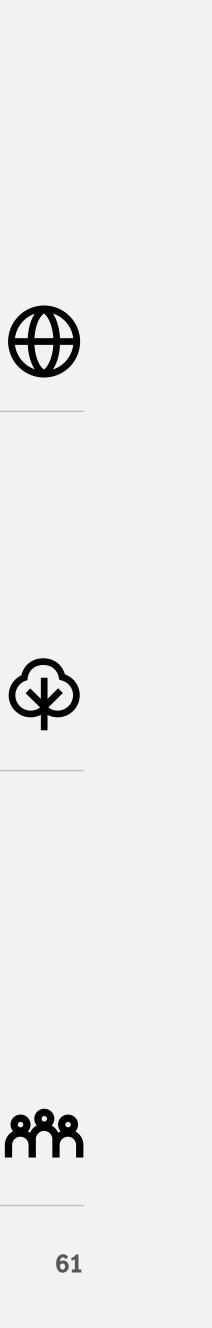
Nature

- Sensitive lands
- Protected areas
- Biodiversity
- Threatened and endangered species
- Mitigation banking
- Water quantity/quality



People

- Health and safety
- Training and development
- Labor practices
- Human rights
- Community relations
- Indigenous peoples
- Job creation
- Research, internships



Timberland (continued)

While sustainability is integral to our due diligence, it doesn't stop there. It continues into our asset management business where, as of year-end 2022, 100% of our forests were certified under either the <u>SFI</u> or <u>FSC</u>,¹⁵ and some of our forests in Australia and New Zealand carry dual FSC and Programme for the Endorsement of Forest Certification (PEFC) accreditation. We were managing our forests to these rigorous programs—which are essentially ESG standards for forest management—long before the concept of sustainable or ESG investing became mainstream.

Examples of sustainability principles and objectives in third-party certification

SFI principles

- Sustainable forestry 1
- Forest productivity and health 2
- Protection of water resources
- Protection of biological diversity
- Aesthetics and recreation 5
- Protection of special sites 6
- Legal compliance
- Research 8
- Training and education

- **10** Community involvement and social responsibility and
 - respect for indigenous rights
- **11** Transparency
- **12** Continual improvement
- **13** Responsible fiber sourcing

With the proliferation of ESG standards and regulations over the past few years, and in particular the advent of the EU's sustainability finance taxonomy and the Sustainable Finance Disclosure Regulation (SFDR), forest certification continues to prove its relevance. Whether it's our three sustainability themes of climate, nature, and people or the three ESG themes of environmental, social, and governance issues or the SFDR's Principal Adverse Impacts (PAIs), we believe that forest certification is a comprehensive mechanism for credibly demonstrating sustainable asset management and, critically, that it provides independent assurance to our stakeholders that we're operating sustainably.



FSC principles

- Compliance with laws
- Workers' rights and employment conditions
- Indigenous peoples' rights
- Community relations
- Benefits from the forest 5
- Environmental values and impacts 6
- Management planning
- Monitoring and assessment
- High conservation values 9
- **10** Implementation of management activities







Timberland (continued)

Collaboration

Getting things done together is one of our core values, with collaboration being a cornerstone of our business. We recognize that we can't specialize in everything, and we seek to establish mutually beneficial relationships with organizations and companies that can complement our strengths and that have a similar culture and values.

These relationships not only help us improve our sustainability performance, but they also reflect our conviction that when it comes to solving global challenges, we're all in this together. The following are some of the organizations we actively partnered with in 2022, whether through program participation, research funding, or charitable contributions.

• We support research into the resilience of agriculture and forestry to climate change at MIT's Joint Program on the Science and Policy of Global Change with the University of California, Davis.

• We actively participate in the <u>WBCSD's</u> Forest Solutions Group and Nature Action projects in collaboration with industry partners, focused on scaling forestry as a natural climate solution.

• We support the Michigan State University Department of Forestry Forest Carbon and Climate Program's mission to increase the understanding and implementation of climate-smart forest management.

• We provide funding to the American Bird Conservancy for its work in conserving wild birds and their habitats throughout North America, including threatened and endangered species.



Case study Protecting native otters in Chile

One of our key responsibilities in consistently managing our forests toward a nature-positive future is protecting threatened species and their habitats.

The Huillin are otters native to Chile, where they live in rivers, shallows, and lakes. Huillin are classified as endangered by the International Union for Conservation of Nature (IUCN) and are listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the Convention on Migratory Species (CMS). In recent years, the geographic distribution of the Huillin has decreased drastically due to habitat loss.

Manulife Investment Management Forestal y Agrícola SpA (MFA (CL)) manages the San Fernando and Los Boldos properties in the Toltén and Quele river basins, where Huillin are present. These properties are close to the northern limit of the Huillin distribution in Chile.

Within these properties, MFA (CL) has defined areas of high conservation value forest to protect the natural habitat of the Huillin. MFA (CL) set up a monitoring program in these areas, with the aim of preserving their status, observing the existing population, and defining a work plan that allows the conservation of both the Huillin and their habitat. The latest monitoring shows that the Huillin are present in all monitored properties, through evidence of footprints, feces, and camera recordings. This has been the case since the first Huillin monitoring in 2013.

Prior to this work, the IUCN predicted that habitat loss would wipe out the Huillin present in the monitored area. This hasn't happened because MFA (CL) and other forestry companies included the Huillin in their conservation priorities and have been actively protecting riparian areas through the restoration of prioritized watercourses. This action is halting habitat loss and ensuring the Huillin stay in the northern limit of their distribution.





Agriculture

AUM: \$5.8B⁴¹ Investment professionals: 42³⁵

Overview and highlights

- In 2022, we certified our entire 300,000+ acre U.S. agriculture platform to Leading Harvest standards.¹⁷
- We continued our journey toward using regenerative farming techniques where they make sense environmentally and economically—which covers nearly two-thirds of our permanent crop and half of our row crop farms.
- We acquired a climate risk tool to assist us in carrying out quantitative scenario analyses systematically across our global portfolio.
- We released our carbon principles, a high-integrity climate benefit methodology aligned with IC-VCM, that we integrate into our acquisition screening for existing carbon projects and into our new carbon project development processes.
- We approved a work program for quantifying soil carbon sequestration with a leading agriculture technology company.
- We joined the Ecosystem Services Market Consortium (ESMC) and partnered with ESMC as well as the U.S. Cotton Trust Protocol and Forum for the Future to launch the Eco-Harvest pilot project in Alabama, Arkansas, Texas, and Tennessee.

41 AUM data is on a fair value basis as of December 31, 2022, and is reflected in Canadian dollars. Data includes assets managed by Manulife Investment Management and affiliates on behalf of Manulife's Canadian and U.S. general accounts, as well as certain third-party investors.

Integration

How you grow and what you grow are both important. The "how" considerations include when and how to plant and harvest, how much of each input to use and when to apply it, and techniques for working with the soil. The "what" considerations recognize that certain crops grown in certain regions for certain markets may have particular environmental and/or social footprints. All of these are important ESG considerations when considering the economic value of the investment.

In our investment process, since 2021 we've used a proprietary question-based tool co-developed in house by our sustainability, acquisitions, and operations teams to identify, assess, and score ESG components of every deal we consider. This tool kit highlights both potential risks and opportunities, and it enables us to quantify risk through stoplight indicators used to rate inherent risk, risk mitigation potential, and residual risk. We then aggregate these upward to produce an overall numerical sustainability score for the asset, which can be used in our underwriting. The completed tool kit is provided in every deal package presented to our natural resource investment committee to ensure that investment decisions explicitly consider relevant sustainability risks and opportunities.



Agriculture (continued)

Stewardship

We manage our forests and farms not only to secure competitive financial returns, but also to achieve key environmental and social objectives set out by third-party sustainability standards, such as <u>Leading Harvest</u> and others; for example, <u>GlobalG.A.P.</u>, <u>USDA Good Agricultural Practices (GAP)</u>, <u>LODI RULES</u>, and <u>Sustainable Agricultural Initiative's Farm Sustainability Assessment</u>.

In order to ensure that we operate consistently within these standards, we follow a comprehensive set of stewardship principles that integrates the development, management, and operation of working lands for useful products with a commitment to conserve soil, air, and water quality; biological diversity; wildlife habitats; and participation in vibrant, healthy communities. These principles inform more granular stewardship policies that guide our property management professionals in day-to-day asset management decisions.

We're proud that as of year-end 2022, our entire U.S. agriculture platform, including nearly 78,000 acres of permanent crops and over 230,000 acres of row crop farmland, achieved certification to the Leading Harvest Farmland Management Standard.¹⁷ Leading Harvest demonstrates our commitment to sustainability, providing our key stakeholders assurance of sustainable practices, robust management, and continuous improvement.

Collaboration

As with our collaborative practices in our timberland assets, we seek to establish mutually beneficial relationships with organizations and companies that can complement our strengths in agriculture.

These relationships not only help us improve our sustainability performance, but they also reflect our conviction that when it comes to solving global challenges, we're all in this together. The following are some of the organizations we actively partnered with in 2022, whether through program participation, research funding, or voluntary contributions.

- We joined the ESMC and partnered with <u>ESMC</u> as well as the U.S. Cotton Trust Protocol and Forum for the Future to launch the Eco-Harvest pilot project in Alabama, Arkansas, Texas, and Tennessee. The project will work with cotton farmers, including some of our own tenants, to generate high-quality carbon credits for corporate buyers.
- We support research into the resilience of agriculture and forestry to climate change at <u>MIT's Joint Program on the Science and Policy of Global Change</u> and the University of California, Davis.
- We actively participate in the <u>WBCSD's</u> Forest Solutions Group and Nature Action projects in collaboration with industry partners, focused on scaling agriculture as a natural climate solution.
- We support the <u>Pollinator Partnership's</u> efforts to promote pollinator health critical to food and ecosystems—through conservation, education, and research.
- We provide funding to the <u>American Bird Conservancy</u> for its work in conserving wild birds and their habitats throughout North America, including threatened and endangered species.



Case study Planting for pollinators in Wisconsin

Many species of birds, bees, bats, and butterflies are pollinators that we depend on for growing food crops. It's troubling that pollinator numbers have declined for decades due to pressures such as a changing climate, exposure to pests and disease, contact with poisonous chemicals, and reduction in their habitats.

On several of our Wisconsin cranberry marshes, our farm managers have taken improving local pollinator community welfare into their own hands. In Jackson Perry Creek marsh, we've built multiple pollinator gardens—both to ensure the sustainability of the cranberry crop and to steward native pollinators that will benefit the local community. We've also been scouting, researching, and photo-documenting the local flowering plant species with the aim of refining a proprietary, cranberry-specific pollinator blend suited to existing pollinators year-round in central Wisconsin's dry sandy soil. Based on information from the <u>Xerces Society for Invertebrate Conservation</u>, our farm managers planted a small experimental plot of milkweed, the preferred food source for Monarch butterflies, in our Juneau Yellow River marsh. If successful, the plan is to plant an additional six to eight plots in various areas around the cranberry marsh.

It's still too early to know how successful the pollinator gardens and milkweed plots will be in their current form, but we believe that our experimental approach, informed by relevant external expertise, will help us to identify the solutions we're seeking.





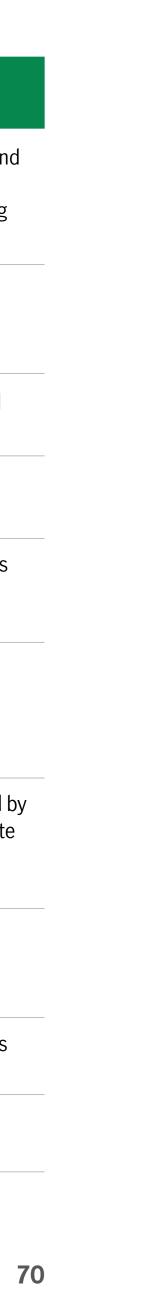
Global collaboration

Below are examples of current sustainability/ESG industry groups and initiatives with which we're engaged.

Organization	Year joined	Region	Focus	Manulife Investment Management's involvement
30% Club Canada Investor Group	2019	Canada	A group of asset owners and asset managers committed to exercising their ownership rights to encourage increased representation of women on corporate boards and in executive positions	We have a target list of Canadian companies established annually; we engage with select companies from this list.
30% Club Japan Investor Group	2021	Asia	A group of investors committed to achieving a minimum of 10% female representation on TOPIX 100 boards around 2020 and 30% female representation on TOPIX 100 boards around 2030	We participate regularly in working groups.
American Bird Conservancy (ABC)	2020	North America	Dedicated to conserving wild birds and their habitats throughout the Americas; with an emphasis on achieving results and working in partnership, we take on the greatest problems facing birds today	We're a stewardship partner, providing annual funding in support of ABC's missions.
Asia Investor Group on Climate Change (AIGCC)	2016	Asia	Works with Asian asset owners and financial institutions to create awareness about the risks and opportunities associated with climate change and low-carbon investing	We're an active member of the group and chair the physical risk and resilience working group.
Asian Corporate Governance Association (ACGA)	2016	Asia	Promotes implementation of effective governance practices in Asian companies on behalf of institutional investors and regulators	We're an active member in the association in addition to participating in the China and Korea working groups.
Australian Forest Products Association (AFPA)	2010	Australia	Represents forest owners and the forest products manufacturing sector in Australia	We're a member of this initiative.
Board Diversity Hong Kong Initiative	2018	Asia	Commits to an ongoing engagement on diversity at all levels with listed companies in Hong Kong, starting with the board of directors	We're one of the founding members of this initiative. We believe diversity on boards encourages better leadership and better corporate governance, and it ultimately increases corporate performance and global competitiveness for both companies and their shareholders.



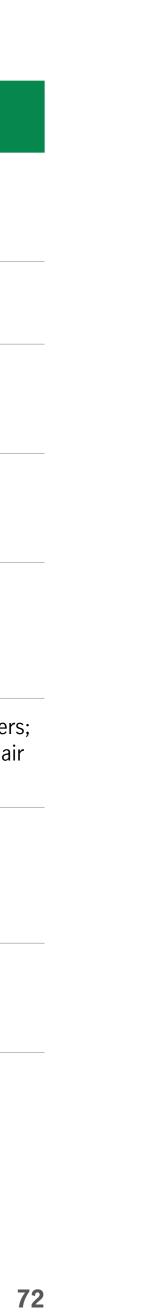
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Organization	Year joined	Region	Focus	Manulife Investment Management's involvement	
Building Owners and Managers Association (BOMA) Canada	2018	Canada	Implements timely, responsible, and consistent policy positions on important issues to the Canadian real estate industry; acts as the voice representing the industry by advocating on members' behalf on a national or provincial platform	We attend quarterly meetings and aid in developing tools and standards for the commercial real estate industry on how to integrate resilience best practices and adapt to changing climate conditions.	
Cambridge Institute for Sustainability Leadership Investment Leaders Group (CISL ILG)	2020	United Kingdom	A global network of pension funds, insurers, and asset managers with over £14 trillion under management and advice; the group is committed in its mission to advance the practice of responsible investment	We're an active member of the CISL ILG, striving to create an investment chain that prioritizes economic, social, and environmental sustainability.	
<u>Canada Green Building Council</u> (CAGBC)	2017	Canada	Sister organization to the U.S. Green Building Council	We're involved on the board of directors and chair the real estate owners and developers advisory group.	
Canadian Coalition for Good Governance (CCGG)	2012	Canada	Focused on corporate governance organization in Canada	We have representation on the E&S (environmental and social) Committee.	
<u>CDP</u>	2018	Global	Advocates for disclosure of company data to measure and manage the environmental impact (carbon, water, forestry); one of the first ESG disclosure initiatives in the financial industry	We're a member of CDP and participate in various initiatives such as the Science Based Targets initiative.	
<u>Center for Advancement of Social</u> <u>Entrepreneurship & Impact Frontiers</u> <u>strengthening Impact Management</u>	2022	United States	Strengthening program is a cohort-based program designed to support investors who are looking to establish or improve on their current impact management practice, helping managers to fully integrate impact into investment frameworks, processes, and systems	We're currently participating in the strengthening Impact Management 12-month cohort program.	
Ceres Investor Network	2016	Global	Promotes discussion and collaboration on how to address climate risk and other sustainability challenges among institutional investors	We participate in discussions and initiatives brought forward by Ceres. We're also a member of the Investor Water Hub, Private Equity Working Group, and founding member of the Valuing Water Investor Working Group.	
Ceres' Valuing Water Finance Initiative	2022	Global	An initiative calling on companies to meet <u>Ceres' Corporate Expectations</u> <u>for Valuing Water</u> that align with the UN 2030 Sustainable Development Goal for Water (SDG 6)	We're signatories to the initiative.	
Climate Action 100+	2018	Global	Collaborative engagement with the largest corporate GHG emitters	We're a founding member and co-lead several engagements across North America and Asia.	
<u>Climate Engagement Canada (CEC)</u>	2021	Canada	A finance-led initiative that drives dialogue between finance and industry to promote a just transition to a net zero economy	We're a founding participant.	



Organization	Year joined	Region	Focus	Manulife Investment Management's involvement
<u>Climate Smart Land Network (CSLN)</u>	2015	North America	Provides forest landowners and managers with direct access to forest and climate experts and the opportunity to benefit from other forest landowners in the network	Our timber and agriculture team has been a member since CSLN's inception. We continue to share information at their annual member gatherings as well as through emails and monthly calls aimed to support the acceleration of natural climate solutions.
Concordia University	2020	Canada	<u>Sustainable Investing Practicum</u> (SIP) enables undergraduate business students to better understand the principles of ESG investing in a capital market environment; students make fund management recommendations to a supervisory committee based on sustainable investing criteria	Concordia's John Molson School of Business signed a partnership agreement with Manulife Investment Managemen that established the first sustainable investing practicum at a Canadian university.
Ducks Unlimited		North America	The world's leader in wetlands and waterfowl conservation	We're a supporter of this initiative.
<u>Ecosystems Services Market</u> Consortium (ESMC)	2022	United States	Aims to reduce GHG, improve water quality, and increase other ecosystem services to benefit society through improved agriculture practices	We partnered ESMC and with the U.S. Cotton Trust Protocol and Forum for the Future to launch the Eco-Harvest pilot project in Alabama, Arkansas, Texas, and Tennessee.
Emerging Markets Investors Alliance (EMIA)	2015	Global	A central hub for information, education, and networking for investors in emerging markets	We're active members of the agriculture, debt and fiscal governance, ESG, and extractive industries working groups.
ESG Data Convergence Initiative (EDCI)	2022	Global	Aims to streamline the private investment industry's historically fragmented approach to collecting and reporting ESG data in order to create a critical mass of meaningful, performance-based, comparable ESG data from private companies	We're a supporter, and within our PE&C and infrastructure businesses, we've aligned our annual ESG questionnaires with the EDCI.
Farm Animal Investment Risk and Return (FAIRR) Initiative	2022	Global	Focused on sustainability issues within the food supply chain, including the protein producer industry and consumer-facing food companies	We're a network member with access to FAIRR data and indexes.
Finance for Biodiversity Pledge and Foundation	2021	Global	Commitment of financial institutions to protect and restore biodiversity through their financing activities and investments	We're a signatory to the pledge, a member of the advisory board, and an active member of the engagement, impact assessment, and public policy working groups.
<u>GRESB</u>	2015	Global	Validates, scores, and benchmarks ESG performance data for real assets, providing business intelligence and engagement tools to investors and managers	We report to the GRESB real estate and infrastructure assessments on an annual basis.



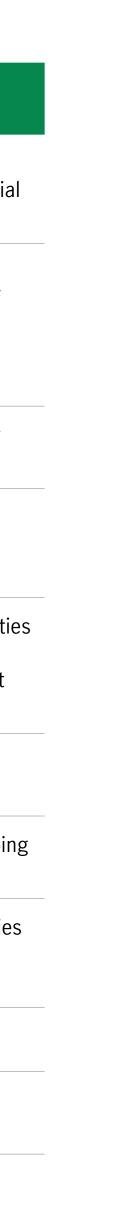
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Organization	joined	Region	Focus	Manulife Investment Management's involvement
Hong Kong Green Finance Association	2018	Hong Kong	Promotes adoption of green finance and investment by gathering industry experts to provide policy suggestions to the Hong Kong government and other regulators	We contribute to the working groups, including on green bonds and product innovation as well as external collaborations.
Institutional Limited Partner Association (ILPA)	2014	Global	Engages, empowers, and connects limited partners to maximize their performance on an individual, institutional, and collective basis	We're a member of the ILPA ESG Working Group and Diversity in Action Initiative.
International Corporate Governance Network (ICGN)	2019	Global	Promotes effective standards of corporate governance and investor stewardship to advance efficient markets and sustainable economies worldwide	We're a member of the Stewardship Committee.
International Sustainability Standards Board (ISSB)—ISSB Investment Advisory Group (IIAG)	2019	Global	A group of leading asset owners and asset managers in various markets that's committed to improving the quality and comparability of sustainability-related financial disclosures	We're a member of the ISSB IIAG.
Investment Company Institute (ICI)	2015	Global	Encourages adherence to high ethical standards by all industry participants; advances the interests of funds, their shareholders, directors, and investment professionals; and promotes public understanding of mutual funds and other investment companies	We're involved in calls and discussions on sustainability- related disclosures for asset managers.
Leading Harvest	2020	United States	Advances sustainable agriculture, provides assurance programs comprising standards, audit procedures, training and education, and reporting and claim offerings	Our timber and agriculture business were founding members in addition, our global head of agriculture is the current chair of the board of directors.
Long Term Infrastructure Investors Association (LTIIA)	2017	United States	Works with a wide range of stakeholders—infrastructure investors, policymakers, and academics, among others—to enable the long-term, responsible deployment of private capital in public infrastructure projects around the world	Recep Kendircioglu, VP, senior managing director for infrastructure, sits on the board.
Massachusetts Institute of Technology (MIT) Joint Program on the Science and Policy of Global Change	2016	Global	Studies interactions among human and earth systems to provide a sound foundation of scientific knowledge	We're a sponsor and project representative.



Organization	Year joined	Region	Focus	Manulife Investment Management's involvement
<u>Michigan State University Department</u> of Forestry Forest Carbon and Climate <u>Program (FCCP)</u>	2020	United States	Established to connect professionals, natural resource managers, decision makers, students, and the broader public with the value of forested lands and forest products in addressing climate change; extensive expertise in forest conservation guides the program's focus, in addition to local, regional, and international relationships with entities engaged in the use and protection of forests and related ecosystems	We're a supporter of the program's mission to increase the understanding and implementation of climate-smart forest management.
National Council of Agriculture Employers (NCAE)	2019	United States	National association focusing exclusively on agricultural labor issues from the agricultural employers viewpoint	We're a member of this initiative.
<u>National Council for Air and Stream</u> Improvement, Inc. (NCASI)	2021	United States	Mission is to help members cost-effectively meet environmental and sustainability goals through basic and applied research, technical support, and education	We're a member of this initiative and benefit directly and indirectly from research that NCASI conducts on behalf of the forest sector. We also participate in working groups and provide technical leadership when needed to further advance new science in managed forests.
New Zealand Forest Owner Association (FOA)	2006	New Zealand	Represents the owners of New Zealand's commercial plantation forests; set up in 1926 and is now one of the country's most influential primary sector organizations	We're a member of this initiative.
National Alliance of Forest Owners	2008	United States	National advocacy organization committed to advancing federal policies that ensure sustainable practices and strong markets for our working forests	We have representation on the board of directors, operating committee, climate change, and environment task groups.
Pollinator Partnership	2021	Global	Mission is to promote the health of pollinators critical to food and ecosystems through conservation, education, and research	We're a supporter of this initiative.
<u>Principles for Responsible Investment</u> (PRI)	2015	Global	United Nations-supported international organization that works to promote the incorporation of ESG factors into investment decision-making	We're a signatory and an active member of various working groups, including the fixed-income advisory group and sovereign bond working group, and chairs of the Infrastructure Advisory Committee, Real Estate Advisory Committee, and the listed equity integration subcommittee.
Programme for the Endorsement of Forest Certification (PEFC)	2007	Global	Global alliance of national forest certification systems	We're involved on the board of directors.

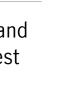


Organization	Year joined	Region	Focus	Manulife Investment Management's involvement
<u>Real Estate Roundtable Sustainability</u> Policy Advisory Committee (SPAC)	2019	United States	Seeks to educate policymakers and the public about real estate and its significance to the economy	We participate in monthly meetings and engagement on federal or state policy and regulations affecting commercial real estate.
<u>Real Property Association of Canada</u> (REALPAC) ESG Committee	2017	Canada	Members include publicly traded real estate companies, real estate investment trusts, pension funds, private companies, fund managers, asset managers, developers, government real estate agencies, lenders, investment dealers, brokerages, consultants/data providers, large general contractors, and international members	We participate in monthly meetings and engagement on federal, provincial, or municipal policy. We're also chair of the Zero Carbon Working Group.
Responsible Investement Association (RIA) Canada	2019	Canada	Promotes responsible investing and ESG integration into the investment process in Canada	We participate in initiatives and roundtables organized by the RIA.
<u>Singapore Standards Council (SSC)</u> Enterprise Singapore	2019	Asia	Facilitates the development, promotion, and review of standards and technical references in Singapore	We're a member of the working group, providing input on the development of an International Organization for Standardization for sustainable finance.
Securities Industry and Financial Markets Association (SIFMA)	2015	United States	Industry trade group representing securities firms, banks, and asset management companies; advocates on legislation, regulation, and business policy affecting retail and institutional investors, equity and fixed-income markets, and related products and services	We've engaged in the International Organization of Securities Commissions consultation on sustainability-related disclosures for asset managers and the Financial Conduct Authority climate disclosure consultation with SIFMA.
Sustainable Forestry Initiative (SFI)	2002	North America	Collaborates with a diverse network to provide forest-based solutions to local and global sustainability challenges	We've engaged on the Resources Committee.
<u>Taskforce on Nature-related Financial</u> Disclosures (TNFD)	2020	Global	Focuses on redirecting flows of finance at scale toward nature-positive activities to allow nature and people to flourish	We were members of the Informal Working Group developing the scope for TNFD.
<u>Task Force on Climate-related Financial</u> <u>Disclsoures (TCFD) Consortium</u> (Japan)	2019	Asia	Includes corporate and investor members and aims to foster best practices in TCFD reporting	We're a member of the investor group to support companies to provide decision-useful disclosure.
The Longleaf Alliance	2022	United States	Mission is to ensure a sustainable future for longleaf pine ecosystems	We're a member of this initiative.
Transition Pathway Initiative	2021	Global	A global, asset owner-led initiative that assesses companies' preparedness for the transition to a low-carbon economy	We're a supporter of this initiative.

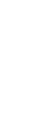


Organization	Year joined	Region	Focus	Manulife Investment Management's involvement
<u>Urban Land Institute (ULI)</u>	2021	Americas and EMEA	The oldest and largest network of cross-disciplinary real estate and land use experts in the world; through members' dedication to the mission and their shared expertise, the institute has been able to set standards of excellence in development practice	We're a member of the Mapping ESG Steering Committee.
UN Environment Programme Finance Initiative (UNEP FI) Property Working Group (PWG)	2019	Global	Drives innovation in responsible property investment by facilitating access to relevant information and best practices for systematically applying and integrating ESG criteria into investment and lending decisions	We attend and contribute to the quarterly working group meetings.
World Benchmarking Alliance (WBA)	2018	Global	Seeks to increase the private sector's sustainability impact; creates benchmarks to incentivize and accelerate companies' efforts toward achieving the UN's sustainable development goals	We're a supporter of the initiatives.
<u>World Business Council for Sustainable</u> <u>Development (WBCSD)</u>	2019	World	CEO-led organization of over 200 leading businesses working together to accelerate the transition to a sustainable world	We're a council member and liaison delegate. Our timber and agriculture teams actively participate in the WBCSD's Forest Solutions Group, Scaling Positive Agriculture, and Nature Action projects in collaboration with industry partners focused on scaling forestry and agriculture as natural climate solutions.















Manulife Investment Management

The case studies shown here are for illustrative purposes only, do not represent all of the investments made, sold, or recommended for client accounts, and should not be considered an indication of the ESG integration, performance, or characteristics of any current or future Manulife Investment Management product or investment strategy.

Manulife Investment Management conducts hundreds of ESG engagements each year but does not engage on all issues or with all issuers in our portfolios. We also frequently conduct collaborative engagements in which we do not set the terms of engagement but lend our support in order to achieve a desired outcome. Where we manage and operate physical assets, we seek to weave sustainability into our operational strategies and execution. The case studies shown are illustrative of different types of engagements across our in-house investment teams, asset classes and geographies in which we operate. While we conduct outcome-based engagements to enhance long term-financial value for our clients, we recognize that our engagements may not necessarily result in outcomes which are significant or quantifiable. In addition, we acknowledge that any observed outcomes may be attributable to factors and influences independent of our engagement activities. Our approach to ESG investing and incorporation of ESG principles into the investment process differs by investment strategy and investment team. It should not be assumed that an investment in the company discussed herein was or will be profitable. Actual investments will vary and there is no guarantee that a particular fund or client account will hold the investments or reflect the characteristics identified herein. Please see our ESG policies for details. We consider that the integration of sustainability risks in the decision-making process is an important element in determining long-term performance outcomes and is an effective risk mitigation technique. Our approach to sustainability provides a flexible framework that supports implementation across different asset classes and investment teams. While we believe that sustainable investing will lead to better long-term investment outcomes, there is no guarantee that sustainable investing will ensure better returns in the longer term. In particular, by limiting the range of investable assets through the exclusionary framework, positive screening and thematic investment, we may forego the opportunity to invest in an investment which we otherwise believe likely to outperform over time.

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and, if necessary, seek professional advice.

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Manulife Investment Management

Manulife Investment Management

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