

A large-scale construction site for the Windsor-Detroit Bridge Authority. The image shows a massive concrete pylon under construction, with a red tower crane positioned next to it. The pylon has a red maple leaf logo on its upper section. In the background, another pylon is visible through a hazy atmosphere. The sky is a clear, pale blue.

# WINDSOR-DETROIT BRIDGE AUTHORITY

## TASKFORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

2022 REPORT

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# CONTENTS

## **INTRODUCTION - PAGE 4**

- About this report
- About Us
- Our Commitment to Climate Change

## **GOVERNANCE - PAGE 6**

- Board Oversight and Monitoring
- Management Responsibilities

## **STRATEGY - PAGE 9**

- Climate-related Risks and Opportunities
- Impacts on Business and Strategy

## **RISK MANAGEMENT - PAGE 15**

- Risk Management Approach

## **METRICS AND TARGETS - PAGE 17**

- Greenhouse Gas Emissions
- Targets

## **LOOKING AHEAD - PAGE 18**



“The Gordie Howe International Bridge project team recognizes the importance of protecting communities from the impacts of climate-change and is committed to building sustainable infrastructure that will provide benefits for generations to come. Windsor-Detroit Bridge Authority’s inaugural Task Force on Climate-Related Financial Disclosures (TCFD) report, signifies our commitment to managing climate risks as part of our ongoing sustainability efforts and our dedication to transparency and accountability as we help build a sustainable and resilient future.”

- Grant Hilbers, WDBA Vice President of Engineering



3

# INTRODUCTION

## About this Report

The Taskforce on Climate-related Financial Disclosures (TCFD) was established by the internationally recognized Financial Stability Board to develop a consistent framework for organizations to report on climate-related financial risks and opportunities to stakeholders. In 2022, the Government of Canada introduced new requirements for Crown corporations to disclose this information annually.

Windsor-Detroit Bridge Authority's inaugural Taskforce on Climate-related Financial Disclosures (TCFD) report provides an overview of operational practices and performance for the 2022 calendar year. The information presented covers all WDBA operations, including work underway on both Canadian and US project sites. It is important to note that with construction of the Gordie Howe International Bridge still underway, any performance data presented herein, is not reflective of future bridge operations. During construction, GHG emissions are significantly higher than those expected during bridge operations. WDBA is committed to expanding its TCFD disclosures as the project moves forward and continuing to build on the TCFD recommendations over time, to reflect its evolving climate change practices.

## About Us

Windsor-Detroit Bridge Authority (WDBA) is a Canadian Crown corporation established in 2012 to deliver and operate the Gordie Howe International Bridge between Windsor, Ontario and Detroit, Michigan. We are responsible for overseeing our private-sector partner, Bridging North America (BNA), through construction and operation of the new crossing and, as bridge operator, we will set and collect tolls. WDBA reports to Parliament through the Minister of Intergovernmental Affairs, Infrastructure and Communities and is guided by our Board of Directors.

The Gordie Howe International Bridge project is North America's largest bi-national infrastructure project valued at \$5.7 billion (CDN). It includes the delivery of four major components – the longest cable-stayed bridge and the largest US and Canadian ports of entry (POE) along the Canada-US border as well as a connection into the Michigan Interstate system.

The new Gordie Howe International Bridge will provide redundancy at the busiest trade corridor between Canada and the United States with improved border processing and highway-to-highway international connectivity. It also addresses future capacity needs and will provide six lanes to meet anticipated growth in traffic over the years to come. Features include a multi-use path for pedestrians and cyclists, LEED v4 Silver rating for buildings and Envision™ Platinum Award for the bridge and surrounding roadways, as well as a robust Community Benefits Plan.

## Our commitment to climate change

Climate change is one of the most pressing and complex issue of our time, presenting risks to human health, security, biodiversity and economic growth. Response to climate-related risks requires action to reduce greenhouse gas (GHG) emissions into the atmosphere, while also recognizing an opportunity to increase the resiliency of assets, services and operations through collaborative and innovative efforts.

The Gordie Howe International Bridge project is an example of sustainable infrastructure – one that is socially, environmentally and economically responsible, contributes to a cleaner environment and supports the protection of communities on both sides of the border from the impacts of climate change, both now and in the future.

The project is designed for resource efficiency and cost effectiveness during both construction and operation, to support healthy and productive environments. Emphasis is being placed on integrating products, components and systems that improve building performance and significantly reduce energy consumption, increase facility flexibility and improve user experience.

The Gordie Howe International Bridge project strives to achieve the following climate-related goals and objectives:

- **Design for durability and resiliency** by planning for long-term maintenance and monitoring; considering short- and long-term risks; and demonstrating attention to extending the project’s useful life.
- **Conserve non-renewable resources** by reducing energy and water demands; considering sources of renewable energy and water re-use; using recycled, recyclable, local, biobased, and salvaged materials; reducing waste generation; diverting waste from landfills; optimizing energy efficiency in construction and operations; and monitoring energy and water consumption during operations.
- **Protect the natural world** by employing green infrastructure stormwater management design principles; protecting, conserving, and enhancing environmentally sensitive areas; avoiding unsuitable geography and greenfields; and coordinating with all environmental obligations, including, aquatic resources, air and water quality, noise and vibration, invasive species, wildlife habitats, erosion and sedimentation control, historic and cultural resources, wetland protection, stormwater management, and light pollution reduction.

These goals and objectives are part of WDBA’s broader sustainability goals, which also include: maintaining safety and security; creating a culture of leadership; evaluating life-cycle costs; providing economic opportunity; safeguarding cultural resources; and, proactively engaging the public.



# GOVERNANCE

Climate change is an integral part of WDBA’s sustainability commitments, policy and framework. Clear lines of authority and oversight regarding sustainability have been established, including management of climate-related risks and opportunities. The chart below provides an overview of WDBA’s governance structure, with functions in bold font directly related to sustainability and climate change responsibilities. In 2023, all sustainability related documents, procedures and committees will be reviewed and transitioned to Environmental, Social and Governance terminology, where appropriate.

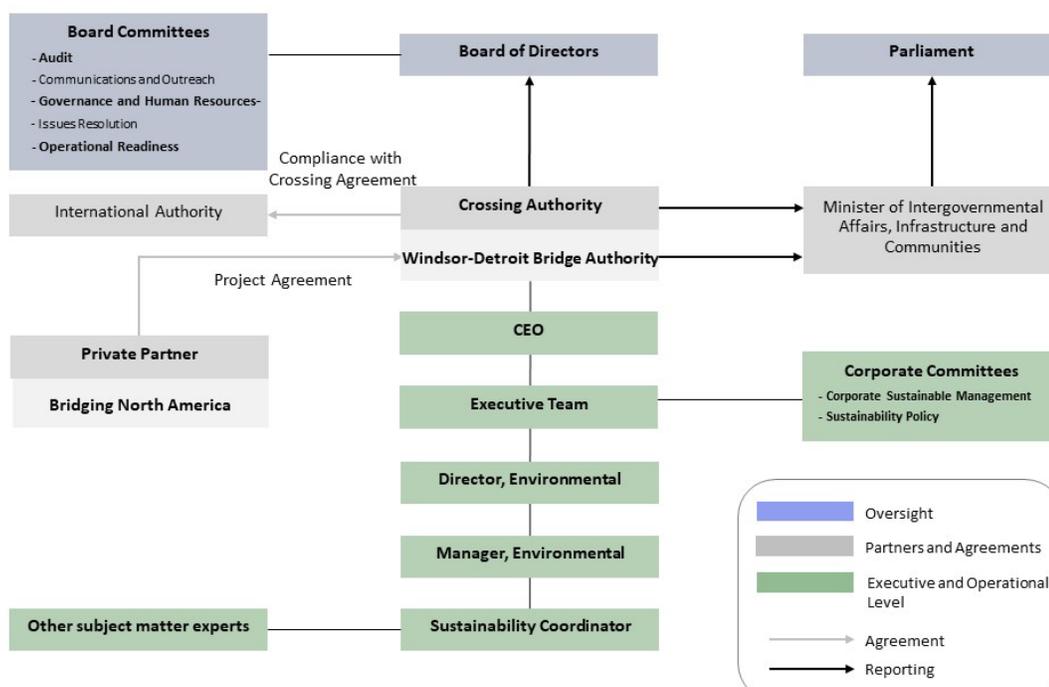
## Board Oversight and Monitoring

WDBA’s Sustainability Policy established a Corporate Sustainable Management Committee and Sustainable Management Framework. This framework outlines WDBA’s commitment to achieve annual sustainability and climate objectives, delivered through the committee’s yearly action plans, along with processes to be followed.

WDBA’s Board of Directors is responsible for approving the Sustainability Policy and Sustainable Management Framework which undergo an annual review to ensure relevancy is maintained. The Board receives annual updates on the activities of the Corporate Sustainable Management Committee and progression of action plans. In 2023, WDBA will extend the Board Committee Terms of Reference to include additional language pertaining to climate oversight, and annual reporting will be expanded to include updates on WDBA’s management and exposure to climate-related risks and opportunities.

## Management Responsibilities

WDBA’s Executive Team is responsible for the implementation of the Sustainable Management Framework and ensuring that the proper people, systems, procedures and resources are in place. Key Performance Indicators (KPIs) are utilized to assess sustainability and climate-related performance on a quarterly basis. The Executive Team works in conjunction with the Corporate Sustainability Management Committee to develop, initiate, measure and report on WDBA’s sustainability and climate goals on a yearly basis.



## Corporate Sustainable Management Committee

In 2021, WDBA established the Corporate Sustainable Management Committee (CSMC) to enact and recommend updates to the Sustainability Management Framework and support the implementation of mandatory and/or voluntary climate change programs within WDBA. CSMC represents a cross-section of WDBA departments and teams, including finance, engineering, , human resources, stakeholder and community relations , procurement , and environmental. The committee meets on a monthly basis.

Further to this, in 2022, WDBA created and filled a new Sustainability Coordinator position to align sustainability principles and corporate commitments with project oversight requirements, specifically with a focus on the TCFD. The Sustainability Coordinator complements the Director, Environmental, who is responsible for:

1. reviewing the Sustainability Policy every two (2) years, or earlier as required, and recommending amendments
2. overseeing the development of environmental training
3. ensuring the Sustainability Policy is communicated appropriately
4. monitoring compliance and assessing outcomes.

The table below provides an overview of responsibilities and activities undertaken during the reporting period.

	Responsibilities	2022 Activities
<b>Board Level</b>		
Board of Directors	Provides oversight of business activities and other affairs at WDBA. Updates are provided on sustainability, CSMC initiatives and TCFD reporting.	<ul style="list-style-type: none"> <li>• Provided updates to the Board on Sustainability Policy amendment and implementation</li> </ul>
Audit Committee	Responsible to ensure transparent and accurate reporting of financial information, effective climate-related risk management practices, internal control and the corporation's standards of integrity and behaviour. Also ensures Sustainable Development Goals are incorporated into WDBA's operations.	<ul style="list-style-type: none"> <li>• Annual updates provided on TCFD requirements and progress</li> <li>• Identification of gaps in reporting to the Board to ensure effective oversight of WDBA's key governance documents, including sustainability and climate-related policies</li> </ul>
Governance and Human Resources Committee	Responsible to develop effective corporate governance practices and to advise WDBA on a range of human resource issues to ensure that appropriate strategies and plans are in place. This includes alignment and oversight of relevant climate and sustainability priorities throughout the organization and development of strategies that may affect execution of work by employees (e.g. hybrid work policy).	
Operational Readiness Committee	Assists, advises and makes recommendations to the Board on matters concerning the future operations of the Gordie Howe International Bridge. Receives regular updates on climate strategy implementation and impact on operations.	

## Responsibilities

## 2022 Activities

### Executive Level

Executive Team

Oversees WDBA's day-to-day operations in accordance with the direction of the Board of Directors. Plans and directs the execution of WDBA's Sustainability Management Framework and climate-related goals, objectives and KPIs.

- Compiled and received climate-related updates for information and decision-making purposes
- Received progress updates on TCFD reporting for communication to the Board
- Reviewed Sustainability Policy to ensure alignment with requirements of Federal Sustainable Development Strategy Goals
- Received regular reporting on environmental compliance, sustainability and climate-related oversight

### Operational Level

Environmental/  
Sustainability Team  
and other subject  
matter experts

Monitors corporate obligations, deliverables, policies and key processes that reflect WDBA's efforts to support a sustainable environment and host communities. Tracks the effectiveness of project and corporate commitments to apply sustainability principles in the delivery and future operation of the Gordie Howe International Bridge. Coordinates data collection and develops reports/KPIs related to environmental compliance, sustainability and TCFD.

- Compiled data to provide climate-related updates for information and decision-making purposes
- Coordinated data collection to compile information required for TCFD reporting
- Engaged with colleagues throughout the organization to support GHG emission data collection and support sustainability initiatives
- Participated in external events such as tree planting initiatives, educational workshops, SAR training courses and garbage clean-ups

Corporate Sustainable  
Management  
Committee

Develops, initiates, measures and reports on WDBA's sustainability goals. Identifies objectives and targets for maintaining and/or enhancing WDBA's corporate sustainability performance in alignment with the organizations Sustainable Management Framework.

Policy Committee

Responsible for formulating and monitoring policy goals to assist WDBA in executing its duties in an ethical and legal manner.

# STRATEGY

As a major infrastructure project, crossing the Detroit River, with ports of entry (POEs) located in Canada and the US, the Gordie Howe International Bridge is inherently exposed to climate-related risks and opportunities. These may range from the impact of weather events on the integrity of the infrastructure, to the impact of the transition to a lower-carbon economy on operations. In identifying, assessing and subsequently managing climate-related risks and opportunities, consideration has been given to the full lifecycle of the project, including design, construction and operations.

## Climate-related risks and opportunities

Climate-related risks are the potential impacts that may arise from climate change or from mitigation, and how they may affect an organization's operations, strategy, and financial planning over the short, medium, and long term. Types of risks include **physical risks** due to increased extreme weather events (e.g. heatwaves), longer-term gradual shifts of the climate (e.g. precipitation) and indirect effects of climate change such as loss of ecosystem services (e.g. water shortages); and **transition risks** related to the process of transitioning to a lower carbon economy (e.g. technology changes).

## Physical Risks

A physical risk assessment was completed to assess various hazards under high warming and low warming scenarios. Maximum Value at Risk (MVAR) and Failure Probability metrics were used to assess potential financial impacts, and the likelihood of impact on WDBA assets, including the Bridge and Ports of Entry and business operations. Hazards assessed include:

- riverine flooding
- coastal inundation
- extreme wind
- soil subsidence
- freeze-thaw events
- surface water flooding
- extreme heat
- forest fire.



The MVAR and failure probability were calculated using advanced modeling techniques which analyze how the changing climate may impact extreme weather events. The basis of the climate model was Coupled Model Intercomparison Project Phase 6 (CMIP6) data, in accordance with the International Panel on Climate Change (IPCC) recommendations.

Overall, the physical risk exposure and associated impacts for WDBA were determined to be low. The MVAR did not exceed 1% and failure probability was low for coastal inundation, extreme wind, soil subsidence, freeze-thaw events, surface water flooding and forest fires. Hazards identified with possible impacts to WDBA operations include riverine flooding and extreme heat as depicted in the table below.

Risk Type	Risks	Timeframe	Mitigation
<b>Physical – Acute</b>	<p><b>Extreme Heat and Riverine Flooding</b></p> <p>Increase in frequency and severity of extreme weather events that may result in direct or indirect damage to assets, compromising integrity of key infrastructure that could lead to reduction in revenue and increased costs. Extreme heat is highly likely to impact WDBA but the impact itself would not be consequential. Riverine flooding is a rare possibility.</p>	 <p>1-3 years   3-10 years   10-30 years</p>	<p><b>Short Term:</b> Improved and enhanced stormwater management features incorporated into project design to reduce flooding risk. Assess employee safety risk during short term extreme heat events and identify mitigation measures.</p> <p><b>Long Term:</b> Establish and maintain a 30 m setback from the shoreline of the Detroit River wherever feasible, maintaining a vegetation and soil protection zone. Incorporate climate risks into health and safety policy development and implementation</p>
<b>Physical - Chronic</b>	<p><b>Extreme Heat and Riverine Flooding</b></p> <p>Exposure to long term chronic weather shifts may result in compromised integrity of key infrastructure and infrastructure design not meeting evolving standards.</p>	 <p>1-3 years   3-10 years   10-30 years</p>	<p><b>Short Term:</b> Port of Entry facilities will be constructed with highly insulated walls and energy efficient glass and solar shading which will decrease heating and cooling costs.</p> <p><b>Long Term:</b> Investigate industry standards to ensure current design meets standards as they continue to evolve. Each Port of Entry will have its own dedicated mechanical plant for its heating, ventilation and air-conditioning needs to provide building comfort more efficiently than separate systems for each building. Use of native and drought tolerant vegetation through the Canadian POE lands to increase plant survival rates and decrease irrigation requirements.</p>

The lowest points of the bridge were analyzed with data suggesting that riverine flooding is a rare possibility with the potential to be a significant but manageable risk with existing mitigation measures. Extreme heat is highly likely to impact WDBA, however, the impact itself would not be consequential on WDBA assets. The probability of asset productivity loss was determined to be unlikely to hinder revenue. Extreme heat can however impact human health, function and productivity of workers working primarily outside.

## Transition Risks

WDBA has completed a preliminary impact analysis on transition-related risks using probability and impact ratings. Preliminary assessment of risk probability and impact has resulted in a prioritized list of risks, based on the mitigation measures identified, the residual risk is within WDBA's risk appetite tolerance and no longer a high-risk rating. Impacts indicated in the table below are currently under review and subject to change as more assessment information is gathered and additional mitigation measures are identified and implemented.

Risk Type	Risks	Timeframe	Mitigation
Policy/Legal	<p><b>Increased Pricing in Greenhouse Gas Emissions</b> An increase in carbon price may result in increased costs to WDBA (e.g. instances where utility expenses are passed through to the tenants).</p>	 <p>1-3 years 3-10 years 10-30 years</p>	<p><b>Short Term:</b> Implement design strategies to take advantage of natural light to reduce energy needs.</p> <p><b>Long Term:</b> Investigate opportunities to invest in initiatives such as renewable energy sources and fleet electrification.</p>
Policy/Legal	<p><b>Enhance Emissions Reporting Obligation</b> Rapidly evolving regulatory expectations in relation to climate disclosures may result in increased compliance and administrative costs for WDBA.</p>	 <p>1-3 years 3-10 years 10-30 years</p>	<p><b>Short Term:</b> Leverage existing staff to support obligations to deliver climate-related reporting needs and determine if additional training or resources are required.</p> <p><b>Long Term:</b> Develop processes to track risk, approach and budget requirements.</p>
Policy/Legal	<p><b>Mandates and Regulations on Existing Products and Services</b> Government requirements (e.g. Canadian Net-Zero Emissions Accountability Act and Greening Government Strategy) to advance measures that support the transition to net-zero may be onerous for WDBA to implement, requiring additional resources and costs.</p>	 <p>1-3 years 3-10 years 10-30 years</p>	<p><b>Short Term:</b> Determine WDBA regulatory requirements and identify timelines for implementation.</p> <p><b>Long Term:</b> Leverage existing staff through the Corporate Sustainable Management Committee to assess and develop mitigation strategy, as required.</p>
Market	<p><b>Uncertainty in Market Signals</b> Increase and/or uncertainty in energy pricing (e.g. affecting co-gen) may result in increased operating costs.</p>	 <p>1-3 years 3-10 years 10-30 years</p>	<p><b>Short Term:</b> Investigate opportunities to invest in renewable energy sources to help mitigate for building energy efficiency/net-zero emissions.</p> <p><b>Long Term:</b> Investigate and project fossil fuel costs to determine if cogeneration is feasible for long term operation.</p>

Risk Type	Risks	Timeframe	Mitigation
Market	<p><b>Increased Costs Over Raw Materials</b></p> <p>Increased and/or uncertain prices of raw materials (e.g. lumber, concrete, steel, aggregate) may result in increased capital expenditures during construction operations.</p>		<p><b>Short Term:</b> Investigate availability of raw materials and determine if suitable alternatives are appropriate.</p> <p><b>Long Term:</b> Project costs of raw materials to determine, properly allocate and budget for required items.</p>
Reputation	<p><b>Increased Stakeholder Concerns</b></p> <p>Increased community concern regarding project impacts on human health and the environment may have adverse impacts on WDBA's reputation and operations.</p>		<p><b>Short Term:</b> Continue to monitor and mitigate construction and operation impacts on the environment using a proactive approach.</p> <p><b>Long Term:</b> Conduct and support research opportunities to forecast and mitigate for environmental concerns such as emissions, water levels, flood events, renewable energy and wildlife.</p>

## Climate-related Opportunities

WDBA assesses climate-related risks and opportunities in accordance with the climate strategy and risk management processes identified below to support the protection of communities and the environment from impacts of climate change. WDBA is voluntarily reporting on climate-related opportunities outlined in the table below.

Opportunity	Timeframe	Strategy
<p><b>Use of Efficient Modes of Transport</b></p> <p>Advancements in zero-emission and hybrid vehicles present an opportunity to align with Greening Government Strategy for WDBA's fleet vehicles.</p>		<p><b>Short Term:</b> Focus on the possibility of obtaining zero-emission or hybrid fleet vehicles for new leases, specifically in the operations phase of the project.</p> <p><b>Long Term:</b> Monitor fleet vehicle usage and track emissions to align with reduction targets over the long term.</p>
<p><b>Development and/or Expansion of Low Emission Goods and Services</b></p> <p>Development of incentive programs for low emission light and heavy-duty vehicular traffic to encourage repeat use.</p>		<p><b>Short Term:</b> Investigate existing incentive programs to assess feasibility of implementation.</p> <p><b>Long Term:</b> Support and pursue changes to regulatory and economic drivers to develop incentives that encourage low emission vehicular traffic. Bring in revenue related to more frequent travel of low emission vehicles.</p>
<p><b>Use of Public Sector Initiatives</b></p> <p>Low-carbon initiatives may unlock financial incentives or policy exemptions.</p>		<p><b>Short Term:</b> Investigate grant opportunities available for climate-related initiatives and assess action plans needed to leverage funds.</p> <p><b>Long Term:</b> Develop strategies and action plans in alignment with grant opportunities.</p>

## Impacts on Business and Strategy - Climate strategy, planning and initiatives

### WDBA's Climate Strategy

To effectively manage climate-related risks and opportunities, WDBA maintains a forward-looking plan with a focus on initiatives that reduce emissions and other environmental considerations that are incorporated into our Corporate Plan, Project Agreement, Sustainability Management Framework and other key documents.

WDBA's climate strategy is guided by four key principles:

- **Proactive Prevention Measures** to minimize risks to an acceptable residual level and effectively protect the environment
- **Continuous Improvement** of day-to-day performance, including incorporation of sustainability values into purchasing decisions
- **Supporting Biodiversity and Building Resiliency** to protect our natural environment and encourage sustainable community development
- **Supporting Vibrant Communities** through community engagement and initiatives that contribute to positive social impacts through the Project Community Benefits Plan and local street improvements in the host communities.

Our specific climate-related initiatives are organized in three strategic pillars recognizing the nature of our operations and are currently underway or planned for a later stage in the project. These are highlighted on the following page.



### Sustainability Action Plans

Sustainability Action Plans have been developed by the Corporate Sustainable Management Committee to identify priorities, establish goals and identify actions to achieve them. In alignment with Canada's Federal Sustainable Development Strategy goals, WDBA has identified four targets that support climate-related initiatives and sustainable infrastructure development in Canada. These include:



pristine lakes and rivers through monitoring the effectiveness of stormwater management systems



healthy wildlife populations through post-construction monitoring of habitat enhancements for various wildlife species



greening government commitments to reduce emissions that contribute to climate change



modern and resilient infrastructure that supports clean economic growth and social inclusion.

## Climate Considerations in Design-Build Phase



POE facilities designed to achieve **LEED v4 BD+C Silver**



target to **reduce energy** consumption by **32%**



Use of **recycled and regional materials**

**Envision Platinum** awarded for sustainable roads and bridges



Integration of a **multi-use path** and pedestrian processing areas in the design



**BNA Sustainability Management Plan** and **ISO 14001 Environmental Management System**



**Extend useful life** of project assets



**Active transportation infrastructure** added to adjacent local roads



Dedicated **cogeneration power plant** accommodated in design, to account for on-site energy generation

## Climate Considerations in Operations Phase



**BNA Sustainability Management Plan** and **ISO 14001 Environmental Management System**

US POE to be **Energy Star Certified** with score of at least 75



**EV charging** made accessible to staff at the POEs.

Consideration of **incentives for electric vehicles** as part of the toll setting exercise



POE facilities to achieve **LEED v4 O+M certified Silver**



**Toll free operations** of multi-use path

**Mass notification system** to provide extreme weather warnings



## Climate Considerations in Corporate Operations



Language integrated into **procurement processes**



Maintaining LEED/Envision/Energy Star **portfolio manager**



Flexibility for employees to **work from home** reducing commuting emissions

Operation of **Corporate Sustainable Management Committee** and adoption of **policy and framework**



Inclusion in Corporate Plan to **obtain zero emission or hybrid vehicles** for new leases



**Mass notification system** to provide extreme weather warnings



# RISK MANAGEMENT

In providing oversight of the Gordie Howe International Bridge project, WDBA performs activities to ensure sound corporate governance in the stewardship of the project. This includes managing risks and further developing the framework for risk decision-making and execution of associated strategies.

WDBA considers risk management to be a shared responsibility within the organization. Accordingly, WDBA's Board and its related committees are accountable for oversight. The Executive Team and all employees are accountable for managing risk within their areas of expertise.

Risk management policies ensure a consistent, comprehensive and enterprise-wide risk management approach that is integrated into planning, decision-making and operational processes. WDBA's Board of Directors approve the Enterprise Risk Management Policy and Risk Appetite Statements which set the tone and expectations for risk management throughout the organization. WDBA monitors and manages its risk profile, tracking risks that are most impactful to the project and organization. Risk assessments and mitigation strategies are regularly reviewed and challenged to ensure risks are appropriately identified and managed.

In 2023, WDBA will update the risk management framework to include revised appetite statements and update the associated policies and procedures. The new Risk Appetite Statements will incorporate sustainability and climate change.



## Risk Management Approach

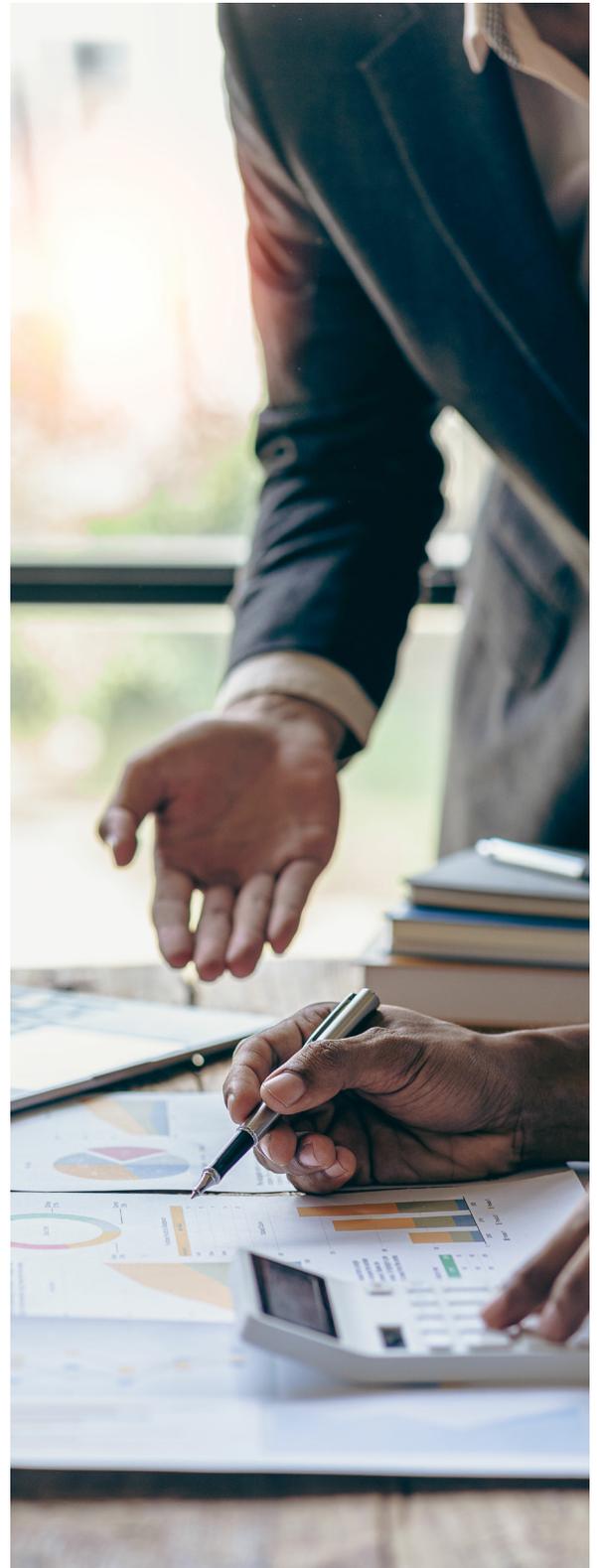
WDBA's Risk Management Framework is based on ISO 31000: 2018 Risk Management, Committees of Sponsoring Organizations of the Treadway Commission (COSO) Enterprise Risk Management Integrated framework, as well as the Project Management Institute's Practice Standard for Project Risk Management.

WDBA's top risks are identified and monitored through the project's risk register. WDBA's quantitative risk analysis uses a 5x5 Risk Matrix (i.e. a risk having a high impact of 5 as well as a high probability of occurring at 5 receives a score of 25). Quantitative ratings are based on the judgement of subject matter experts. This is a more subjective analysis, prioritizing risks based on risk rating and colour coding.

In assessing risks quantitatively, a more detailed and objective analysis is applied. Using standard criteria, risks are analyzed by providing a range of estimates for impacts to assess the probability of those impacts occurring and the potential consequence to WDBA if the risk materializes over a five to ten-year period.

In January 2023, WDBA completed a Climate Risk and Opportunities identification workshop. A preliminary list of risk categories and topics from the TCFD report were reviewed and circulated with internal subject matter experts (SMEs) and a professional services firm. The workshop included a review of risks that would apply to WDBA as well as any new risks. These risks were recorded in a WDBA risk register template and assigned owners. Following the identification follow up meetings and interviews were scheduled with SMEs over February and March to determine an initial qualitative rating for likelihood and impact which produced preliminary risk scores and supported the prioritization of mitigation plans. Once mitigations were established a target/residual risk assessment was established. The results of the physical risk assessment and other relevant climate risk information was vetted through the lens of the existing risk framework including the use of WDBA risk scoring criteria to ensure impacts align with the assessment process, and inclusion of the risks in regular reviews and reporting.

The climate risks are reviewed regularly in monthly risk update meetings with the risk owners and any risks outside of the risk appetite tolerance plus risks with significant changes or new risks will be reported to the appropriate Board Committee and then to the Audit Committee which will escalate any significant risks to the full board.



# METRICS AND TARGETS

## Greenhouse Gas Emissions

WDBA completed its first corporate-wide consolidated Scope 1, 2 and 3 GHG emissions inventory for the calendar year 2022, in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (GHG Protocol) and its annexes.

Scope 1 GHG emissions refer to direct emissions from organizational operations. Scope 2 emissions refer to indirect emissions arising from the consumption of electricity or heat, and Scope 3 emissions are all indirect emissions that occur as a result of organizational activities but are outside of direct operations.

In 2022, WDBA's total GHG emissions amounted to 198,982 tons of CO<sub>2</sub> equivalent. The vast majority of emissions resulted from purchased goods and services (Scope 3 – Category 1), which are emissions primarily associated with construction materials, such as steel and cement, and construction activities carried out by WDBA contractors, including BNA. To this extent, the selected construction materials and activities are in alignment with efforts to achieve sustainable development and environmental performance standards identified through LEED and Envision certifications, which is an attempt to reduce our emissions, amongst other environmental factors. WDBA's Scope 1 and 2 emissions relate to fuel and electricity consumption at project offices, trailers and small fleet of staff vehicles. Emission levels are expected to remain at a similar level until the completion of construction activities. Once operational, it is expected that emissions will decline significantly and pivot from construction-related emissions to those associated with operations, maintenance and repair of the bridge.

A detailed overview of total GHG emissions for the 2022 calendar year is presented below:

GHG Emissions Type (Tonnes CO <sub>2</sub> e)	Scope Description	GHG emissions (tCO <sub>2</sub> e)
<b>Operational Emissions</b>	<b>Scope 1</b> Direct GHG emissions from sources that are owned or controlled by WDBA.	<b>12,07</b>
	<b>Scope 2</b> Indirect GHG emissions that occur through the use of purchased electricity and heat.	<b>36,90</b>
<b>Upstream Indirect Emissions</b>	<b>Scope 3 - Category 1</b> (Purchased goods and services) Aggregates all products and services purchased that are not otherwise detailed in the other categories (i.e. categories 2 through 8).	<b>198 347,3</b>
	<b>Scope 3 - Category 2</b> (Capital goods) Accounts for office trailers and BNA equipment procured in 2022.	<b>425,7</b>
	<b>Scope 3 - Category 3</b> (Fuel and energy related activities) Consists of aggregating fuels and energy purchased and consumed in the context of the Gordie Howe International Bridge construction project to estimate upstream impact.	<b>99,6</b>
	<b>Scope 3 - Category 5</b> (Waste) Disposal and treatment of waste generated in the reporting company's operations in the reporting year (in facilities not owned or controlled by the reporting company).	
	<b>Scope 3 - Category 6</b> (Business Travel) Includes emissions from the transportation of employees for business related activities in vehicles owned or operated by third parties.	<b>39,8</b>
	<b>Scope 3 - Category 7</b> (Employee Commute) Includes emissions from the transportation of employees between their homes and their work sites.	<b>21,2</b>
	<b>Other Scope 3 categories (upstream and downstream) have been scoped out due to immateriality.</b>	
<b>TOTAL</b>		<b>198 982</b>

## Basis for Preparation

WDBA utilized a financial control approach to estimate GHG emissions data. The following organizational boundaries were applied:

- The emissions include operational emissions associated with WDBA as well as construction-related emissions associated with Gordie Howe International Bridge project work in Canada and the US.
- Due to BNA's high level of involvement in the construction of the Gordie Howe International Bridge, the Scope 1, 2 and select Scope 3 emissions (categories 1,2, 3, 5 and 7) of our private-sector partner were directly measured, or estimated subject to data availability, and are accounted for as WDBA's Scope 3 emissions.
- WDBA's organizational boundaries for select emissions sources (mobile emissions and employee commute) have been extended to BNA's sub-contractors and are accounted for as WDBA's Scope 3 emissions.

## Targets

As the Gordie Howe International Bridge is still in the construction phase, the 2022 calendar year is not representative of WDBA's emissions profile to be expected once the bridge opens to traffic. Considering this information, WDBA will wait to set a baseline year and emission reduction target until the bridge begins operations, which is contracted to occur in 2024.

## LOOKING AHEAD

As Canada transitions to a net-zero economy, WDBA recognizes the importance of its day-to-day business decisions and is developing forward-looking plans for the future operation of the new Gordie Howe International Bridge. WDBA is committed to creating a culture of leadership that will be reflected in the development of a strategic and collaborative commitment to sustainability and climate action. Key future priorities include continuing to improve and disclose impact metrics under a Sustainable Management Framework and Sustainability Policy which will enable WDBA to further develop environmental, social and governance objectives.

WDBA recognizes the importance of environmental protection to communities on both sides of the border and, together with Bridging North America, we are working together to develop a robust environmental management program to ensure the Gordie Howe International Bridge is constructed and operated in accordance with the highest standards of sustainable development.

## Stay Connected



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