



MORRISON HERSHFIELD

People • Culture • Capabilities

2022 ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

AUGUST 2023





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MESSAGE FROM THE PRESIDENT & CEO

I am delighted to share Morrison Hershfield's inaugural Environmental, Social and Governance (ESG) Report, an exciting evolution of our previous Corporate Social Responsibility reporting. As an engineering firm, we have a great responsibility and opportunity to deliver sustainable infrastructure solutions that have a significant positive impact on our communities and the planet.

Morrison Hershfield is committed to continuously improving our business and the overall industry. We have long been committed to environmental and social sustainability, through the services we offer our clients and in our internal operations. In 2022, we embarked on an exciting journey to develop a comprehensive and robust ESG Strategy that builds on our previous Corporate Social Responsibility reporting. With strong leadership commitment and support, the firm took steps to formalize our climate commitments through third-party, industry leading frameworks, expanding our goal setting and targets around the physical and social impacts we have on our people, clients, partners, communities and the environment.

We are committed to reducing our own carbon impact. Morrison Hershfield has set targets for carbon-neutral operations for

Scope 1 and 2 emissions by 2024, and net-zero GHG emissions across all scopes by 2050, in accordance with the Paris Agreement. We also made the decision to commit to the Science Based Targets Initiative (SBTi) and will set science-backed near-term reduction targets for all emission scopes and submit the targets for third-party validation in 2024.

Morrison Hershfield delivers more than 5000 projects a year, and we view every project as an opportunity for climate action. We launched a Climate Change Department within our Environmental Business Unit with a goal of embedding a climate focus into all our projects. We want to help clients meet their sustainability targets and future-proof their projects. A small sample of our climate-ready solutions are included throughout this report.

We also introduced a Climate Change Community of Practice in 2022. Participation is open to all interested staff across the company with the goals of sharing knowledge, developing tools and delivering training. We are building a team of Climate Champions.



MESSAGE FROM THE PRESIDENT & CEO

I am very proud of what we've accomplished and excited for the future. I invite you to read our 2022 Environmental, Social and Governance Report to learn more about our progress and plans to enhance our ESG performance. Some highlights include:

Environmental Impacts: Formalized our Climate Commitment; signed FIDIC Climate Change Charter; established Climate Change Department; committed to the Science Based Target initiative to augment our current alignment with the Global Reporting Initiative, FIDIC Climate Change Charter and the United Nations Sustainable Development Goals; updated our Carbon Footprint Assessment; launched the company wide Climate Change Community of Practice.

Social Impacts: Focused on our people, clients and communities. We continued to advance policies and programs around employee engagement, leading health and safety systems, industry leadership, diversity, equity and inclusion, and community involvement. We became an active member of the Canadian Council for Aboriginal Business, began pursuing Progressive Aboriginal Relations certification, and released our Indigenous Relations Policy.

Strong Governance: We remain 100% employee owned, with 36 percent of our employees holding shares. We are governed by our Board of Directors, guided by our 2025 Ambition strategy and focused on continuous improvement. We integrated climate action into our quality management system, including proposal and project delivery processes and policies, and initiated steps to achieve ISO 27001:2013 certification of our Information Security Management System in 2023.

I am very proud of the collaborative efforts of our ambitious teams who are passionate about creating sustainable social and environmental change. We will continue to hold each other accountable and responsible for making progress on our commitments. Together we will continue to make a difference.

Sincerely,
Anthony



Anthony Karakatsanis, P.Eng.
President & Chief Executive Officer





ABOUT THIS REPORT

Our Responsibility

The way we operate and the work we do can have significant, lasting effects on our communities and the environment. It is our responsibility to operate sustainably, and to help our clients assess climate change vulnerability and risk and reduce embedded and operational carbon emissions in their infrastructure projects.

Morrison Hershfield has been reporting on our Corporate Social Responsibility (CSR) for several years in our annual CSR Report. We are pleased to release our first Environmental, Social and Governance (ESG) Report, including clear and transparent reporting on our ESG strategy, goals and targets, progress and milestones and our commitment to continuously improve the way we do business.

Our 2022 ESG report aligns with the 2022 calendar year, covering the period of January 1, 2022 to December 31, 2022.

MORRISON HERSHFIELD AT A GLANCE

Who We Are

Morrison Hershfield is a market-leading, employee-owned engineering firm that has been making a difference for over 77 years. Founded in 1946, we have matured into a sophisticated, future-focused organization, determined to sustain our culture and commitment to multi-generational ownership. The high standards set by our founders formed our Core Values and Principles for dealing with the public, our clients and each other. These define who we are, and who we'll always be.

Our exceptional technical experts, thought leaders and high-performing employees deliver innovative, cost effective, sustainable infrastructure solutions across North America.

Our Core Values

FOUNDED
On Technical Excellence and Ethics

COMMITTED
To Accountability and Integrity

DEFINED
By Innovation and Teamwork

INSPIRED
To be Client-Focused and Solution-Based



Our Mission

*To be the first call for
engineering solutions that make
a difference.*

What We Do

Morrison Hershfield aims to provide our clients with balanced and resilient engineering solutions that serve their primary needs and contribute to the responsible use of resources and social well-being in their communities. We want to create lasting and positive change. We provide vertical and horizontal infrastructure solutions in 13 markets.

- Bridges
- Buildings
- Critical Facilities
- Energy
- Environment
- Government
- Industrial
- Land Development & Municipal Infrastructure
- Solid Waste
- Telecom & Technology
- Transit
- Transportation
- Water & Wastewater

Our 2025 Ambition

We are driven by our ambition to deliver an exceptional client experience and unrivaled employee experience, within a progressive, inclusive and inspiring environment.



76

Years of
Innovation

1000+

Employees

100%

Employee-Owned

26

Offices

5000+

Projects
Delivered

+70

NPS

+45

eNPS

90%

Annual Revenue
from Repeat Clients

15+

Industry Awards
in 2022

OUR ESG STRATEGY & FRAMEWORK

Morrison Hershfield's Environmental, Social and Governance (ESG) strategy is grounded in the belief that we can thoughtfully leverage our people, culture and capabilities to have a lasting positive impact on the environment, our clients, our employees and the communities we serve. We are advancing sustainability and ESG initiatives within our own operations and in every project we deliver.

Morrison Hershfield's Climate Commitment

We have long been committed to environmental sustainability, through the services we offer our clients and in our internal operations. As an engineering firm, we have a great responsibility and opportunity to deliver sustainable infrastructure solutions that protect and have a significant short and long term positive impact on our communities and the planet.

OUR CLIMATE COMMITMENT

In 2022, Morrison Hershfield formalized our climate commitment:

- View each project as a climate action opportunity and fulfill the FIDIC Climate Charter.
- Commit to the Science Based Targets Initiative (2024), set science-based near-term reduction targets for all emission scopes, and submit the targets for third-party validation.
- Achieve carbon neutral status for our operations in 2024 for Scope 1 (natural gas) and Scope 2 (electricity).
- Achieve net-zero GHG emissions across all scopes by no later than 2050, in line with a 1.5°C global warming limit (Paris Agreement).

Shift to ESG Reporting

Acting on climate change is important to our internal and external stakeholders. Morrison Hershfield has been reporting on our Corporate Social Responsibility for years. In 2022, with strong leadership commitment and support, we transitioned to a more robust ESG strategy. We took steps to formalize our climate commitments through third-party, industry leading frameworks, expanding our goal setting and targets around the physical and social impacts we have on our people, clients, partners, communities and the environment.

We used the Victor ESG Risk Rater Assessment tool to gain additional insight into our current practices and identified opportunities for improvement. The ESG Risk Rater consists of 105 questions formulated based on internationally recognized industry frameworks. The questions are organized into 18 themes across the environmental, social and governance categories, including greenhouse gas emissions, energy transition, waste and pollution, water and land use, health and wellbeing, dignity and equality, governance strategy, and more. As a baseline, Morrison Hershfield scored an overall ESG score in the 'Good' category, the second highest of the five overall categories. We intend to use this tool annually to gauge progress with our ESG goals.

See Appendix A: Victor ESG Risk Rater Assessment.

Reporting Frameworks

Transparent reporting is an essential component of our ESG Strategy and helps us manage climate-related opportunities and risks. We assess and report on our ESG performance using several internationally recognized frameworks, including the United Nations Sustainable Development Goals, the FIDIC Climate Charter, and the Global Reporting Initiative (GRI).

In 2022, we decided to pursue the Science Based Targets Initiative (SBTi) to develop a pathway to decarbonize our operations and supply chain.

Science Based Targets Initiative (SBTi) Approach

After research and deliberation, we settled on the Science Based Targets Initiative (SBTi) as a metrics-based and science-backed approach to establishing a pathway to greenhouse gas (GHG) emissions reductions.



The SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute and the World Wildlife Fund. The SBTi drives climate action in the business sector by helping organizations set science-based emissions reductions targets to support the 2015 Paris Agreement and limit the increase in global warming to 1.5°C by 2050.

In 2023 Morrison Hershfield will sign the letter of commitment with SBTi, develop our near-term and long-term targets, and submit them to SBTi for third-party validation.

To support the development of SBTi targets, we produced a [Carbon Footprint Assessment](#) for 2022. This report was last produced in 2019 prior to the Covid-19 pandemic, but now that our operations have stabilized in a new hybrid working environment, we want to understand our GHG emissions profile and use it to plan our reductions pathway.



The LEED Gold HandyDART Centre in Victoria, BC was designed to accommodate up to 110 electric vehicles and exceeds provincial and federal environmental protection standards.

Global Reporting Initiative (GRI) Standards

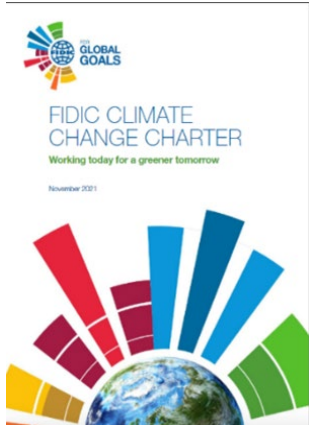
The content in this ESG Report aligns with the GRI (Global Reporting Initiative) Standards launched in October 2016. Our GRI Content Index is included in Appendix B of this document. In 2023, we will be updating to the revised GRI Universal Standards 2021.



The Global Reporting Initiative is an independent standard organization. The GRI reporting framework helps companies communicate their performance in a clear and comparable manner.

FIDIC Climate Change Charter

Engineers and others who design and deliver the world’s infrastructure and built environment have an outsized and essential role in ensuring the world tackles climate change and achieves net zero by 2050. In 2022, Morrison Hershfield signed the International Federation of Consulting Engineers (FIDIC) Climate Change Charter, producing a focus and guiding principles for the firm to take a coordinated company-wide approach to our climate commitments.

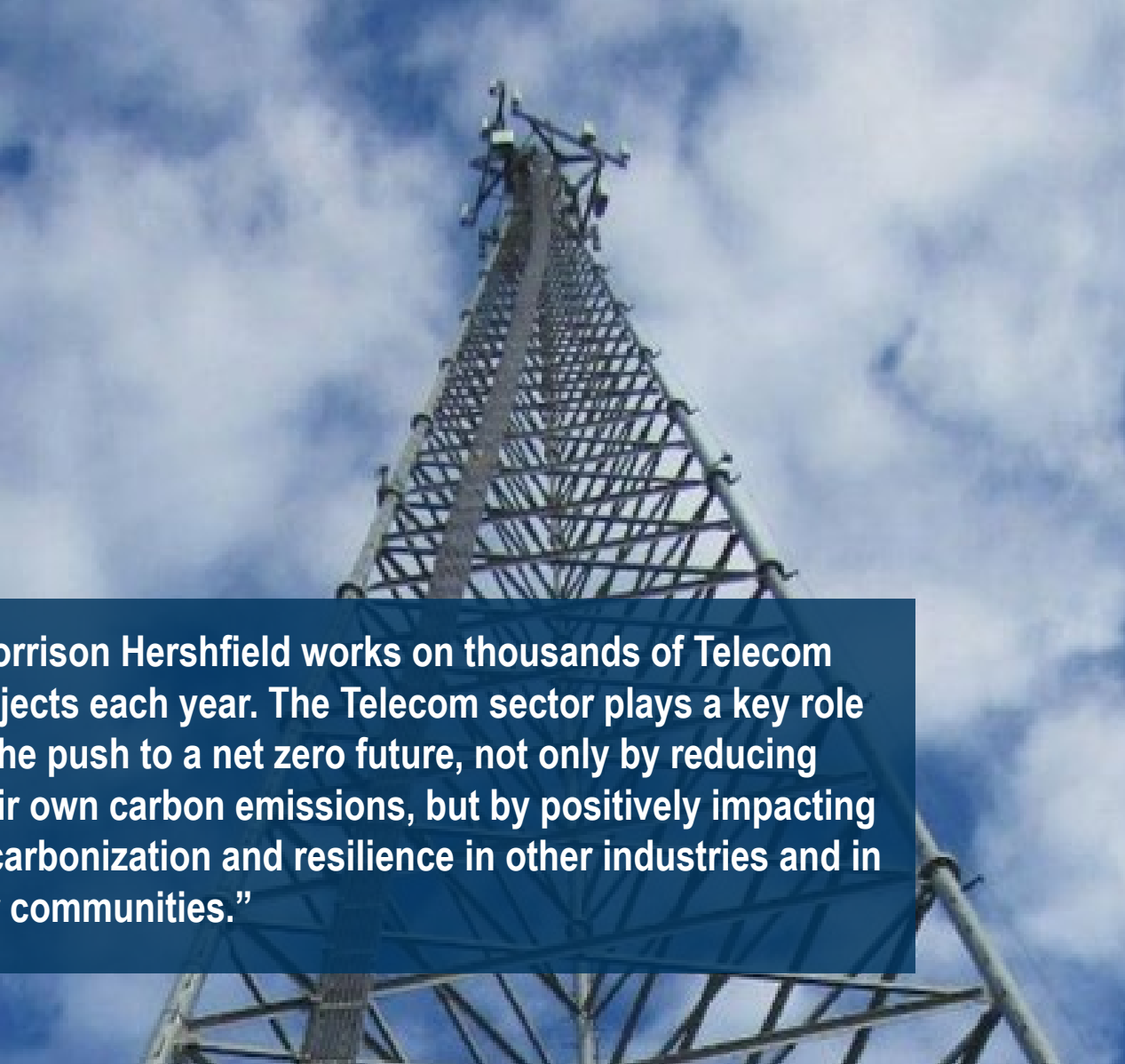


FIDIC is the global consulting engineering industry body which represents over 40,000 companies and more than one million professional engineers and consultants around the world.

The Charter is a significant call to action that sets out clear commitments and actions needed by individual engineers, companies, member associations and project teams to address climate mitigation, adaptation and resilience of the built environment in the years and decades to come. Essentially, it asks firms to commit to reduce their own emissions, reduce embedded and operational carbon in the infrastructure projects they design, and support climate change adaptation through mitigation and resilient design.

At Morrison Hershfield, the latter two commitments will be pursued through our Climate Change Community of Practice and championed by our rapidly growing Climate Change department. Significant interest, engagement and activity was seen over the last year, particularly with focused and broad-based training and with the integration of climate change in proposal and project delivery processes.

Details of our progress in the action areas identified for companies is provided in Appendix C.



“Morrison Hershfield works on thousands of Telecom projects each year. The Telecom sector plays a key role in the push to a net zero future, not only by reducing their own carbon emissions, but by positively impacting decarbonization and resilience in other industries and in our communities.”

United Nations Sustainable Development Goals

Our ESG Strategy aligns with the United Nations Sustainable Development Goals (SDGs) as we strive to deliver sustainable outcomes that aim to improve the wellbeing of present and future generations.

Though we contribute to all 17 SDGs, Morrison Hershfield believes there are eight core SDGs where we have the greatest opportunity for impact: SDG3 (Good Health and Well Being), SDG5 (Gender Equality), SDG6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action). Examples of our positive contribution are evident throughout the Environmental, Social and Governance chapters of this report, and further summarized in Appendix D which highlights our plans, actions and progress within each area.



MH partnered with Ministry of Transportation Ontario to develop one of the first comprehensive sets of standards for constructing and installing electric vehicle charging stations.



ENVIRONMENTAL



SOCIAL




GOVERNANCE

Environmental and Sustainability Priorities

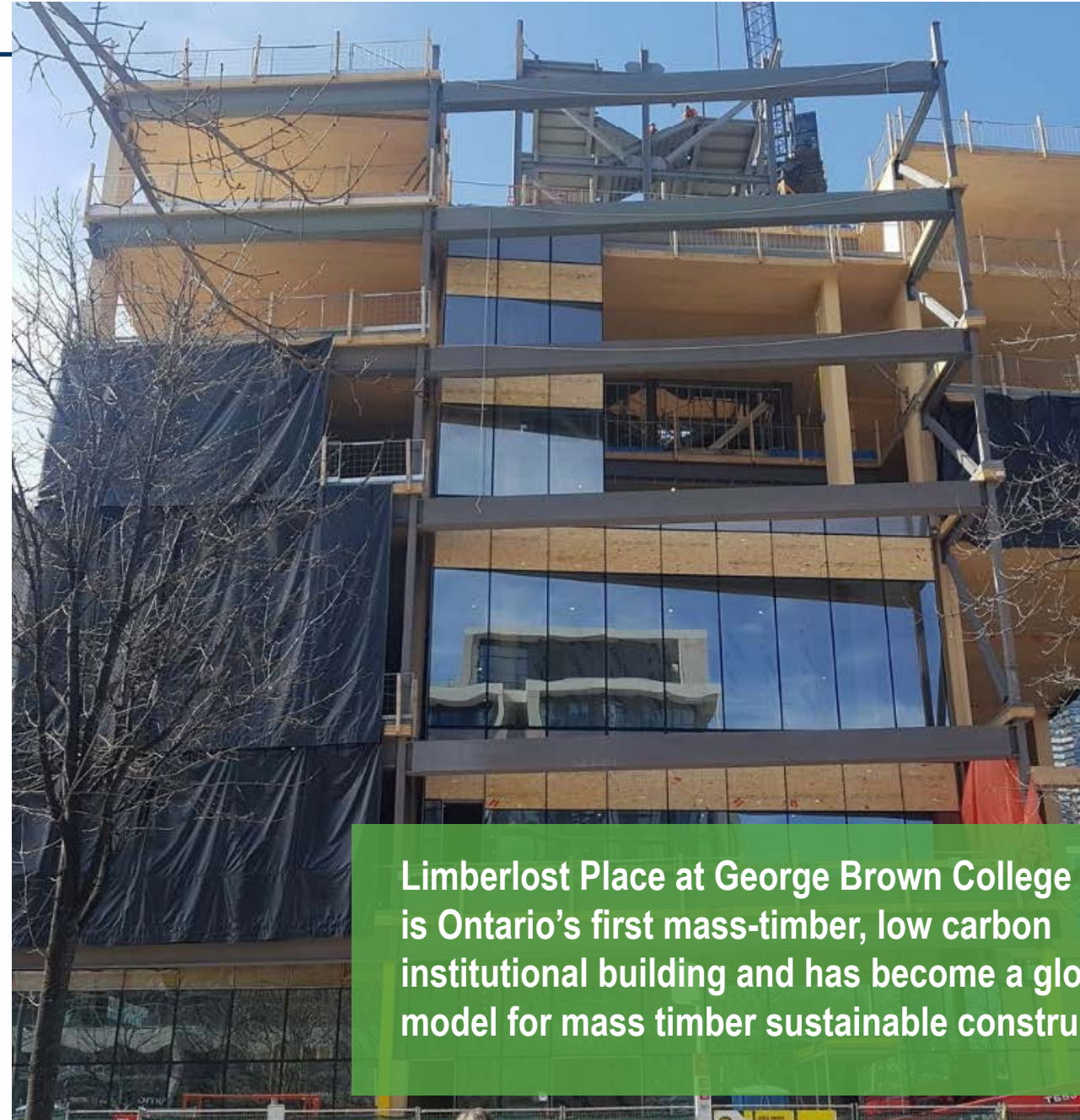
It is essential that we employ the right measures in pursuing sustainability and in determining and communicating the correct indicators to our clients using sound engineering principles and methods. To prioritize sustainability in our business practices, we strive to:

- Understand and communicate the appropriate metrics, both internally and to our clients, so that informed more sustainable decisions can be made.
- Advance toward operational sustainability through a process of continuous improvement. Consideration will be given, but not limited to:
 - Greenhouse Gas Emissions
 - Energy
 - Water & Wastewater

- Materials
- Waste
- Ecology & Nature
- Transportation
- Human Health
- Economics
- Social Stewardship
- Education & Awareness
- Work in partnership with our clients and partners, enabling them to pursue and achieve long-term sustainability.
- Elevate our employees' understanding of environmental issues.
- Push the boundaries. Be innovative in finding solutions that advance us, our clients and the public toward environmental sustainability.
- Monitor progress and report annually to the Board of Directors and our staff.



The Town of Mayo geothermal wells use a warmer groundwater source to heat the water supply system, reducing the demand for fossil-fuel derived heat sources. It is an important contributing project to Yukon's Climate Change plan – “Our Clean Future”.



Limberlost Place at George Brown College is Ontario's first mass-timber, low carbon institutional building and has become a global model for mass timber sustainable construction.

Sustainable Business Operations

Morrison Hershfield has an obligation to provide our clients with environmentally and socially responsible solutions on every project, enabling them to minimize their overall impact and achieve their long-term goals. This same philosophy applies to our own organization – we must ensure we are supporting our neighbors through a shared focus on improving our workplace, our communities and the environment. Our commitment to sustainable operations and continually improving every aspect of our business is central to our ethos as a responsible engineering firm.

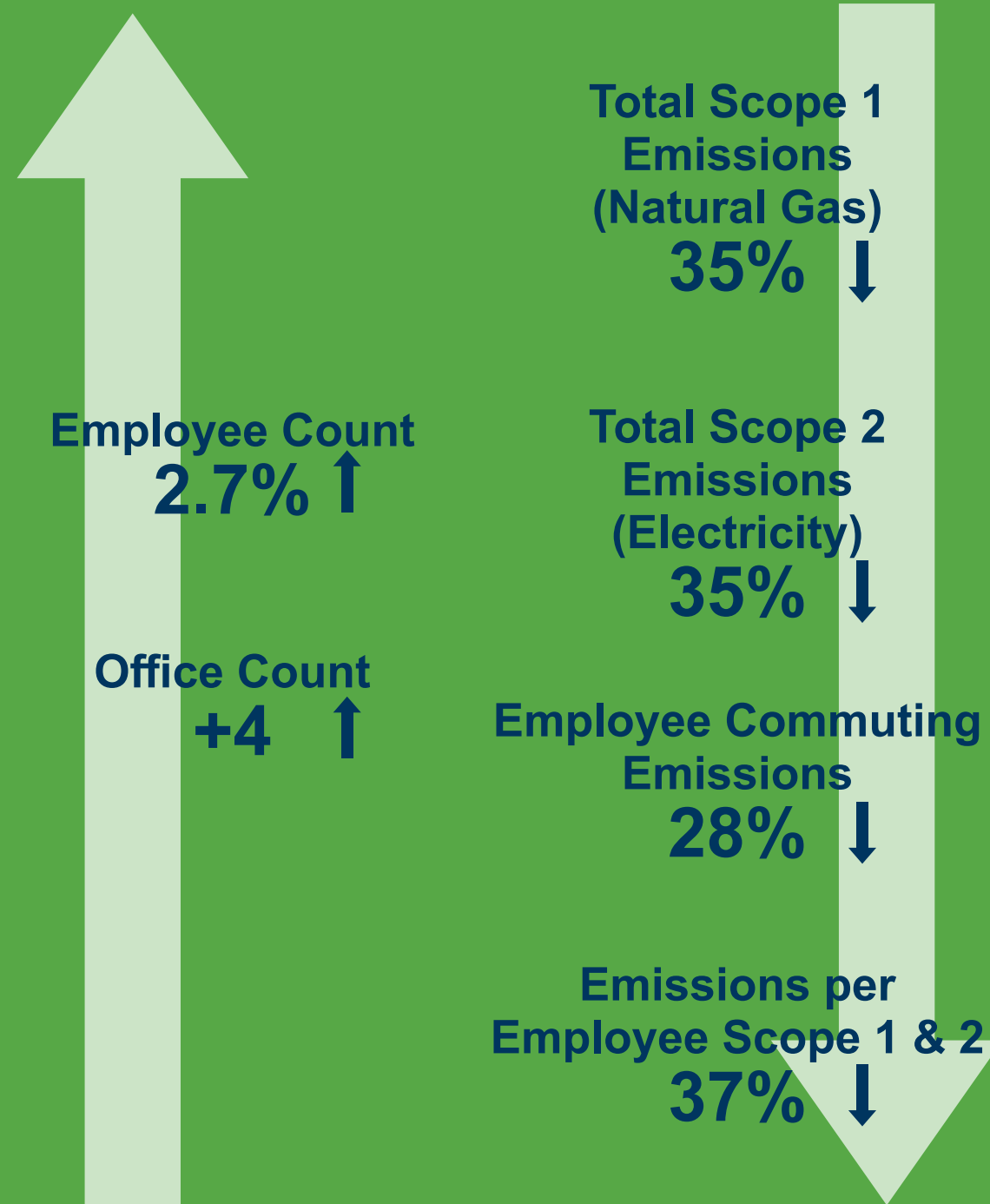
Morrison Hershfield's Carbon Footprint

To provide a clear understanding of Morrison Hershfield's environmental impact and greenhouse gas (GHG) emissions, we conducted a Carbon Footprint Assessment for the calendar year 2022.

The 2022 Carbon Footprint Assessment followed similar reports undertaken in 2009 and 2019, and generally used the same methodology, while expanding the examination of our emissions. In computing our carbon emissions, we followed established standards, used industry-leading software, and consulted reputable sources. We partnered with the technology provider Avarni Software for tools and guidance in conducting the carbon footprint. The technology includes capabilities to forecast carbon reduction pathways which will prove important as we formally commit to reducing our carbon footprint with near-term and long-term targets.

2022 CARBON FOOTPRINT HIGHLIGHTS

(Compared to 2019)



This assessment followed the GHG Protocol and consisted of gathering consumption data for each office. Emissions were categorized according to the three scopes defined by the GHG Protocol: Scope 1 emissions originating from direct sources (including consumption of natural gas used in buildings and exhaust from company-owned vehicles); Scope 2 emissions, associated with the consumption of purchased electricity, steam, heat and cooling; and, Scope 3 emissions, indirect emissions from sources such as our supply chain, business travel and employee commuting.

We obtained more actual data for our office consumption of electricity and natural gas, sharply reducing our reliance on estimates from 35% in 2019 to 1% in 2022 for electricity and correspondingly from 40% to 2% for natural gas.

We took a more rigorous approach to our employee commuting emissions compared to previous reports, using a survey to collect data that will help to shape policies as we seek to reduce our emissions. Employee commuting emissions have declined 38% since 2019, largely a result of the move to hybrid work environments.

For the first time, we gathered data on emissions related to our business travel and undertook an analysis of our supply chain emissions in the form of purchased goods and services. We found that business travel emissions comprise 10% of our overall emissions, with 86% resulting from project-related travel. We also discovered that our supply chain accounts for 67% of our total carbon emissions, with our sub-consultants making up half of this amount.

Our workplace strategy continues to emphasize new and more energy efficient spaces, as demonstrated through our office moves in Baltimore, Whitehorse and St. John's. There has been a 15% reduction in our total space requirement per employee since 2019. We are adapting our office space strategy to the shift to hybrid work environments, with 20% of our workforce now working fulltime from home, 20% working fulltime from the office and the remaining 60% of staff taking a part-time office/part-time work from home approach. We are investing in technology to support hybrid work and reduce interoffice travel, as well as support local office waste reduction and recycling programs, and reduced printing and copying. We are also adding more office amenities like showers, bike storage and EV charging stations.

Additional details on our carbon footprint methodology, including key assumptions, is available in our [2022 Carbon Footprint Assessment](#).



The York Region Transit Maintenance Facility Expansion is the first bus maintenance facility in the world to be designed to the Passive House Standard.

Morrison Hershfield's Emissions Profile

Morrison Hershfield recently completed our 2022 Carbon Footprint and have voluntarily disclosed our greenhouse gas (GHG) emissions since 2009. For the first time, we are reporting on our company owned vehicles (Scope 1), purchased goods and services and business travel (Scope 3).

SCOPE 1:

Greenhouse gas emissions that are directly produced by an organization as a result of their own activities or operations. Morrison Hershfield's direct emissions are produced from natural gas production and company-owned vehicles.

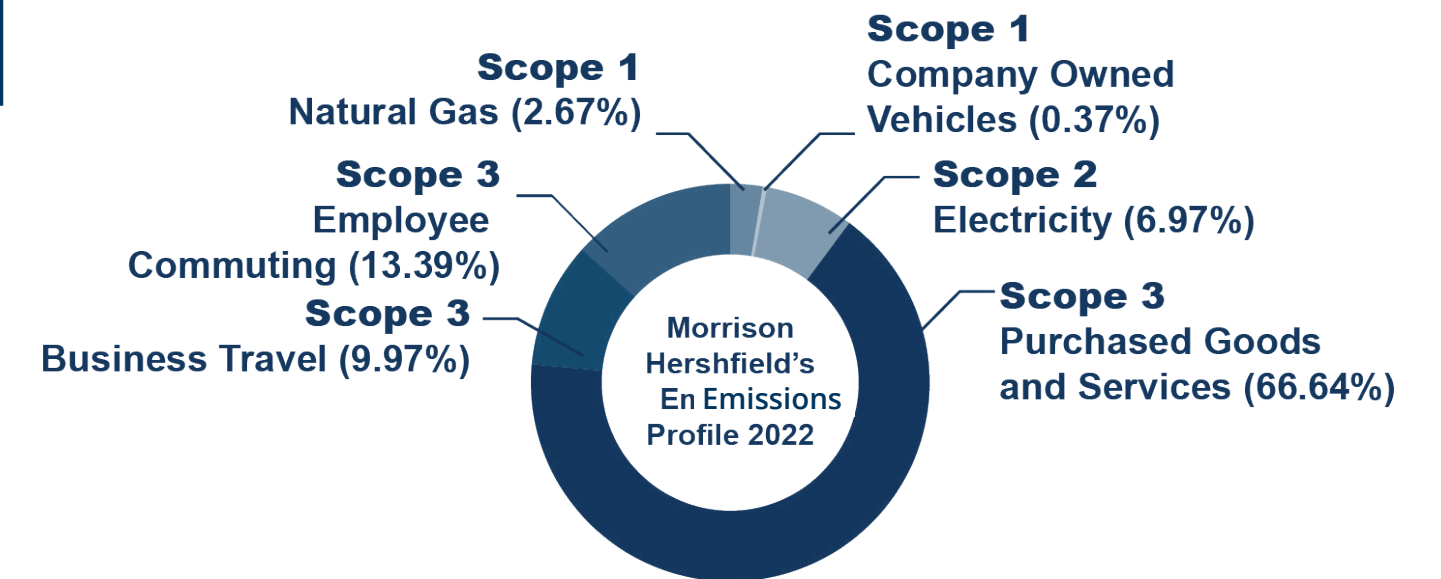
SCOPE 2:

Greenhouse gas emissions that are indirectly generated by an organization due to electricity, heat, or steam. Morrison Hershfield's indirect emissions are produced from electricity used in our offices.

SCOPE 3:

Greenhouse gas emissions that are generated indirectly from sources that are not owned or controlled by the organization including purchased goods and services, business travel, and employee commute. Our calculations prioritize these three categories as they account for the majority of our Scope 3 emissions.

Category	2009 (t CO2e)	2019 (t CO2e)	2022 (t CO2e)
Employee Count (#)	753	975	1001
Scope 1: Owned Vehicles	N/A	N/A	27.5
Scope 1: Natural Gas	220	300	208
Scope 2: Electricity	1297	859	544
Scope 3: Purchased Goods & Services	N/A	N/A	5,200
Scope 3: Business Travel	N/A	N/A	778
Scope 3: Employee Commute	2,230	1,627	1,045



Climate Change Response

The underlying goals of Morrison Hershfield's Climate Change Response are to account for climate change vulnerability and risk and to reduce embedded and operational carbon emissions in the building and infrastructure projects on which we consult, design and deliver. We plan to accomplish this by:

- Engaging key clients to understand their climate change goals and action plans.
- Training staff on incorporating climate change aspects into our consulting engineering work and to ensure project teams are suitably equipped.
- Pursuing and encouraging climate change mitigation and adaptation accreditation..
- Advising clients on carbon emissions and their impact on climate change, and on building and infrastructure vulnerability and resilience.
- Targeting key hires with climate change expertise.

Climate Change Practice

We are on an exciting and important journey to develop an industry-leading climate change mitigation/adaptation practice. We are embedding a climate change focus across our client service delivery to help our clients account for and adapt to climate change (the effects of climate change on our projects) and account for and reduce GHG emissions (the effects of our projects on climate change).

Our Climate Change Practice focuses on partnering with our clients to help them:

- Reduce GHG emissions.
 - Conduct GHG/carbon footprint assessments.
 - Undertake decarbonization options evaluations, assessments and plans.
 - Provide renewable energy planning and approvals.
- Adapt to climate change.
- Understand vulnerabilities to climate change.
 - Identify risks and ensure resilience to climate change.

PROGRESS IN 2022

- ✓ **LEADERSHIP AND ENGAGEMENT**, including the launch of a new Climate Change Community of Practice (CoP).
- ✓ **BASIC TRAINING AND KNOWLEDGE SHARING**, including an MS Teams site, CoP Lunch and Learn events.
- ✓ **ADVANCED TRAINING AND DEVELOPMENT OF CAPABILITIES**, including a 16-hour climate risk assessment course delivered by industry expert Dr. Guy Felio, and additional online training.
- ✓ **TOOLS AND PROCESSES** including a pilot project to trial an updated go/no-go process for proposals, vetting guidance, and project start-up guidance applying a climate change lens. This resulted in updates to our management system (MHMS) documentation, including an update to our Quality Policy.

Sustainable Design

Sustainable Design Tools

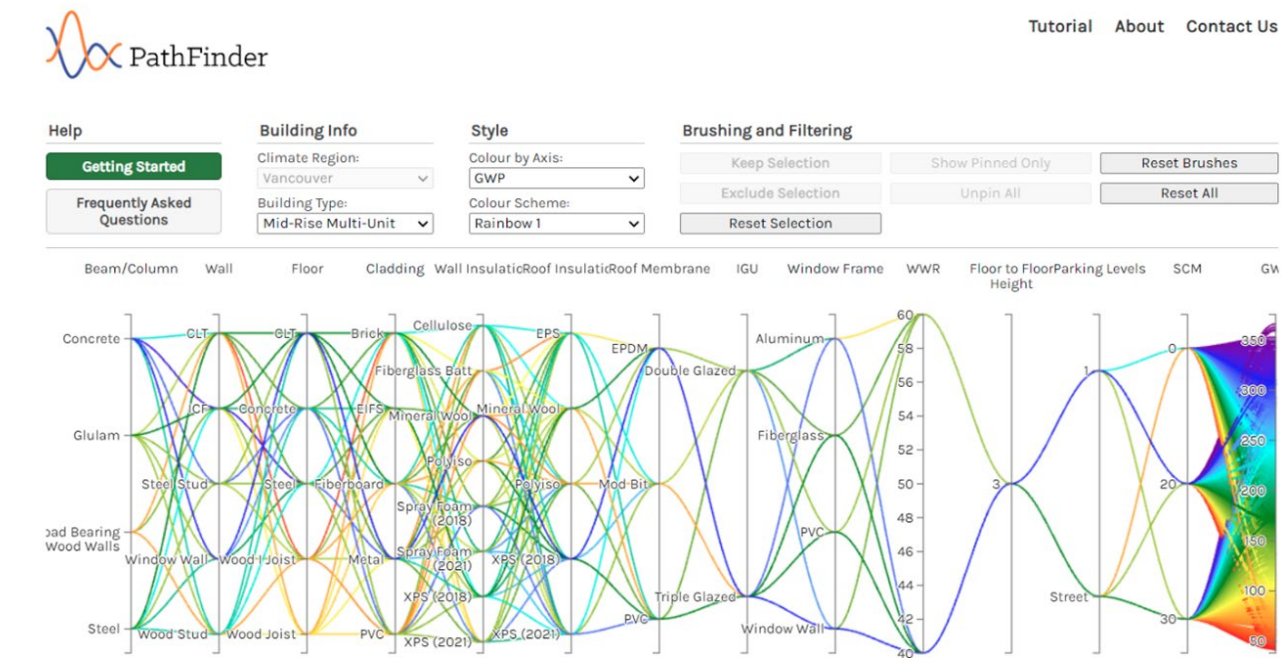
Morrison Hershfield maintains a strong reputation in the field of life cycle assessment (LCA) thanks to the wealth of experience of our technical staff. We partnered with the Athena Sustainable Materials Institute to develop the free LCA online tool specifically for North American buildings to calculate the total impact of building systems. The [PathFinder](#) tool has helped users test building design scenarios for operational energy and emissions for several years, and is now complemented by the Embodied Carbon PathFinder. This free web application allows users to see the embodied carbon implication of different design and materials selections, giving life cycle assessment results for three typical multifamily residential building types. We were instrumental in developing Athena's software solutions including Athena's Impact Estimator. Morrison Hershfield is also a leader in utilizing effective sustainable design tools, such as energy modeling, to understand the total energy input and output of both existing buildings and potential new building designs.

Our engineers can fully customize potential building designs, down to the smallest detail. Using our in-house designed software called Building Energy Performance Mapping, we can instantly assess the impact of individual design decisions on the overall efficiency and sustainability of various building systems, such as HVAC equipment, windows and envelope materials. This allows us to provide the most effective, sustainable long-term solutions for our clients.

Morrison Hershfield, in partnership with BC Housing and industry partners, expanded the Building Envelope Thermal Bridging Guide to include details applicable to all Canadian climates and energy codes. We also developed a web-based database ([ThermalEnvelope.ca](#)) that lets users easily search for building envelope details, compare approaches to mitigate thermal bridges and calculate the overall thermal transmittance of opaque wall assemblies. These tools play an important supporting role in achieving net zero design and implementation within the industry.

EMBODIED CARBON PATHFINDER

This free web application allows users to see the embodied carbon implication of different design and materials selections, giving life cycle assessment results for three typical multifamily residential building types.



Green Building Accreditation and Education

Morrison Hershfield often works with clients who have a stated goal or mandate to obtain specific sustainability ratings or green building targets. To meet this growing demand, we have established ourselves as a leader in green building consulting services. We have worked with the Canada Green Building Council (CaGBC) to develop training and guidance material for LEED applicants. We were one of the first consulting firms in North America to receive American National Standards Institute (ANSI) Accreditation as a third-party GHG Verifier under The Climate Registry. Today, we can measure our clients' carbon footprint and identify, design and implement carbon reduction plans for their operations.

Many of our engineers have fellowships or certifications and training in established and emerging sustainability frameworks, including LEED, WELL Building Standards, Passive House, BOMA Best, Green Globes, ENVISION and Green Roads. Morrison Hershfield has obtained well over 100 green building certifications for our clients using these frameworks. We are among the CaGBC and BOMA Best corporate membership companies, and our employees are active participants on CAGBC Technical Advisory Committees.

We remain dedicated to training and development, to ensure our workforce is in the best position to recognize and meet our clients' evolving needs. In 2022, Morrison Hershfield led webinars on important sustainability topics for a wide range of disciplines. Of note is our partnership with Owens Corning and Northern Facades for a series of energy efficiency webinars.



Designing “future proof” data centers requires sustainable design, management and reliability. We help global hyperscale data center owner/operators with sustainability consulting to model emissions to ensure environmental compliance, reduce embodied carbon and achieve LEED Gold certification.

Mass Timber Navigator

Morrison Hershfield collaborated with BC Forest Innovation Investment (BCFII) and the Province’s Office of Mass Timber (OMTI) and a team of industry experts to develop the Mass Timber Navigator tool. It is an easy-to-use project proforma and early design planning tool for engineered timber building projects including encapsulated mass timber construction (EMTC). Using data from five unique archetype occupancies developed by MH, the tool provides both cost and energy code compliance impact scenarios for multiple baseline comparisons. This is an evolved version of the Building Pathfinder tool that is specific for testing the viability of mass timber projects in BC climate zones 1 through 7. Beta testing for the tool was completed in 2022-2023 and recently became available for public use on the Province of BC’s Naturally Wood website (www.naturallywood.com).

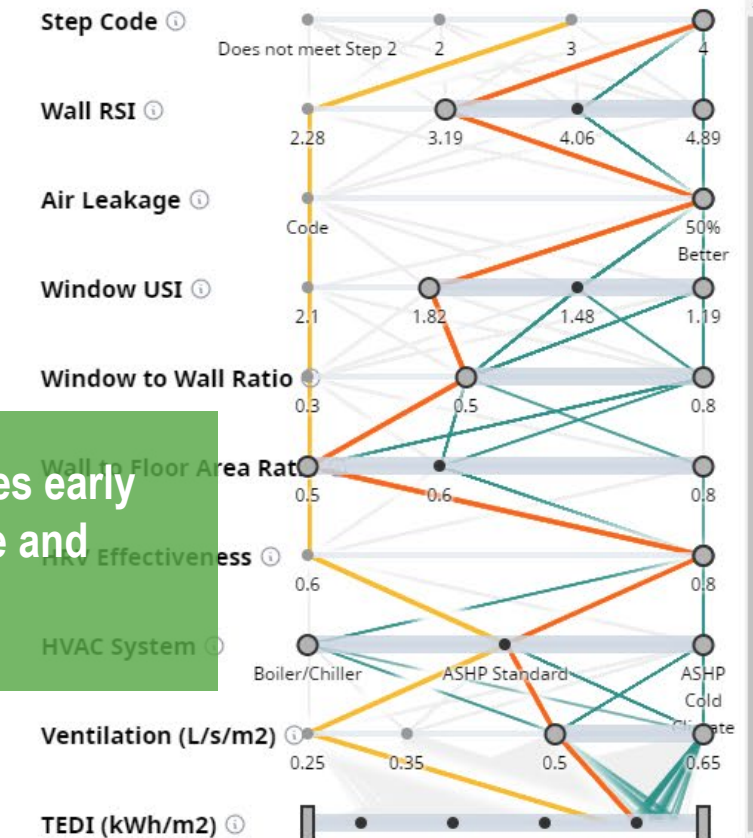
Mass Timber Design Tool

Current selections: Residential 12 Storey (30 m² per occupant) Climate Zone 5

Parameters

Reset sliders

← Lower performance Higher performance →



Best match for

Total Cost (\$/m²)

Change parameters

	Baseline building	Best match with current parameters
Wall RSI	2.28 mk/W	3.19 mk/W
Air Leakage	Code ACH	50% Better ACH
Window USI	2.1 W/mK	1.82 W/mK
WWR	0.3	0.5
WFAR	0.5	0.5
Ventilation	0.25 L/s/m ²	0.5 L/s/m ²
HRV Effectiveness	0.6 %	0.8 %
HVAC System	ASHP Standard	ASHP Standard
TEDI	26.81 kWh/m ²	20.31 kWh/m ² ↓ 24%
EU	90.72 kWh/m ²	95.09 kWh/m ² ↑ 4.8%
Utility Cost	10.05 \$/m ²	10.57 \$/m ² ↑ 5.2%
Step Code	3	4
Total Cost	2,906.94 \$/m ²	2,994.61 \$/m ² ↑ 3%
GHGi	5.33 kgCO ₂ e/m ²	5.38 kgCO ₂ e/m ² ↑ 0.94%

Download CSV

The Mass Timber Navigator provides early design EMTC building performance and costing impact studies.

Our Projects

Sustainability in design and function continues to rise in importance across each area of our business. The work we do can have significant, lasting effects on the communities and ecosystems in which we operate.

For over 75 years, we have established ourselves as leaders in applying innovative technical solutions for our clients in North America and around the world. Our strong technical staff look beyond the boundaries of what is thought possible and push our industry forward. This determined focus on finding innovative applications fuels Morrison Hershfield's ability to stay at the leading edge of our markets.

Our project teams have the knowledge and vision needed to meet rising demands for high-performing buildings and infrastructure. As engineers, scientists, planners, and technical specialists, we can have a significant net positive impact by addressing climate change through our project work and creating the change and action needed to truly make a difference.

WE EMBED CLIMATE CHANGE CONSIDERATIONS INTO OUR PROJECTS:


- We updated our MH Management System to include climate change in our project pursuit and delivery processes.
- We are piloting a climate change screening process for all MH projects.
- Our Climate Change Community of Practice members regularly share work plan development tips for making projects climate change ready.



We assisted with City of Ottawa's pilot program to develop and test design approaches for resilient rainwater management, including retrofitting mature neighborhoods with Low Impact Development measures for managing stormwater runoff.

Our clients expect engineering solutions that serve their primary needs and contribute to the responsible use of resources and social well-being in their communities. We are dedicated to the profession and the execution of our projects. We recognize that we can have a meaningful impact on sustainability through sharing our knowledge and expertise and in our project work, where we strive to balance technical excellence and economic responsibility with environmental and social benefits.

Throughout this report, you will find examples of the work we do. We deliver over 5000 projects annually, some of which target stringent zero-carbon and Passive House standards, achieve ambitious energy efficiency targets or involve mass timber construction. Others assess and mitigate expected fugitive emissions in landfills or provide new opportunities for communities to minimize and recycle waste. We examine the impacts of infrastructure on native/endangered species and their habitats and design resilient drainage and stormwater management systems to accommodate a changing climate. We design and assess new “electrification” infrastructure such as EV charging stations, electrical storage and light rail. And, our climate resiliency assessments and climate change mitigation and adaptation plans help our clients and communities meet their sustainability goals.



The Central Surrey Recycling and Waste Centre increases the convenience of recycling and waste management for residents, significantly reducing travel distances, GHG emissions and illegal dumping. It plays an important role in Metro Vancouver’s efforts to reach diversion goals and move to a circular economy.



SOCIAL

Our People and our Culture



ENVIRONMENTAL



SOCIAL



GOVERNANCE



The Foundation of our Success is our People.

As a professional services firm, our ability to compete and provide value to our clients is a result of the knowledge, skills and expertise that our employees bring to their work every day. Our ability to attract, retain and develop our employees in a diverse and inclusive environment, providing them an unrivaled employee experience, is central to achieving our long-term strategic goals.

2025 AMBITION Unrivaled Employee Experience

Providing an unrivaled employee experience is a strategic goal of Morrison Hershfield and is central to achieving our 2025 Ambition. We aim to be a destination employer for professionals who share our core values and seek a balanced, supportive and intellectually challenging work environment.



The Employee Experience

Morrison Hershfield maintains human resources policies in accordance with regulations and practices in every country where we operate. We report progress on key employee programs, including health and safety, training hours, succession planning and employee turnover, to the Human Resources and Compensation Committee of the Board of Directors, on a regular basis. Our employee programs are overseen by Vice President, Human Resources, Organizational Development and Safety, who reports directly to the CEO. This individual is responsible for developing, supporting and maintaining Morrison Hershfield’s human resources policies and programs.

Recruiting and Retention

Our industry is facing a shortage of experienced, qualified technical professionals, resulting in a competitive, challenging market for recruiting talent. This makes recruitment and retention a significant challenge that we work to address every day. To ensure we hire based on ability, skills and potential, Morrison Hershfield continues to improve a best-in-class applicant tracking system for all candidates utilizing the same process. Managers use a standardized hiring process for screening and selection to reduce systemic or

unconscious bias throughout the decision-making process. Last year, Morrison Hershfield optimized our recruiting and onboarding processes. Our Ambassador Program assigns an MH peer to assist each new hire navigate the MH system and learn our culture, providing extra support during their first few months of employment.

In 2022, Morrison Hershfield launched a Flexible Work Arrangements program in response to employee feedback gained through “Future of Work” surveys. Flex arrangements include alternative work locations and/or schedules from the traditional working day and week. We are committed to providing flexible work arrangements, wherever possible, to assist employees in fulfilling their multiple responsibilities at work, at home and in the community.

264
New Hires in 2022

Employee Turnover

Voluntary
1.0% pts
Below industry benchmark

Involuntary
2.8% pts
Below industry benchmark

Employee Engagement

Morrison Hershfield works diligently to improve employees' satisfaction with their working environment. To assess our performance in this area, we periodically conduct third party employee engagement surveys, and internal pulse surveys. Results of the surveys are shared with staff and reviewed by the Senior Management Team to assess the overall health of our culture and identify areas for improvement. We set action plans to address potential areas of concern identified by the survey results. In response to the COVID-19 pandemic in 2020, and our move to a remote and subsequently flexible work environment, Morrison Hershfield increased the frequency of employee pulse surveys to help identify staff needs, shifts in expectations and encourage an open dialog.

THE CARSON AWARDS OF EXCELLENCE

Excellence deserves recognition. Our internal Carson Awards of Excellence Program recognizes, celebrates and advertises those who strive for excellence, either through their daily activities, the development of innovative and elegant engineering solutions, or the development of new markets and products. The program allows peers to nominate each other for their contributions in seven categories. Winners are selected by a panel of external client judges and announced during an annual live video production attended by employees across the globe. The Carson Awards recognize that these contributions not only benefit Morrison Hershfield but may also be for the betterment of our profession and our community. It is named after founding member Carson Morrison, who established the company in 1946.



Focus on Wellness

Morrison Hershfield encourages all staff to take an active role in their mental and physical health and well-being. In addition to a robust benefits program, wellness workshops are offered throughout the year. Our annual MH Wellness Challenge takes place every June, and last year saw excellent participation from staff in Canada, India and the U.S. Over 1300 activities were logged in support of our mental and physical wellbeing.



Employee Satisfaction - eNPS

Among other metrics, Morrison Hershfield uses Employee Pulse Surveys and the Employee Net Promoter (eNPS) score to measure employee satisfaction and engagement. We currently have a great eNPS of +45. Employees are motivated by job satisfaction, work-life balance, and opportunities for growth and development. We want to make sure we are performing well in these areas!

Employee Pulse Survey

Employee Net Promoter Score

+45
MH eNPS



Morrison Hershfield supports initiatives that encourage fun and teamwork in and outside of the office. We were excited to see a return to teambuilding activities in 2022!

88%

Believe they can be themselves at MH

85%

Employee Engagement



Training And Development

Morrison Hershfield helps staff build their professional mastery through work experience, mentorships, resources and training. Training and development opportunities are provided at four levels: compliance, project management, technical, leadership.

Compliance training is offered in accordance with local and national regulations in each jurisdiction where Morrison Hershfield does work. We support and invest in technical training opportunities to ensure our employees remain knowledgeable and current in their field and are given opportunities to grow. We offer training through a combination of on-the-job training, e-learning,

TRAINING AND DEVELOPMENT OPPORTUNITIES:

COMPLIANCE



TECHNICAL



LEADERSHIP



PROJECT MANAGEMENT

participation in Morrison Hershfield's Communities of Practice, knowledge sharing events and supporting external training such as attending conferences, seminars and educational courses.

Morrison Hershfield covers the full cost of any mandatory external training and 50% of the cost of any approved self-elected external training. This investment is critical to the development of our employees, and also contributes to our innovation, sustainable design and core business services.

Since transitioning our online Learning Management System to Workday in 2019, our catalogue of internal courses has increased to over 300 offerings at the end of 2022.

Our "MH Academy" promotes professional growth in project and people management and is currently comprised of our Project Management Academy (offering over 13 online courses) and our Leadership Academy (with more than 16 courses). In addition, Morrison Hershfield staff have free access to over 9000 external courses through our company-paid LinkedIn Learning subscription, purchased in 2021. LinkedIn Learning is an industry leader in online training, with courses covering a wide range of technical, business, soft skills, software and creative topics. It is accessible online 24/7 and promotes staff development.




MORRISON HERSHFIELD'S LEADERSHIP ACADEMY supports the development of best-in-class management and leadership skills to make our people strong team leads, department managers and executives.



PROJECT MANAGEMENT ACADEMY provides focused training in specific knowledge areas for our new and existing project managers. Modules identify the fundamentals of project management and capture best practices from some of our best project management practitioners throughout the firm.

 **9 hours**
Avg Personal Development Time
per Employee


291
Internal Courses


8000
Free Learning Courses

Formal Technical Groups

Morrison Hershfield maintains nine technical networking groups, called Communities of Practice (CoP). They provide a forum to encourage and cultivate technical excellence and innovation, and opportunities for staff to advance their knowledge, and share interests and expertise. The groups also serve as incubators for employees to leverage best practices across business units and develop their ideas into applications or service offerings. All CoPs are hosted on MS Teams with open enrollment. In 2022, we launched a new Climate Change CoP with widespread interest from employees across the company.

THE CLIMATE CHANGE COMMUNITY OF PRACTICE forms part of Morrison Hershfield's response to support the urgent action necessary to limit, mitigate and adapt to the impacts of climate change and support the global goal of Net Zero GHG emissions by 2050. It is anticipated that this CoP will help to embed a climate change focus in our sales pursuits, client interactions and project delivery, and quicken its pace of adoption.

9
Communities
of Practice

Diversity, Equity, Inclusion

Our dedicated DEI portal site is accessible to all staff and shares important communications, key policies and guidelines, metrics and recommended training/learning with a goal of reducing bias and helping employees become better allies in the workplace.

In 2022, we introduced additional mandatory training for new hires on recognizing and confronting bias, approved our DEI policy and "Use of Pronouns" guidelines, undertook our first DEI Survey of employees, and launched our new EIT Pathway to Licensure program to assist all MH Engineers-in-Training pursue licensure.

We became an active member of the Canadian Council for Aboriginal Business and began the first phase of our Progressive Aboriginal Relations (PAR) Certification.

Throughout the year, we regularly recognized, communicated and celebrated key social awareness days, weeks and months, informing and engaging staff with themed learning and interactive activities.



“Morrison Hershfield develops high-performing, diverse and inclusive teams. Our commitment to Diversity, Equity and Inclusion (DEI) is integrated into our 2025 Ambition. We see our actions as a key opportunity for Morrison Hershfield to collectively impact social change and improve organizational effectiveness.

-Catherine Karakatsanis,
Chief Operating Officer

DEI Advisory Council

Our DEI Advisory Council plays an important role in prioritizing our DEI actions and assisting with executing the firm’s DEI strategy. Planning for this Council began in 2020, and it was formally launched in 2021. Membership transitions every 12-18 months, providing an opportunity for more staff to become involved at the strategic level. We welcomed the second group of Council members in 2022.

DEI ADVISORY COUNCIL

Morrison Hershfield established our DEI Advisory Council in 2021. The Council is led by two co-chairs from our Senior Management Team and supported by 10 employee volunteers. Its role is to recommend how to further embed diversity and inclusion into our culture, identify priority actions and assist with executing the DEI strategy for Morrison Hershfield.

Employer Champion

Morrison Hershfield continues to be an Employer Champion partnering with Professional Engineers Ontario in its mandate to improve female representation within the engineering profession. This brings key stakeholders to the table to discuss challenges and opportunities to drive Engineers Canada’s 30 by 30 initiative, which aims to increase the proportion of newly licensed female-identifying engineers to 30 percent by the year 2030.

DEI Goals

Priority DEI actions for 2023 include advancing our PAR certification commitment, reviewing our key internal people processes to further reduce systemic bias and expanding the EIT Pathway to Licensure Program.

2022 PROGRESS

29%

Female Gender Diversity

Technical Level: 24% Female
Managerial Level: 28% Female
Executive Level: 10% Female
Shareholder Level: 19% Female
Board of Directors: 40% Female

37%

Ratio of Minority to Non-Minority

18%

Women Engineers Total

23%

2022 New Female Hires

85%

Employees Agree or Strongly Agree That MH has a Diverse and Inclusive Culture.

(*Source: 2022 Employee Perception Survey)



Indigenous Relations And Reconciliation

Over the years, Morrison Hershfield has established productive working relationships with Indigenous communities, clients and partners across Canada. Undertaking sincere and meaningful engagement as part of our projects has led to more informed decision making and created more sustainable solutions that help protect the unique culture of each community, while improving quality of life and supporting economic prosperity.

In 2022, Morrison Hershfield became an active member of the Canadian Council for Aboriginal Business and began pursuing Progressive Aboriginal Relations (PAR)

Certification. An internal PAR working committee was created and is actively working on key initiatives to advance our commitment to progressive Indigenous relations. First steps included releasing our Leadership Statement on Progressive Indigenous Relations and approving our Indigenous Relations Policy.



Indigenous Relations Leadership Statement

Morrison Hershfield strives to build and maintain a collaborative and inclusive approach to all we do. We are committed to developing and strengthening mutually respectful and meaningful relationships between Indigenous communities, our clients and partners, and our firm. We commit to furthering our own knowledge and understanding of unique Indigenous cultures, needs and concerns and to exploring mutually beneficial employment and business opportunities.

With the PAR program and Canada's Truth and Reconciliation Commission recommendations as our guide, we will continue to demonstrate our commitment to the Indigenous community and take positive and concrete steps on our collective journey toward reconciliation.

ACKNOWLEDGEMENT TO INDIGENOUS PEOPLES

As articulated in the 2017 United Nations Declaration of Rights of Indigenous Peoples (UNDRIP), Morrison Hershfield acknowledges and recognizes the urgent need to respect and promote the inherent rights of Indigenous peoples.

Progressive
Aboriginal
RELATIONS **COMMITTED**

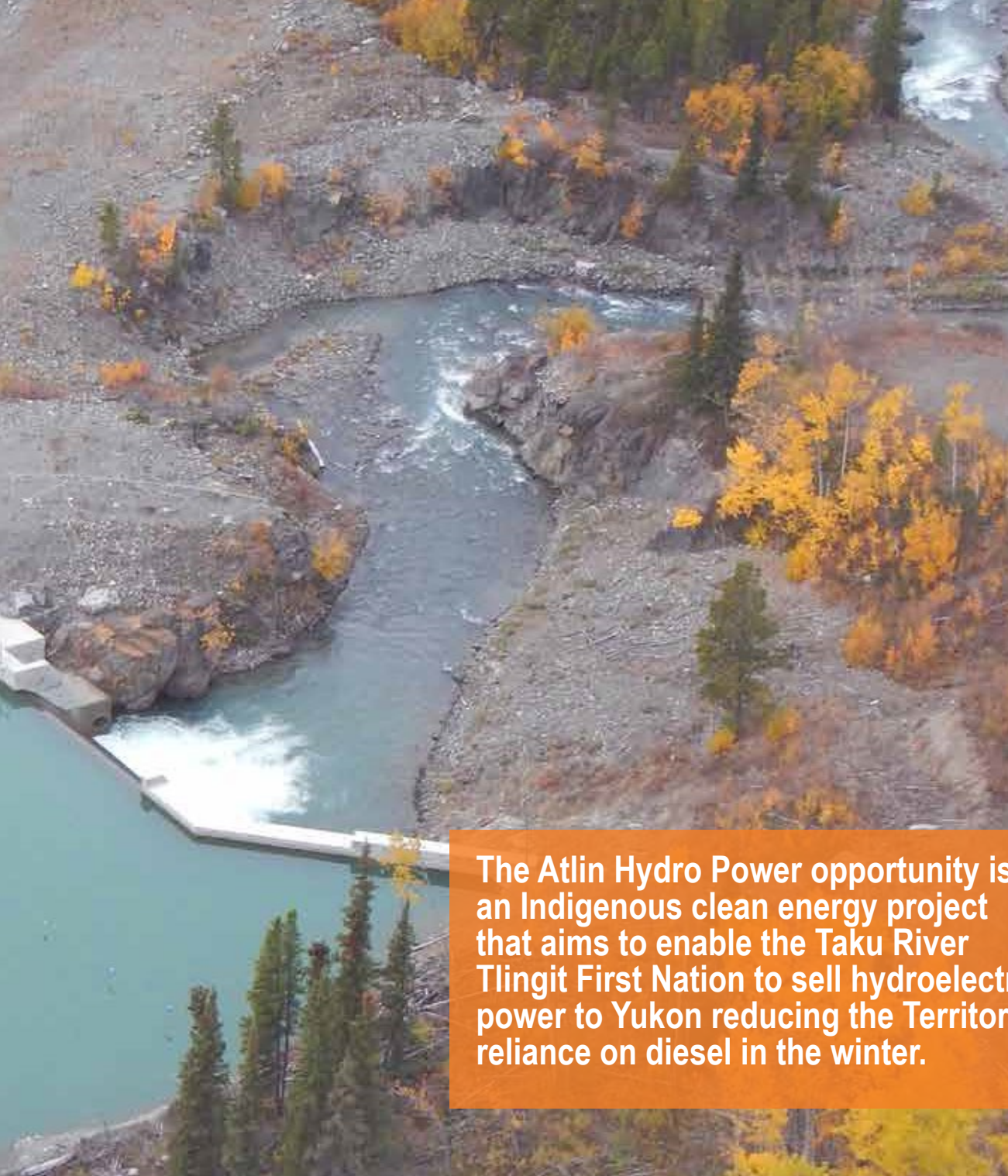
Canadian Council for
Aboriginal Business

PAR is a recognition and certification program that confirms organizational performance on Indigenous relations. It signals to Indigenous communities that PAR certified companies are:

- ✓ Good business partners
- ✓ Good places to work
- ✓ Committed to prosperity for Indigenous communities

There are four key drivers for PAR that are addressed throughout the program:

- (1) leadership actions
- (2) employment
- (3) business development
- (4) community relations.



The Atlin Hydro Power opportunity is an Indigenous clean energy project that aims to enable the Taku River Tlingit First Nation to sell hydroelectric power to Yukon reducing the Territory's reliance on diesel in the winter.

Indigenous Relations Policy

Morrison Hershfield's Indigenous Relations Policy sets out our guiding principles and defines our commitment to progressive Indigenous relations and reconciliation. We commit to:

- **Be Respectful:** Respect the legal rights of Indigenous Peoples and communities, as well as their culture, histories, resources and traditions.
- **Build Relationships:** Create and sustain mutually beneficial business relationships between Morrison Hershfield and the Indigenous communities we work with.
- **Engage Proactively:** Engage Indigenous communities in our activities providing the opportunity for meaningful participation and dialogue with community leaders and members to optimize decision-making.
- **Develop Awareness:** Promote opportunities for education and training within our firm that further our own understanding of unique Indigenous cultures, needs and concerns and foster engagement with Indigenous Peoples.
- **Support Business Development:** Be a responsible business partner and seek out equitable procurement opportunities with Indigenous communities and businesses.
- **Grow our Indigenous Employee Base:** Look for opportunities to provide job opportunities to Indigenous people and ask them to partner with us to help achieve our certification goals.

2022 MILESTONES

- ✓ Joined Canadian Council for Aboriginal Business.
- ✓ Began pursuit of PAR certification.
- ✓ Released Indigenous Relations Leadership Statement
- ✓ Released Indigenous Relations Policy
- ✓ Initiated Four Seasons of Reconciliation Training for Senior Management Team and professional engineers in BC offices.

Focus on the Future

Through 2023 and beyond MH will work with the CCAB and our Indigenous community partners to advance our PAR initiatives. In the near-term this will include obtaining third-party verification of our "Committed" PAR status and confirmation of specific goals and performance metrics.

Health and Safety

The physical, psychological and social well-being of all Morrison Hershfield personnel is at the core of our corporate values. We take a proactive and strategic approach to workplace safety and maintaining safe workplaces and jobsites. Our robust safety policies, safe job procedures and safe job practices provide a solid foundation for the firm's Occupational Health and Safety Management System (OHSMS).

Our comprehensive Hazard Management Program (HMP) addresses the management of health and safety risks unique to Morrison Hershfield. Through the systematic recognition and assessment of job-specific hazards, the HMP ensures that appropriate safety measures and controls are incorporated into all our projects from the planning stage through their execution and turn over.

Our training program provides education and training to our teams to ensure they have the knowledge and skills to do their work safely. Reporting, inspection, incident reporting and performance monitoring programs build on our commitment to excellence and continuous improvement in health and safety. Multiple communication

A HEALTH AND SAFETY LEADER IN THE ENGINEERING CONSULTING INDUSTRY

Morrison Hershfield's Occupational Health and Safety Management System (OHSMS) exceeds regulatory requirements. It is rooted in international standards, regional standards like the Certificate of Recognition (COR) program and best practices and supported by over 77 years of industry experience. MH holds COR certifications in various Canadian provinces.

channels together with our health and safety committee and the active participation of our employees in corporate initiatives are paramount to maintaining a safe work environment and honoring our core values.

2022 Achievements and Continuous Improvement

During 2022, we implemented several initiatives to strengthen our OHSMS:

- Morrison Hershfield's Health & Safety policies, procedures and practices are available online to all employees via a new Health & Safety page on our corporate intranet site.
- Developed new health and safety training for managers and team leaders.
- Strengthened our OHSMS communication system by adding safety alerts, monthly safety bulletins, and regular updates on the H&S page of MH Connect.
- Reviewed and updated the External Service Provider Safety program.
- Reviewed and updated MH policies and procedures to meet new regulations and COR certification requirements.
- Developed new Job Hazard Analysis, Safe Job Procedures and Safe Work practices to meet new Audit and regulatory requirements.
- Completed external health and safety audits, maintaining MH COR certifications in Ontario, Alberta and the Yukon.

Employee Engagement and Satisfaction

In our most recent employee survey, occupational health and safety was one of the highest-scoring performance categories, with a 90% approval rating. Our employees feel that we have the programs in place to protect them in their work. Our Vice President of Human Resources, Organizational Development and Safety, leads our HSE program managing health, safety and wellbeing at Morrison Hershfield. This role is also responsible for reporting regular updates to our Senior Management Team, and a semi-annual report to our Board of Directors.

SOLID SAFETY RECORD



1,897,826 Hours worked

0.42 Total Recordable Injury Frequency (TRIF)

0.11 Lost Time Injury Rate (LTIR)

0.21 Severity Rate (SR)

Our TRIF, LTIR and SR are below industry averages.

90%

Approval rating from staff regarding Occupational Health & Safety

1

Online central repository of H&S policies, guidelines, practices and tools.

8

Joint Health and Safety Committees



Industry Leadership

Morrison Hershfield continues to make a positive impact through industry leadership. Morrison Hershfield employees actively engage with external agencies, industry groups and the education sector. We encourage our engineers to pursue these opportunities as a means of connecting with their peers to exchange information, share best practices and promote new training and tools to elevate their knowledge and skills.

Our staff maintain prominent roles with many local, regional, national and international industry organizations. In 2022, staff participated as speakers and panel experts at numerous in person and virtual industry events. We hosted 22 technical webinars for over 1400 participants, and maintain an on-demand webinar library on our website.

Hosted
22
Free Technical
Webinars

1482
Webinar
Participants

Added
17
To On-Demand
Library

PROFESSIONAL ORGANIZATION SUPPORT

- Architectural Institutes
- Building Enclosure Councils
- Communication Tower Associations & Councils
- CSA Committees
- Green Building Councils
- HVAC Associations
- International, National and Regional Engineering Associations
- Mission Critical Industry Forums
- Planning Institutes
- Project Management Institutes
- Real Estate Associations
- Sustainable Infrastructure Institutes
- Transit Associations
- Transportation Associations
- Water & Wastewater Associations

Focus on Innovation

Our goal is to provide all Morrison Hershfield employees with direct access to the knowledge needed to progress in our areas of practice. We invest in technology, process development and programs that promote innovation. In doing so, we can contribute to more effective, resource efficient solutions for our clients that help control costs and reduce environmental and social impacts. We devote considerable resources to ensure that we provide our staff with the tools and opportunities to remain at the cutting edge of their respective fields.

We maintain a knowledge management system with separate platforms for knowledge sharing, operations and project teams. Morrison Hershfield employees utilize the knowledge platform to share new ideas, best practices and lessons learned, as well as solicit advice from colleagues. The knowledge platform is an effective tool for raising the collective knowledge of our firm and helping new and established engineers understand our leading practices. Our project teams platform supports our ISO 9001:2015 certified management system and serves as an effective, rigorous and secure document and data management tool for Morrison Hershfield and our external project partners.

Our Building Specialty Services team continues to advance its “Innovation Initiative” program to foster and promote critical and innovative thinking to solve problems, discover new ways of doing what we do, and/or create alternate solutions that display leading edge scientific and engineering creativity and market-leading intelligence.

Company Recognition and Project Awards

Morrison Hershfield takes pride in our people, culture and capabilities. We strive to provide the best for our clients, our community and our staff. It is an honor to be recognized by key authorities and industry peers for our work ethic and dedication to technical excellence, and we celebrate the teams and individuals who ensure that through time, our business practices continue to stay great.

Our technical excellence and market leadership are further demonstrated by our inclusion on several prestigious industry lists and involvement on more than 15 award winning projects over the last year.

15+
Award-Winning Projects

Industry Lists & Rankings

#19

Top 45 Engineering Architecture Firms



2022 Giants 400 Report

#45

Top 100 mechanical, electrical, plumbing and fire protection engineering firms



MEP Giants List 2022

#128

2022 Top 500 Design Firms



Top Lists

#73

Top International Design Firms



Top Lists

Platinum Elite

Top 100: Canada's Biggest Infrastructure Projects Design Firms



University of Washington Life Sciences Building, Seattle, WA
BLT Built Design Award



Clayton Community Centre, Surrey, BC.
Canadian Green Building Award, SAB Magazine



LC1 Data Center Data Center in Loudoun County, VA.
Craftsmanship Award & Washington Building Congress

In the Community

Morrison Hershfield’s continued success depends in large part upon the health and prosperity of the regions in which we operate. Supporting our communities is another way we demonstrate our lasting commitment to local and regional development. We have historically taken a grass roots approach to community engagement by encouraging and empowering each local office and employees to support causes in their local communities.

In 2022, staff continued with a mix of traditional and virtual fundraising initiatives.

We regularly post about our community engagement efforts on Morrison Hershfield’s Blog, including our volunteer programs, employee teams and philanthropy events, post-secondary education, STEM education and other partnerships.



The firm also maintained its Donation Matching Programs in support of disaster and humanitarian relief efforts in our communities. In 2022, Morrison Hershfield matched employee donations for the British Columbia Flood Response, and Ukraine Humanitarian Relief.

We continue to look for new ways to expand the engagement opportunities offered within our company to meet the demand of our employees to leave a lasting positive impact on the community. We are also taking steps to formalize our efforts to focus on programs that are most important to our employees and will be most beneficial to the communities in which we operate.



Ukraine Humanitarian Relief Matching Donation Program

ENGAGEMENT OPPORTUNITIES


- Volunteer programs
- STEM Education
- Employee teams
- Philanthropy events
- Post-secondary education partnerships



GOVERNANCE

Our Practices

 ENVIRONMENTAL

 SOCIAL

 GOVERNANCE

OUR PRACTICES

When our founders established this consulting practice in 1946, they set the standard for ethics, technical excellence and customer service. These high standards have become the hallmark of Morrison Hershfield.

Today, our corporate governance practices and policies set expectations of our Board and employees to continue our tradition of operating with the highest levels of integrity. We believe that as a professional services firm, our behavior must be beyond reproach. Our corporate governance practices are in place to reflect that belief.

Employee Ownership

Since 1968, Morrison Hershfield has been a 100 percent employee-owned firm. As stated in our 2025 Ambition, we are steadfastly committed to remaining as such. This will allow us to control our destiny as a firm, act as stewards for future generations and build strength and resilience to invest in ESG programs that benefit the firm, our employees and the communities in which we live and work. In 2020, Morrison Hershfield reached its goal of expanding our shareholder base to one-third of our employees. Our goal is to expand this to 50 percent by 2025.

100%
EMPLOYEE OWNED

36.3%
OF EMPLOYEES
ARE SHAREHOLDERS



Wii Gyemsiga Siwilaawksat Student Residence at Coast Mountain College, BC embraces Indigenous culture and exceeds goals for durability and energy efficiency.

Photo credit: CMTN & Bruce Denis

Board of Directors

Our commitment to strong corporate governance is reflected in our ten-member Board of Directors and governed by our Board Charter. Our Board consists of at least three External Directors, including an external Chair. The remaining Directors must be Morrison Hershfield shareholders. One Shareholder-at-large position is reserved specifically for a non-executive shareholder. External Directors are nominated by a committee of the Morrison Hershfield Board and appointed for six-year terms, reaffirmed each year at the Annual General Meeting by shareholders. Internal Directors are nominated and elected to one-year terms by shareholders.

The Board operates with standing and as-needed committees: Audit and Risk, External Director Search, HR-Compensation, Ownership Roadmap, Shareholder Guidelines and Shareholder Nominating Committees.



Enterprise Risk Management

Morrison Hershfield recognizes that risk is present in all business activities and that the successful management of risk is a critical factor to our business. The forecasted pace of change (including disruptive change) requires that we are alert to the implications of these changes on Morrison Hershfield's client services, business operations, strategy and goals.

A common and practical risk management framework helps strategically manage Morrison Hershfield's portfolio of risk. We have an Enterprise Risk Management (ERM) policy that formally communicates and codifies Morrison Hershfield's Enterprise Risk Management objectives, risk principles, governance expectations and minimum requirements for key risk management activities. This policy helps ensure that exposure to enterprise-wide risks, that are identified, measured, and assessed, are treated using the most effective and efficient methods.

We conduct a bi-annual evaluation intended to identify, assess and prioritize the most significant risks to which our organization is exposed. Following the evaluation, we assign sponsors to the most critical risks and develop risk mitigation plans that include metrics and time-bound goals. We review progress on these mitigation plans as part of our quarterly Management Risk Committee meetings. The system is led by the Chief Technical & Risk Management Officer who provides regular Enterprise Risk Management reports to the Audit & Risk Committee of the MHGI Board of Directors.

Ethics & Integrity

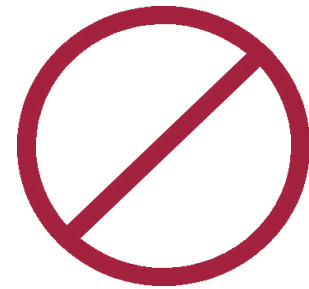
Morrison Hershfield maintains a broad set of ethics and compliance related policies that set expectations for the ethical behavior of our board and employees. All new employees are required to review and acknowledge our policies. Existing employees are required to review and acknowledge new and updated policies as they evolve.



Anti-Corruption



Employee Code of Conduct



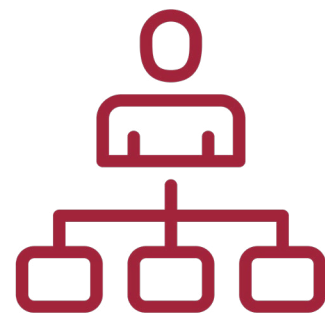
Anti-Harassment



Anti-Discrimination



Diversity, Equity & Inclusion



Respect in the Workplace



Our study of Waste-to-Energy (WTE) Approaches for Environment and Climate Change Canada provides a clear framework to help interested parties assess WTE implementation.

Quality Management

Delivering an unrivaled client experience is a key tenet of MH's 2025 Ambition. We strive to continuously improve our processes and procedures so we can achieve the performance needed to deliver better value to our clients.

The cornerstone of a quality organization is the consistent delivery of quality service. Morrison Hershfield maintains a Quality Management System (Morrison Hershfield Management System - MHMS), certified and registered in accordance with ISO 9001:2015 international standards. We continually review and improve the effectiveness of this system and are committed to ensuring our deliverables consistently satisfy the needs and requirements of our clients as defined in our scopes of work and agreements. The overall goal of MHMS is to align our systems with efficient project delivery to ensure we create high quality deliverables, reduce risk, improve processes, maintain focus on client satisfaction, and deliver our 2025 Ambition.



Our MHMS applies to all activities and practices related to the provision of engineering and management services by all operational business units at Morrison Hershfield. The system functions within a “continuous improvement loop” that captures all critical processes, links them together, and places responsibility at each level where quality is impacted. Our processes ensure reliable project outcomes, consistent quality and timely delivery, reducing risk for our clients and our organization.

Last year, the firm passed the ISO9001 audit with a single minor non-conformance. We updated many of the MHMS governance documents and launched several new process manuals for project and construction managers. The MHMS Quality Policy was updated to include climate responsibility language as it relates to project work and operations. We also launched the new Professional Practice Management Plan to satisfy the requirements of Engineers and Scientists British Columbia and delivered associated training to more than 100 professional engineers and technical staff.

In 2023 we will focus on creating quality metrics specific to MHMS to allow us to establish, evaluate, and enhance the operational efficiency within MH. We will continue to share knowledge and provide the tools and resources needed to support effective project delivery. There will be a Recertification Audit, consisting of a thorough, in-depth review of all policies, processes, work instructions and applications within the organization in 2023.



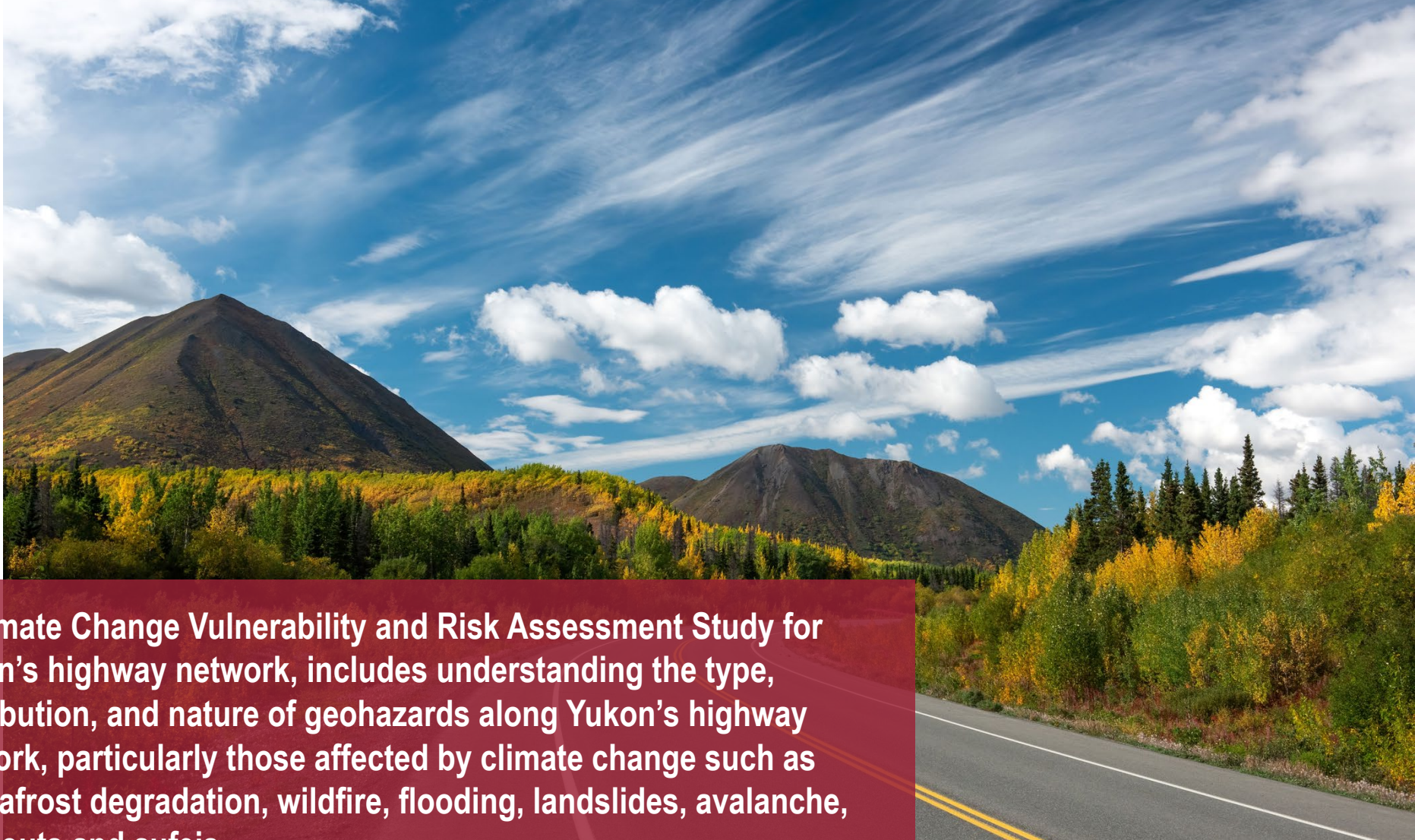
We will always ... aspire to take a climate responsible approach to our project work and operations, take actions which will help reduce carbon emissions, and improve the climate resilience of our communities and built environment.

Our Quality Policy reflects our commitment to taking action on climate change.

Information Security & Privacy

Prioritizing information security demonstrates our commitment to a high level of governance, and ensures that we maintain the confidentiality, integrity, and availability of information via a rigorous risk management process. We want to provide assurance to stakeholders that we have a robust and effective security framework, thus enhancing the resilience and sustainability of our operations.

We began developing our formal Information Security Management System (ISMS) in 2022. The system is based on the internationally recognized standard ISO/IEC 27001:2013 and is a cornerstone of our operations, ensuring the security and confidentiality of client and employee data. Our ISMS plays an important role in managing and mitigating information-related risks, particularly crucial in the context of our diverse project delivery practice. This proactive approach to data management and security bolsters the integrity and reliability of our services and enhances the trust our clients place in us. We are seeking certification of our ISMS system in 2023.



A Climate Change Vulnerability and Risk Assessment Study for Yukon's highway network, includes understanding the type, distribution, and nature of geohazards along Yukon's highway network, particularly those affected by climate change such as permafrost degradation, wildfire, flooding, landslides, avalanche, washouts and aufeis.

2025 Ambition

“By 2025, Morrison Hershfield is acknowledged by clients and employees alike as the industry leader who transformed both the client and employee experience.”

Morrison Hershfield’s 2025 Ambition strategic plan was launched in the fall of 2020 and will continue to guide the firm for the next three years. It is built on the cornerstones of unrivaled client experience and extraordinary employee experience. Our goal is to achieve both, within a progressive, inclusive and inspiring environment, to become the acknowledged Market Leaders.

Our five-year strategy establishes the important goals and actions that will enable us to flourish as an employee-owned, mid-sized firm. During the development of the plan, a number of strategic themes centered around agility, focus, technology, corporate social responsibility and culture consistently emerged. Weaving these themes into the fabric of our corporate culture will accelerate the evolution of our firm: making it more entrepreneurial, yet efficient; more agile, yet disciplined; and more mindful of the environment and our social responsibility.

2022 was a strong year for progressing our 2025 Ambition initiatives. We achieved a ‘World Class’ Net Promoter Score of +70, and a “great” Employee Net Promoter Score of +45, an indication that our clients and employees are highly satisfied with their experience with Morrison Hershfield.



Continuing to prioritize these major areas of focus in 2023 will allow us to advance further into realizing our full 2025 Ambition:

- Unrivaled Client Experience
- Accelerate Smart Growth
- Extraordinary Employee Experience
- Achieve World Class Project Delivery
- Our Plan for Digital Transformation

ESG Governance

Continually progressing our ESG efforts is critical to the long-term health and success of our organization. Morrison Hershfield has a formal process, led by the Senior Management Team, to establish ESG goals and targets, establish KPI's, and track progress towards those goals. We incorporated this goal setting process into the development of our 2025 Ambition and annual business plans. Once our goals are established, we will hold each other responsible for making progress toward those goals. We report progress to our staff, shareholders, the Board and the public, annually.



Rehabilitating the St. Vital Bridge over the Red River in Winnipeg, MB adds 50 years to its service life, enhancing its durability and reducing environmental impacts of demolition and new construction.

APPENDICES: REPORTING

Appendix A: Victor ESG Risk Rater Assessment



VICTOR ESG RISK RATER ASSESSMENT

The ESG Risk Rater is a free tool from our professional liability insurer Victor. Just recently launched, this was an intriguing opportunity due to Victor's deep understanding of risk as an insurer and its focus on the architecture/engineering industry. We undertook the ESG assessment to provide insight into our current practices and opportunities for improvement.

The ESG Risk Rater consists of 105 questions based on internationally recognized industry frameworks, including Global Reporting Initiative, Task Force on Climate-related Financial Disclosures, Sustainability Accounting Standards Board, and others.

The questions are organized into 18 themes across the environmental, social and governance categories. Themes included greenhouse gas emissions, energy transition, waste and pollution, water and land use, health and wellbeing, dignity and equality, governance strategy, and more. Results are provided in a dashboard format with identified strengths and opportunities for improvement. ESG risks are assessed in the context of controls (policies and procedures in place to comply with ESG-related laws, regulation and best practices), reporting (disclosures of ESG metrics), and resilience (identifying, analysing and treating ESG-related risks).

Morrison Hershfield scored an overall ESG score in the 'Good' category, the second highest of the five overall categories. We scored highly in the social and governance categories and lower in the environmental category, mainly due to absence of metrics in this area. In the Environmental category, Victor noted we have established foundational environmental and climate-risk related policies and procedures, but there is an opportunity for improvement with alignment with industry best-practices. Also, Victor noted there is an opportunity to improve through building capacity to begin reporting metrics in-line with industry best practices.

For the Social category, we demonstrated well-integrated policies and procedures, considered a strength against our peers. We again had an opportunity to improve through social-related metrics. In the Governance category, our well-integrated policies, procedures and practices scored very well and our ability to identify, analyse and treat ESG-risks was strong.

Victor intends to further develop this tool including the development of architectural/engineering firm peer benchmarks. We intend to use this tool annually to gauge our progress with our ESG goals.

Appendix B: GRI Index

GRI Content Index - 2022

The Global Reporting Initiative (GRI) is an independent standard organization. The GRI reporting framework helps companies communicate their performance in a clear and comparable manner. To demonstrate Morrison Hershfield’s commitment to transparency and disclosure, the content in the report aligns with the GRI Standards, launched in October 2016.

GRI 102: General Disclosure

102-1 Name of the organization	Morrison Hershfield Group Inc.
102-2 Activities, brands, products, and services	Morrison Hershfield is a market leading, employee-owned engineering firm contributing to the social wellbeing and economic prosperity of the communities we serve. Our services include Advisory, AFP/P3 consulting, Assessment & Planning, Building Science, Climate Resilience & Sustainability, Code & Life Safety, Condition Assessments, Commissioning, Construction Administration, Electrical, Environmental, Fire Protection, Land Development, Mechanical, Operations Consulting, Permitting, Approvals & Compliance, Preliminary & Detailed Design, Project Management, Security, Site Civil, and Structural engineering and consulting. (About MH)
102-3 Location of headquarters	Markham, Ontario, Canada
102-4 Location of operations	Morrison Hershfield has 26 offices worldwide, though we are predominately a North American focused company. (Office Locations)
102-5 Ownership and legal form	Morrison Hershfield is a private, employee-owned corporation.
102-6 Markets served	Morrison Hershfield services the Bridges, Buildings, Critical Facilities, Energy, Environmental, Government, Industrial, Municipal & Land Development, Solid Waste, Telecom & Technology, Transit, Transportation, Water & Wastewater.
102-7 Scale of organization	Morrison Hershfield has a total of 1077 employees.
102-8 Information on employees and other workers	Total number of employees by contract type for 2022. <ul style="list-style-type: none"> • Regular Full-Time: 986 • Regular Part-Time: 45 • Temporary Full-Time: 5 • Temporary Part-Time: 41
102-10 Significant changes to the organization and its supply chain	Morrison Hershfield opened one new office location in 2022: Moncton, NB. There are no new changes to Morrison Hershfield’s supply change management in 2022. In our procurement process, we often involve external service providers in support of providing services to our clients. Under ISO 9001, we assess our service providers’ capacity and performance to provide services on time, on budget and to the requirements of our contractual commitments to the client. We encourage our service providers to have comparable commitments to corporate social responsibility, including fair labor and operating practices, environmental protection and diversity.

GRI Content Index

<p>102-11 Membership of associations</p>	<p>Morrison Hershfield engages with professional societies and advocacy groups to benchmark best practices. We lend support and technical expertise to drive continuous improvement, in our involvement with engineering, project management, construction management, quality, and sustainable organizations across North America.</p> <p>Some of the organizations at which Morrison Hershfield maintains an active presence include:</p> <ul style="list-style-type: none"> • 7X24 Exchange • ASHRAE • Alberta Architectural Association • Architectural Institute of British Columbia • Association of Consulting Engineering Companies Canada • Association of Consulting Engineering Companies – provincial chapters • Association of Professional Engineers and Geoscientists of Alberta • Association of Professional Engineers and Geoscientists of New Brunswick • Association of Professional Engineers and Geoscientists of Saskatchewan • Building Enclosure Council • Bisnow DICE • Canada Green Building Council • Canadian Institute of Planners • Consulting Engineers Alberta • Data Center Dynamics • Engineers Canada • Engineers Geoscientists Manitoba • Engineers Nova Scotia • Engineers and Geoscientists British Columbia • Engineers PEI • Engineers Yukon • Institute for Sustainable Infrastructure • International Federation of Consulting Engineers • National Association of Tower Erectors • Northwest Territories and Nunavut Association Of Professional Engineers and Geoscientists • Professional Engineers and Geoscientists Newfoundland and Labrador • Ontario Association of Architects • Ontario Association for Impact Assessment • Ontario Professional Planners Institute • Professional Engineers Ontario • Structure, Tower and Antenna Council • The Athena Institute • Transportation Association of Canada • U.S. Green Building Council • Various Universities • Yukon Climate Leadership Council
<p>102-14 Statement from senior decision maker</p>	<p>See the President & CEO’s introductory letter to this report.</p>

GRI Content Index

<p>102-12 External initiatives</p>	<p>Our staff and offices are engaged and give back to the communities where we work and live. Staff participate in numerous non-profit volunteerism activities each year, just a few of the organizations we have contributed to include:</p> <ul style="list-style-type: none"> • Alameda County Community Food Bank (Oakland, CA) • Autism Ontario • Atlanta Community Food Bank • Burlington Food Bank • Calgary Food Bank • Canadian Red Cross • Community Food Sharing Association (St. John's, NL) • Edmonton's Food Bank • Feed My Starving Children (Minneapolis, MN) • Fred Hutch's COVID-19 Clinical Research Center (Seattle, WA) • Habitat for Humanity of Broward (Plantation, FL) • Hope Community Bikes (Burlington, ON) • Houston Food Bank • Inclusion Yukon • Lines for Life - COVID Relief Fund (Portland, OR) • Markham Foodbank • Ottawa Food Bank • Ride for Heart (Heart and Stroke) • Safe Harbor Crisis Center (Salt Lake City, UT) • SafeHaven (Dallas-Fort Worth, TX) • Second Harvest Food Bank of Metrolina (Charlotte, NC) • Siloam Mission (Winnipeg, MB) • St. Vincent de Paul - Sarah's Hope Shelters (Baltimore, MD) • The Mustard Seed (Victoria, BC) • United Way Engineering Challenge (Edmonton, AB) • United Way Lower Mainland (Vancouver, BC) • Vicente Ferrer Rural Development Trust - Spark a Joy program (Visakhapatnam, AP, India)
<p>102-16 Description of Organization's values, principles, standards and norms of behavior.</p>	<p>Morrison Hershfield Core Values and Principles</p> <p>In all of our business practices and interactions, we are guided by our values of accountability, integrity and mutual respect. We believe in continuous improvement and teamwork, ensuring our clients receive quality deliverables and service. We embody our core values and principles to fulfill our duty to the public, our clients, and each other.</p> <p>These core values and principles define the foundation of our organizational behavior and the operating culture to which we are committed.</p> <ul style="list-style-type: none"> • Founded on technical excellence and ethics • Committed to accountability and integrity • Defined by innovation and teamwork • Inspired to be client-focused and solution-based

GRI Content Index

GRI 403: Occupational Health and Safety	
102-17 Mechanism for advice and concerns about ethics	Morrison Hershfield's Employee Handbook outlines Fair employment including Human rights, Employment equity, Equal Opportunity, Fair Treatment, Employee Rights, Respect in the Workplace, Grievances and Right to Refuse Work, in addition to Code of Conduct, Conflict of Interest and Anti-Bribery and Anti-corruption policies. The handbook outlines the process for reporting an issue or concern and addresses confidentiality and disclosure.
102-18 Governance structure	Morrison Hershfield governance structure is detailed in the Governance Guidelines for Morrison Hershfield Group Inc. This document is available to employees and external Board Directors.
GRI 305: Emissions	
305-1 Direct (Scope 1) GHG emissions	Morrison Hershfield's latest GHG emissions report is located on our website.
GRI 401: Employment	
GRI 401: Employment	New employee hires for 2022: 259 regular staff.
403-1 Occupational health and safety management system	<p>The Morrison Hershfield Occupational Health and Safety Management System (OHSMS) details our approach to protecting our workforce, property and environment and is rooted in international standards, regional standards like the Certificate of Recognition (COR) program, best practices and over 75 years of industry experience.</p> <p>Protecting the health, safety and environment of employees is a primary concern at Morrison Hershfield. This goal is met through the development of a comprehensive health, safety and environmental policy that endeavors to eliminate unsafe conditions and minimize the impact of hazardous situations for all employees and sub-consultants. This program benefits the company by reducing illness and injury to staff, preventing property damage, and preserving the environment.</p>
403-2 Hazard identification, risk assessment, and incident investigation	<p>The OHSMS outlines the policy for staff to identify hazards, conduct a risk assessment and if an incident is to occur, how an investigation of the incident must be investigated.</p> <p>All safety incidents including near misses, first aids, medical aids, critical injuries must be reported. All incidents involving Morrison Hershfield sub-consultants and/or sub-contractors engaged in field work or working on Morrison Hershfield premises must be reported through the corresponding Morrison Hershfield Project Manager.</p> <p>Morrison Hershfield ensures the rights of its employees, the right to know, the right to participate and the right to stop or refuse work when they think that their work may pose a danger to themselves or to others.</p>
403-4 Worker participation, consultation, and communication on occupational health and safety	<p>Morrison Hershfield operates 8 joint Health and Safety committees. These committees are dispersed by geographic region and are comprised of both employee and management level team members.</p> <p>The purpose of the Joint Health and Safety Committees is to review safety guidelines and provide feedback, identify unsafe acts and conditions within work site review processes and make recommendations to correct unsafe acts, conditions, or concerns and monitor corrective procedures, promote safety awareness, promote better communications and physically inspect safety equipment.</p>
403-5 Worker training on occupational health and safety	<p>Mandatory for all MH employees include: the MH new employee Orientation, WHMIS 2015 (for Canadian employees), HAZCOM (for US employees), Violence and Harassment (Respect in the workplace).</p> <p>Mandatory for employees exposed to the hazard by their Job: Fall Protection and Prevention (for employees working on heights), Confined Space Entry, Rope Access.</p> <p>Training for specific jurisdictions:</p> <ul style="list-style-type: none"> • Health and safety MOL training for employees and Supervisors (Ontario) • Accessibility for Ontarians with Disabilities Act – AODA (Ontario) • Leadership for Safety Excellence (Alberta) • OSHA 10 (selected employees in the US) • Joint Health and Safety Committee Certification (Ontario and some Canadian Jurisdictions)

GRI Content Index

403-5 Worker training on occupational health and safety	<p>Mandatory for all MH employees include: the MH new employee Orientation, WHMIS 2015 (for Canadian employees), HAZCOM (for US employees), Violence and Harassment (Respect in the workplace).</p> <p>Mandatory for employees exposed to the hazard by their Job: Fall Protection and Prevention (for employees working on heights), Confined Space Entry, Rope Access.</p> <p>Training for specific jurisdictions: Health and safety MOL training for employees and Supervisors (Ontario)</p> <ul style="list-style-type: none"> • Accessibility for Ontarians with Disabilities Act – AODA (Ontario) • Leadership for Safety Excellence (Alberta) • OSHA 10 (selected employees in the US) • Joint Health and Safety Committee Certification (Ontario and some Canadian Jurisdictions) 								
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	<p>When working with Clients who have their own safety management procedures, the most stringent safety policy is adhered to by all parties.</p> <p>MH Sub-consultants have a responsibility to adhere to MH Health and safety principles, to work safely in compliance with the law and to take all appropriate safety measures to protect their staff, MH employees and all individuals impacted by their work in accordance with the MH requirements for sub-contracted work.</p>								
403-9 Work related injuries	<p>Total number of work-related injuries for 2022 for Canada and the US:</p> <table border="1" data-bbox="532 782 1322 899"> <thead> <tr> <th>Year</th> <th>2022</th> <th>2021</th> <th>2020</th> </tr> </thead> <tbody> <tr> <td>Total Recordable cases</td> <td>4</td> <td>3</td> <td>12</td> </tr> </tbody> </table> <p>The total recordable injury frequency for 2022 was 0.42.</p>	Year	2022	2021	2020	Total Recordable cases	4	3	12
Year	2022	2021	2020						
Total Recordable cases	4	3	12						
GRI 404: Training and Education									
404-1 Average hours of training per year per employee	<p>Average training hours per employee in 2022: 9 hours.</p> <p>Tracking based on employee self-reporting and excludes external training programs.</p>								
404-2 Programs for upgrading employee skills and transition assistance programs	<p>Catalogue of on-line learning in Workday consisting of approximately 291 programs. Training topics include:</p> <ul style="list-style-type: none"> • Governance, Privacy and Security • Health and Safety • Leadership • Legal Compliance • Productivity • Project Management • Skills & Technical Development <p>All staff have access to a catalogue of over 8,000 free online courses through Morrison Hersfield’s subscription to LinkedIn Learning. Courses include technical, professional and personal development topics.</p>								

GRI Content Index

GRI 405: Diversity and Equal Opportunity	
405-1 Diversity of governance bodies and employees	<p>Gender diversity of employees for 2022: 29% Female / 71% Male</p> <ul style="list-style-type: none"> • Technical Level: 24% Female • Managerial Level: 28% Female • Executive Level: 10% Female • Shareholder Level: 19% Female • Board of Directors: 40% Female
GRI 406: Non-Discrimination	
406-1 Incidents of discrimination and corrective actions taken	No incidents reported in 2022.

Appendix C: FIDIC Climate Change Charter

FIDIC Climate Change Charter

ACTIONS FOR COMPANIES

CULTURE



Develop and promulgate policies and corporate objectives which promote a climate responsible approach to business and projects.

- Added language regarding our climate change action commitment to MHMS Quality Policy.
- Included assessment of opportunities to take climate action and consideration/minimization of climate risk in our MHMS Proposal Procedure.
- Initiated updates to Project Delivery Policy to include a climate change lead on project teams and require consideration of risks associated with a changing climate and notification of clients where substantive risks are identified.
- Updated Project Sponsor Policy to ensure project sponsors encourage project teams to take a climate responsible approach.
- Developed action plan with objectives to bring a climate change lens to our project work and to deliver training and development of staff on climate change, sharing knowledge, resources and tools.
- Hired two Climate Change Mitigation and Adaptation Specialists and developed a Climate Change Practice.

Create a culture that encourages the development of net zero and resilient engineering solutions.

- Established a Climate Change Community of Practice to increase climate change awareness and share knowledge across our business units. Includes Climate Change Ambassadors from each business unit on the Climate Change CoP steering committee.
- Developed a pilot project to demonstrate to teams across the company how they can make their projects part of the climate solution. Involves the development of a repeatable, scalable process to integrate climate change into all proposals and projects. To be initiated in 2023.

Where realistically possible, **support employees** to work on projects that align with their professional preferences and desire for eliminating climate harm.

- Established and staffed a new Climate Change department and service area with specific new expertise in climate science, risk assessment, asset management and GHG mitigation assessments. Currently focussed on completing Climate Change Risk and Vulnerability assessments for horizontal and vertical infrastructure. This department is a centre of excellence, available to support work across all of our business units and projects.

Create mechanisms that encourage employees to contribute and/or work on solutions that help to mitigate climate change.

- Initiated updates to our quality management system (MHMS) documentation to include climate change considerations. Updated documents included quality policy, proposal process, project delivery policy, project sponsor policy.
- Developed a pilot project to demonstrate to teams across the company how they can make their projects part of the climate solution. Involves the development of a repeatable, scalable process to integrate climate change into all proposals and projects. To be initiated in 2023.

Develop a programme to develop its engineers' climate skills, supporting their competence in carbon literacy.

- Provided 16-hour training course on Climate Risk Assessment, from an external subject matter expert to 40 MH staff from across our business units.
- CSA training on ISO 14064-1 GHG Inventories and ISO 14064-2 GHG Projects for select staff.
- On-going informal climate change mitigation/adaptation training through Climate Change CoP – lunch and learn webinars which are recorded and stored for future training purposes; informal message boards to share technical information.

FIDIC Climate Change Charter

Develop a team of climate change champions who may be accredited with a company-level “**Net Zero Practitioner**” qualification or similar to act as a resource to help implement the company’s climate strategy and rolling out climate relevant training.

- Climate Change department within the Environmental Business Unit and the Sustainability and Building Performance Analysis groups within the Building Speciality Services Business Unit play a lead role in supporting projects across the company with climate change mitigation/adaptation expertise.
- Climate Change department initiated in 2022 with the transfer of two staff from other departments and hired two Climate Change Mitigation and Adaptation Specialists.
- Building Specialty Services hired four new climate champions in the Building Performance Analysis group.

Invest in the tools and platforms to help employees to calculate the carbon load of their designs to assist in development of efficiencies and options to further reduce the carbon load of infrastructure, while integrating low carbon and resilient technology solutions.

- Building on well-established expertise within our Building Speciality Services Business Unit to calculate and address embodied and operations carbon emissions in their projects. Other groups within MH are developing capabilities and tools to assess and reduce carbon emissions associated with other types of infrastructure (e.g., roads, transit, bridges, dams).

Assign a climate champion to every major project or scheme, from brief, scope, and feasible options through to completion.

- Our MHMS documentation requests that teams consider this for every project.

Resource its project teams to assess and report the total carbon load of every project design or scheme created in the business.

- MH is working toward developing this capability and is currently implementing a pilot project to include at least a qualitative assessment of carbon loads in all our projects with some projects including a quantified carbon footprint and mitigation assessment.

Work to lower the total carbon load against the baseline metrics year over year. This entails developing a company-level or applying and **off-the-shelf carbon calculator** for the project design and operations and deploying that carbon calculator on every project, to develop aggregated carbon loading figures across the projects the company works on.

- MH applies industry standard tools such as ATHENA on some projects and is currently implementing a pilot project to include at least a qualitative assessment of carbon loads in all our projects.

Design all new schemes and projects to be **net zero emissions or net zero emissions enabled** and supporting the incorporation of nature-based solutions and the adaptation of assets and processes to the consequences of climate change, building in resilience.

- MH is working towards embedding climate change mitigation/adaption in all our projects including consideration of nature-based solutions where appropriate.

Incorporate the latest developments in **renewable and decentralised energy** to power assets and infrastructure components required to fulfill the scheme or project.

- Incorporation of renewable and decentralized energy is being considered on selected projects to reduce carbon loads and footprints.

FIDIC Climate Change Charter

ACTIONS FOR COMPANIES

OPERATIONS



The company commits to developing a science-based approach to decarbonizing their operations and supply chain in line with the Greenhouse Gas Protocol and/or aspire to **the ISO 14064-1 standard** (Greenhouse gases-Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals).

- In 2022, company made decision to pursue the Science Based Targets Initiative for the development of a pathway to decarbonizing our operations and supply chain. We will submit our letter of commitment to SBTi in 2023 and will set science-based near-term and long-term reduction targets and submit the targets for third-party validation.

The company develops a **net zero and climate adaptation strategy** to address carbon emissions and resilience to unavoidable climate impacts across its business operations, offices and facilities and into its value chain.

- Per above answer, we have committed to developing our pathway to net-zero in 2023.

The company works with energy utilities and through **power purchase agreements** to switch operational energy consumption to renewable or clean energy sources where available.

- We have committed to pursuing this in 2023 and achieving carbon neutral status for Scope 1 (natural gas) and Scope 2 (electricity) in 2024.

The company works to convert its fleet vehicles to electric power, provided charging infrastructure is available and **powered by renewable or low-carbon energy**.

- Morrison Hershfield operates seven owned vehicles to transport equipment necessary to support our field work activities. This represents a small component of our Scope 1 emissions but where practical we will look at electric vehicle alternatives over time.

The company reports annually on **its GHG emissions and adaptation actions** in line with a globally recognised framework or standard, for example, TCFD and SABS, and makes this information publicly available on its website.

- Refer to Carbon Footprint Report update in the Environmental Chapter of this ESG Report.

If the company adopts a **science-based net zero approach to climate action**, then it will need to neutralize residual emissions after decarbonisation through best-in-class offsets.

- We will submit our letter of commitment to SBTi in 2023 and will set science-based near-term and long-term reduction targets and submit the targets for third-party validation. We will be able to comment further on this section in next year's ESG report.

Appendix D: United Nations Sustainable Development Goals



Morrison Hershfield recognizes the significance and importance of the United Nations 17 Sustainable Development Goals (UN SDGs). Though we support all SDGs, we have identified eight primary areas of focus, where we believe we have the greatest opportunity for impact: SDG 3 (Good Health and Well Being), SDG 5 (Gender Equality), SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation and Infrastructure), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action). The following highlights our plans, actions and progress within each area, and are detailed further in the body of this report. Our intention is to mature our approach through additional work identifying our focus areas, conducting needs assessments and developing plans. This will be reflected in a more in-depth treatment of UN SDGs in future editions of our ESG report.



SUSTAINABLE DEVELOPMENT GOAL 3: ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES

- Employee Health & Safety; Occupational Health & Safety – Morrison Hershfield’s Occupational Health and Safety Management System (OHSMS) exceeds regulatory requirements. It is rooted in international standards, regional standards like the Certificate of Recognition (COR) program and best practices and supported by over 77 years of industry experience. Our TRIF was 0.42 in 2022.
- Comprehensive benefits. Employees and eligible family members are provided with quality benefits such as health and dental care, vacation and other time off benefits, retirement plan, and employee assistance programs. They also receive enhanced health and wellness opportunities like gym memberships, exercise classes, and other resources to help maintain balance and stay healthy. Staff have free access to regular webinars on a variety of health and wellness topics.
- Community involvement and philanthropy include volunteer programs, matching donation programs for disaster relief and humanitarian efforts and other fundraising events.
- Governance – policies are in place regarding anti-corruption; code of conduct; anti-harassment; anti-discrimination; diversity and inclusion and respect in the workplace.
- Reduce pollution – We are setting targets to reduce carbon emissions – Scope 1, 2 and 3 targets for our own operations – and pursuing impact through our project work.
- We employ safe solid waste management practices and deliver of sustainable solid waste solutions for our clients.

United Nations Sustainable Development Goals



SUSTAINABLE DEVELOPMENT GOAL 5: ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS

- Maintain a dedicated Diversity, Equity and Inclusion (DEI) portal site, accessible to all staff, to share important communications, key policies and guidelines, metrics and recommended training/learning.
- DEI Policy requires that programs are monitored to ensure that our practices of recruitment, promotion, compensation, and development are based on improving access, qualifications, and ability for all.
- Active DEI Advisory Committee.
- Employer Champion for Engineers Canada 30X30 initiative to improve female representation in the industry.
- Flexible work options available.
- Track metrics related to gender diversity at the firm.
- Policies are in place regarding code of conduct, anti-harassment, anti-discrimination, DEI and respect in the workplace.
- Provide gender Intelligence training, and mandatory training to help prevent discrimination, harassment and bullying in the workplace.
- Manager toolkit for screening, selection, and decision-making during the hiring process, to reduce systemic and unconscious bias. They are expected to follow best practice hiring tips and are trained on the impact of bias on the hiring process.
- Use a gender-neutral point factor job evaluation system. Positions are evaluated, assigned a pay band with a corresponding salary range based on the total points awarded to that position. We conduct annual internal pay equity reviews to ensure our compensation decisions are equitable and justifiable.
- Periodic celebration of women throughout the year, including International Women's Day, International Women in Engineering Day, Women in Construction Week, International Day of Women and Girls in Science, to name a few.



SUSTAINABLE DEVELOPMENT GOAL 6: ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL

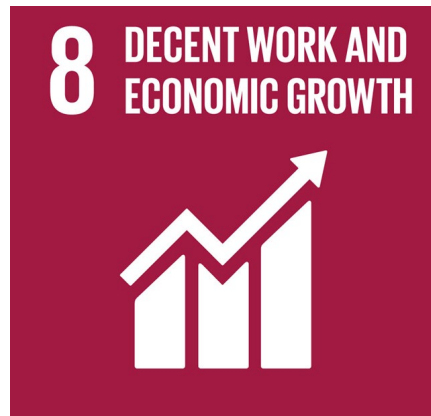
- Water & Wastewater Management Projects - Stormwater management, waste water and other water resource projects.
- Environmental impact management, mitigation and compensation services.
- Solid waste management services for clients, including recycling & waste centres, landfill development and upgrades. Facilities are designed to reduce pollution, eliminate dumping and minimize release of hazardous waste.
- Ecological impacts – ecosystem protection and restoration.
- Water consumption / efficiency through facilities projects with innovative conservation strategies such as recycled rainwater and cooling systems that optimize water use.
- Strengthen participation of local communities in improving water/sanitation management – such as with First Nations partnerships/projects.

United Nations Sustainable Development Goals



SUSTAINABLE DEVELOPMENT GOAL 7: ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL

- Renewable energy projects; EV battery production facility; Standards development for EV Charging Stations; electrification support e.g., infrastructure for transit facilities, ferry terminals.
- Building energy modeling and building envelope projects to optimize performance of buildings.
- Partnerships with First Nations communities to provide clean energy alternatives for their communities.
- Many of our engineers have fellowships or certifications and training in established and emerging sustainability frameworks, including:
 - LEED / green building design
 - WELL Building Standards
 - Passive House
 - ENVISION certified
 - Green Roads
- Contributed to research on high performance buildings through academic and industry partnerships (University of Victoria, BC Housing).
- Improved energy efficiency of our own operations.
- Committed to improved understanding of our Carbon Footprint, including our supply chain emissions.



SUSTAINABLE DEVELOPMENT GOAL 8: PROMOTE SUSTAINED, INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

- Policies in place regarding anti-corruption; code of conduct; anti-harassment; anti-discrimination; diversity and inclusion and respect in the workplace.
- Internship and co-op programs available.
- Member of Canadian Council for Aboriginal Business and active participant in Progressive Aboriginal Relations (PAR) program.
- Living wage employer.
- Environmental, Social and Governance Strategy with annual reporting on metrics and progress.
- Risk Management– overseen by Chief Technical and Risk Management Officer
- Training and development opportunities at four levels: compliance, project management, technical and leadership. Formal technical groups (Communities of Practice) available to all staff across the company.
- Robust Occupational Health and Safety System with Total Recordable Incident Frequency of 0.42 in 2022.
- Comprehensive benefits, with enhanced health and wellness perks.
- Supply chain management focus ensuring appropriate code of conduct and workplace safety practices for our external service providers.
- Employee Engagement and DEI activities with a focus on eliminating bias in workplace and in our hiring policies/processes.

United Nations Sustainable Development Goals



SUSTAINABLE DEVELOPMENT GOAL 9: BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION

- Established a Climate adaptation and mitigation practice to champion the application of a climate lens to our projects and project delivery processes.
- Partnerships with Indigenous communities and businesses.
- Develop sustainable design tools for industry-wide use such as the Building Envelope Thermal Bridging Guide, Thermal.ca, the Mass Timber Navigator Tool, Carbon PathFinder and Embodied Carbon PathFinder.
- LEED/sustainable buildings practice.
- Building retrofits such as Building NX & H Net Zero Carbon & Passive House Retrofit where Morrison Hershfield designed the replacement of the existing building envelope with highly insulated and airtight ones, the upgrade of HVAC systems, lighting power, lighting controls and the addition of new solar photovoltaic systems.
- Telecom & Critical Facility work – expanding access to internet.
- Extending life of bridge structures (e.g., City of Toronto multi-year bridge management program completed in 2022)
- EV Charging Station and Battery Plant infrastructure
- Energy management (green data centres)
- Building energy modeling services



SUSTAINABLE DEVELOPMENT GOAL 11: MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

- Climate ready-solutions – aiming to incorporate a climate focus in all projects we deliver.
- 50% of our project work in 2022 was directly related to sustainability and climate change consulting services or related to sustainable development infrastructure such as EV charging infrastructure, EV battery plant infrastructure, transit infrastructure, renewable energy, high performance buildings, environmental planning, solid waste planning and infrastructure and various electrification initiatives.
- Northern Ontario Housing Guide to establish design guidelines for housing in Indigenous communities across Canada.
- West Nile Virus Monitoring for Ministry of Transportation Ontario
- Mayo Warm Water Well Detailed Design
- Composting facility design for EverGen
- Landfill engineering support services for Waste Connections of Canada, Calgary
- Waste Transfer Facility designs for Metro Vancouver
- Broadview Eastern Flood Protection for Waterfront Toronto
- Toronto Community Housing Retrofits at 600 Rogers Road and 284 West Acres
- Climate vulnerability and adaptation projects such as for BC Transit and the Summer Village of Ghost Lake in Alberta
- Delivery partner for Metrolinx on Toronto Subway Extension Project.
- HVAC GHG Reductions & Maintenance Bay Cooling Feasibility Assessment for BC Transit, Victoria
- Energy audits and decarbonization plans for 21 residential properties for QuadReal.
- LEED O+M certification, energy modeling, Energy Star Portfolio Manager review, Fitwel Assessment and Zero Carbon Building Certification for seven buildings across Canada for Maple Leaf Properties.

United Nations Sustainable Development Goals



SUSTAINABLE DEVELOPMENT GOAL 13: TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

- Morrison Hershfield is acting on climate change through our project work, in our operations and the individual actions of our people.
- We signed the FIDIC Climate Change Charter in 2022, committing to taking specific actions in our project delivery with clients and in our own operations.
- We decided to adopt a science-based approach to setting targets and measuring progress in our own operations (SBTi) with a goal to reduce Scope 1, 2 and 3 emissions in accordance with the Paris Agreement.
- Produced 2022 Carbon Footprint Assessment to support future goal setting.
- Measured our supply chain emissions for the first time in 2022 with the intention to address in our carbon emission reduction targets.
- We progressed our Climate Change Response Plan with the launch of our Climate Change department and Climate Change Community of Practice.
- Created a new Climate Change department in our Environment Business Unit
- Embedded climate focus in our proposal and project delivery
- Completed carbon footprint / GHT mitigation and climate change risk and vulnerability assessments for clients.
- Climate Change Community of Practice. Increase awareness and offer training to all staff. Aim to create a culture of climate champions.