



# PORTS TORONTO

## 2021 Sustainability Report



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The Toronto Port Authority, doing business as PortsToronto since January 2015, is a government business enterprise operating pursuant to the *Canada Marine Act* and Letters Patent issued by the federal Minister of Transport. The Toronto Port Authority is hereafter referred to as PortsToronto.

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## LAND ACKNOWLEDGEMENT

PortsToronto operates under its mandate on the traditional territory of many nations, including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples, and is now home to many diverse First Nations, Inuit and Métis peoples. PortsToronto respects that the Crown and the Mississaugas of the Credit signed Treaty 13, which covers the lands of the City of Toronto, and the Williams Treaties signed with multiple Mississaugas and Chippewa bands. Today, Toronto is still home to Indigenous people and we are grateful to have the opportunity to meet and work on this territory.

## OUR PROMISE

Express gratitude to Mother Earth and for the resources we are using, and honour all the First Nation, Métis and Inuit people who have been living on the land since time immemorial. PortsToronto consults and engages with the Mississaugas of the Credit First Nation on all proposed projects.

# Message from the Chief Executive Officer

Welcome to PortsToronto's 2021 Sustainability Report.

Since we began recording our progress in annual Sustainability Reports more than seven years ago, PortsToronto has woven environmental best practices into the fabric of its operation and has proven its dedication to preserving and protecting Toronto's waters, supporting our community, and innovating for a sustainable future.

In this seventh edition of our report, we have focused our approach on the areas in which we demonstrate a high level of environmental performance, highlighting what makes PortsToronto stand out among its industry peers.

We have also made a few enhancements to this report and further clarified PortsToronto's contributions toward the United Nations Sustainable Development Goals within a comprehensive chart located in the appendix to this report – allowing us to reduce our page count and render the report more accessible and engaging to our readers.

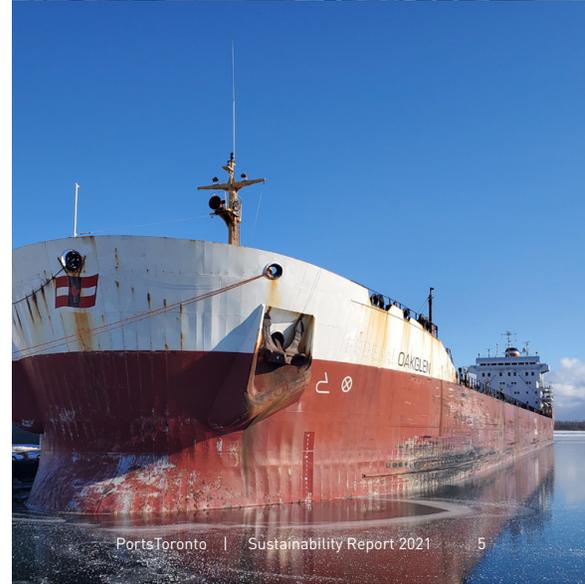
What has not changed in our reporting over the years is our commitment to providing a reliable, accountable document for our stakeholders, community and government partners to track our sustainability progress and future goals. Gaining ground in these areas takes years of committed planning, investment and collaboration.

Case in point, the conversion of the *Marilyn Bell I* ferry to 100 per cent electric power, completed in December 2021, ticked all of the boxes in our cleaner, greener and quieter vision for Billy Bishop Airport and its operations.

Listening to environmental experts and our neighbours, we identified the conversion of the *Marilyn Bell I* ferry to electric power as a priority goal in our sustainability and noise management strategies, and a project that would help us to reach the greenhouse gas (GHG) emissions reduction target we set for ourselves in 2017. It was also an opportunity to innovate, and collaborate with an all-Canadian roster of companies to achieve a first-in-Canada conversion project that had no existing blueprint.

The *Marilyn Bell I* is the first completely electric, lithium-ion ferry in Canada, powered by 100 per cent renewable wind and solar energy through our partnership with Bullfrog Power. Its new electric propulsion system, entirely devoid of fuel components, will eliminate GHG emissions from the ferry operation – reducing the airport's Scope 1, or direct, emissions by an estimated 530 tonnes per year.

The retrofitted ferry will also greatly reduce operational noise in the area, building on the airport's award-winning Noise Management Program and signalling PortsToronto's commitment to invest in, and act on areas of improvement within our operation. A cleaner, greener, quieter operation benefits our community, our business and most importantly, the environment in which we operate.



# Message from the Chief Executive Officer

In another example of strategic forward thinking, we began our partnership with Bullfrog Power in 2010, and remain the only port and airport in Canada to be 100 per cent powered by renewable electricity – this means that PortsToronto’s Scope 2 emissions have been zero for more than a decade. We are proud to be among the largest green energy purchasers in the country and part of a growing movement to help Canada transition to a low-carbon energy grid.

As important to us as clean air, is clean water. This past year, we continued to support innovation and critical research that will help move the needle toward cleaner water in Lake Ontario. In 2021, Seabins in the PortsToronto network removed tens of thousands of small pieces of plastic debris from the Toronto Harbour, and we sponsored a study with University of Toronto engineering students to design a bespoke trash-trapping device made for Toronto’s unique waterways.

We are proud to have influenced the launch of similar trash trapping and data collection programs throughout the Great Lakes. By sharing our experience using trash-trapping technology and supporting the research resulting from our partnership with the University of Toronto Trash Team and engineering departments, we hope to help shape a better, cleaner future for wildlife and the people that live, work and play along Toronto’s shores and beyond.

These wins take time. That is why, in some cases, we are quite literally planting the seeds in advance. In 2021, we partnered with local organizations to plant more than 600 trees and shrubs at the Outer Harbour Marina. These will grow over the years to strengthen the soil and prevent erosion, provide habitat and food for local birds and wildlife, and best of all, they will contribute to Toronto’s tree cover and absorb CO<sup>2</sup> from the air.

As a steward of the Toronto waterfront for more than a century, PortsToronto recognizes that tackling climate change is an ongoing challenge and that there is a long road ahead of us. As of this writing, we have already started working toward establishing new goals to better understand the sources of our operational emissions and to strategize on a plan that will get us to where we need to be in order to strengthen our emissions reductions target.

For now, let us take a moment to celebrate the achievements of the year 2021. I hope you enjoy reading more in the pages that follow about the important role PortsToronto plays in protecting the environment.

Happy reading.



**Geoffrey A. Wilson**  
Chief Executive Officer  
PortsToronto



# PortsToronto 2021 in Review

## 0 | zero

PortsToronto's Scope 2 emissions have been zero since 2010 due to our use of 100 per cent renewable electricity through Bullfrog Power.

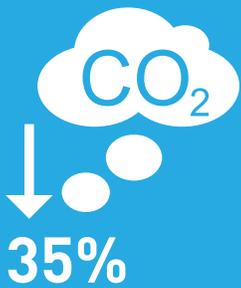


Since 2010, PortsToronto has powered all of its operations with 100 per cent green electricity through Bullfrog Power Canada.



## 23.6%

In 2021, PortsToronto reduced its Scope 1 and Scope 2 emissions by approximately 23.6 per cent by using Bullfrog Power's clean energy, which comes exclusively from a blend of EcoLogoM-certified wind and low-impact hydro power.



In 2017, under the guidance of Delphi Group, PortsToronto set the target of a 35 per cent carbon reduction below 2015 levels by 2030 and identified a pathway to achieve this goal.

At the time, this target was aligned with those set by all three levels of government, however we recognize that it is now outdated and are working on a pathway toward achieving a strengthened target.

## 41%

We encourage passengers to use green transportation to get to and from the airport. 41 per cent of travellers walk, bike or take transit from Billy Bishop Airport – one of the highest percentages in North America.



# YTZ

## 28,252 tonnes

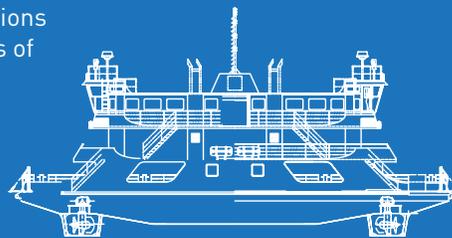
Since joining the bullfrogpowered community, PortsToronto has displaced more than 28,252 tonnes of CO<sub>2</sub> — the same amount of CO<sub>2</sub> emissions produced by the consumption of 11,977,885 litres of gasoline.

This is the equivalent of taking 6,131 cars off the road for one year or diverting more than 9,606 tonnes of waste from the landfill.



## 530 tonnes

The retrofitted *Marilyn Bell I* will eliminate greenhouse gas emissions from Billy Bishop Airport's ferry operation, and will reduce the airport's direct emissions by approximately 530 tonnes per year.



## 196,000 litres

Converting the *Marilyn Bell I* ferry to electric power will eliminate the consumption of approximately 196,000 litres of diesel fuel per year.

# PortsToronto 2021 in Review

## 57,000 trucks

One tonne of freight can travel 240 kilometres on a single litre of fuel by ship, vs. only 30 kilometres by truck. The cargo delivered to the Port of Toronto took approximately 57,000, 40-tonne trucks off Toronto's already congested roads and highways in 2021.



## \$12 million

PortsToronto has invested more than \$12 million since 2009 in charitable initiatives and environmental programs that benefit communities and organizations along Toronto's waterfront and beyond.



## 2,295,815 metric tonnes

Overall, 190 cargo vessels visited the Port of Toronto in 2021, delivering a range of bulk, project and general cargo products totalling 2,295,815 metric tonnes – a four per cent increase from 2020.



## 5,091 medevac flights

We are proud to have Ornge air ambulance services based at Billy Bishop Airport. The YTZ base operated 5,091 medevac flights in 2021.

## 12

Our 12-member, employee-led Sustainability Committee meets regularly to share ideas and identify strategies for employing environmental best practices throughout Billy Bishop Airport's business units and operations.



## \$4.8 billion in GDP

According to a 2021 study by York Aviation, Billy Bishop Airport could contribute \$4.8 billion in GDP annually to the City of Toronto and Province of Ontario by 2025.



# PortsToronto 2021 in Review

## 11 years

PortsToronto has been certified in the Green Marine environmental certification program for the past 11 years.



## 0 | zero

Zero incidents of significant health and safety non-compliance in 2021.



## 230,000

Seabins in the PortsToronto network have the capacity to remove 230,000 pieces of small plastic from the Toronto Harbour per season.



## 600 plants

600 native plants, including 15 coniferous trees, 85 deciduous trees and 500 shrubs, were planted at the Outer Harbour Marina in 2021 as part of a broader effort to ensure Toronto's waterfront assets provide a wildlife refuge and recreational opportunities for generations to come.



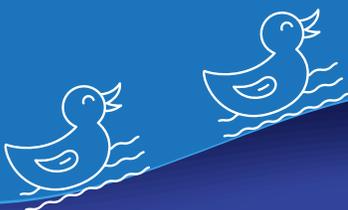
## 31 Calls

PortsToronto addressed 31 calls reporting debris and spills to the Harbour Hotline – contributing to public enjoyment of Toronto's waterfront and inner harbour.



## 4 duckling docks

In spring 2021, PortsToronto installed four duckling docks at water level in the inner harbour to provide an accessible floating rest area for young ducklings still growing their waterproof down.



## 8



PortsToronto also contributes to the success of Toronto's \$2-billion film industry by providing filming locations. In 2021, PortsToronto supported eight productions, including *What We Do in the Shadows*, *The Expanse* and an Arkells music video.

# Mandate

PortsToronto's mission is to effectively manage Billy Bishop Toronto City Airport, the Port of Toronto, the Outer Harbour Marina and its real estate properties on a self-sustaining basis, allowing PortsToronto to reinvest funds into marine safety, environmental protection, community programming and transportation infrastructure.

PortsToronto is the successor agency of the Toronto Harbour Commissioners (THC), which managed the Toronto Harbour from 1911 to 1999. As part of a broad strategy developed by the federal government to modernize the administration of ports, the Toronto Port Authority, now PortsToronto, was established in 1999 to operate the port, marina, airport and its land holdings.

Established under the Canada Marine Act, PortsToronto is a government business enterprise that is mandated to be financially self-sufficient. PortsToronto operates in accordance with the Canada Marine Act and Letters Patent issued by the federal Minister of Transport in addition to a series of specific policies and procedures. The Letters Patent include requirements related to PortsToronto's board of directors and outlines the activities that can be undertaken by the organization.

## COMMUNITY INVESTMENT

PortsToronto is committed to fostering strong, healthy and sustainable communities and has invested more than \$12 million since 2009 in charitable initiatives and environmental programs that benefit communities and organizations along Toronto's waterfront and beyond.



Bridging the Distance Between  
Home and Hospital  
for Canadians in Need

[hopeair.ca](http://hopeair.ca)

Hope Air has provided for more than  
162,000 travel arrangements since 1986.



Sylvio Roy  
Volunteer Pilot Program  
Hope Air





Connecting leisure and business travellers directly into the heart of Canada's largest city, Billy Bishop Toronto City Airport (YTZ) is an important transportation gateway that helps drive the finance, technology and healthcare innovation sectors in the Greater Toronto Area (GTA).

Prior to the pandemic, the airport generated more than \$470 million in Gross Domestic Product (GDP) each year and supported 4,740 jobs, including 2,080 directly associated with airport operations. According to a 2021 study by York Aviation, Billy Bishop Airport has the potential to contribute \$4.8 billion in GDP annually to the City of Toronto and Province of Ontario by 2025.

A travel hub of choice for business and leisure travellers alike and one of the most walkable, bikeable airports in North America, Billy Bishop Airport has been recognized with a number of passenger driven awards and is known throughout the travelling community for its excellent customer service, superb amenities and unbeatable convenience.

Billy Bishop Airport also serves as a base for Ornge air ambulance services, two Fixed Base Operators, FlyGTA and Heli Tours, and is home to a personal/general aviation community that includes approximately 50 private planes and one flight school.

## EXCELLENCE

Billy Bishop Airport has been recognized with a series of passenger-driven awards, including being named one of the top airports in North America in both the Airports Council International's (ACI) Airport Service Quality Awards and Skytrax World Airport Awards, the premier international airport awards voted on by 13.8 million passengers worldwide. Billy Bishop Airport was also named one of the top ten best international airports by Condé Nast Traveler.

Airports Council International (ACI) has also recognized Billy Bishop Airport for its efforts to protect and preserve the environment through programs, initiatives and projects. In 2017, Billy Bishop Airport won the top award for its Noise Management Program; in 2019, the airport won Best Innovative Project for the successful completion of its three-year Airfield Rehabilitation Program; and in 2020, the airport won for its Master Plan, which was inclusive of many initiatives to protect the environment.



## PUBLIC OPINION

In November 2021, a public opinion survey was conducted by Edelman through the Logit Group among 1,200 Torontonians to determine awareness and gather opinions regarding Billy Bishop Airport. Results indicated awareness and support for the airport among many surveyed in areas such as economic impact and the favourable travel experience provided. Key findings include:



2 in 3 Torontonians (66%) have used Billy Bishop Airport predominantly due to convenience and ease of location



Strong favourability for Billy Bishop Airport, particularly among those in the Beaches/East York neighbourhoods



Overwhelming agreement that Billy Bishop Airport brings economic growth and traveller benefit

The Port of Toronto provides a crucial piece of economic infrastructure for the transportation of goods and supports many of Toronto's key sectors, including construction, tourism, and food and beverage. In 2021, more than 2.2 million metric tonnes of cargo transited through the Port of Toronto, providing the sugar for our coffee, the salt for our roads and the raw materials needed for Toronto's booming construction industry, including cement, aggregate and steel.

The Port of Toronto is also a popular destination for Great Lakes cruising. As a precautionary measure in response to the COVID-19 pandemic, the Government of Canada suspended the 2020 and 2021 cruise ship seasons. In 2022, the Port of Toronto will be ready to once again welcome Great Lakes cruise ships to Toronto, an important contributor to the city's tourism industry that brought 36 ships carrying approximately 12,000 visitors to Toronto in 2019.



## HIGHWAY H<sub>2</sub>O

In addition to its economic impact, increased imports through the Port of Toronto has a positive impact on the environment given the 2.2 million metric tonnes of cargo delivered by ship last year took approximately 57,000, 40-tonne trucks off Toronto's congested roads and highways.



## GREAT LAKES CRUISING

While the Port of Toronto will continue to play an essential role in Canada's supply chain in 2022, it will also play an important role supporting Toronto's tourism sector as its Cruise Ship Terminal anticipates hosting a record 40 cruise ships in 2022, including a number of new cruise ships designed for expedition cruising on the Great Lakes.



# OUTER HARBOUR Marina

Just outside the Toronto Harbour and a short walk from Tommy Thompson Park and nature preserve, the Outer Harbour Marina (OHM) is located 10 minutes from the downtown core.

With breathtaking scenery and a world-class marina, the OHM offers a unique escape from city life without having to leave Toronto. As one of the largest freshwater marinas in Ontario, the Outer Harbour Marina has more than 625 extra-wide slips that can accommodate boats up to 100-feet long. As well as being the only docking facility of its kind in Toronto, the OHM also boasts heated indoor boat storage.

The OHM has a reputation for excellence, including as it relates to environmental stewardship. In 2021, the OHM earned the Green Anchors Gold rating in the Clean Marine Eco-Rating Program from the Ontario Marine Operators Association for the 11th year in a row – one of the highest rankings attainable for marinas that follow environmental best practices. Through improvements such as the PortsToronto Seabin Program, the OHM is working toward achieving the Diamond designation in the Boating Ontario Clean Marine Eco-Rating Program.



The award-winning PortsToronto Seabin Program launched at the Outer Harbour Marina in summer 2019 aims to help remove floating litter and microplastics from the water, and was the first commercial installation of Seabins in Canada. The program continued in 2021, with University of Toronto Trash Team researchers quantifying and analyzing items of floating waste collected by the Seabins.



# REAL ESTATE AND PROPERTY HOLDINGS



Real estate and property holdings include 5 Queens Quay West, Pier 6 and various water and land lots along the waterfront. These properties are leased to other businesses, and some have the potential for redevelopment.



Through its mixed-use facilities, the Port of Toronto plays a role in supporting Toronto's \$2 billion film industry by providing a production hub for industry players such as Cinespace and Netflix in Marine Terminal 51 and parts of the Cruise Ship Terminal. This complementary use is facilitated in parallel with traditional port operations and cruise ship tourism, and has proven to be successful in ensuring the full utilization of the property.



# Corporate Governance

PortsToronto is accountable to the federal government through Transport Canada and is guided by a board of directors composed of individuals appointed by all levels of government – federal, provincial and municipal. The PortsToronto board met 21 times in 2021.

The PortsToronto board relies on four standing committees to facilitate business and guide its decisions, namely Audit and Finance, Governance and Human Resources, Communications and Outreach, and Pension. During 2021, the committees met 22 times.

*“Organizations like PortsToronto, and sustainable projects such as the conversion of the Marilyn Bell I ferry to 100 per cent electric power, play an important role in city building as we drive the economy by providing hubs of commerce, gateways to trade and places of employment.”*

– PortsToronto CEO, Geoffrey Wilson, addressing the Transforming Sustainable Infrastructure Plenary Session at the Toronto Global Forum in November 2021.

## The board of directors is appointed as follows:



One appointee nominated by the federal Minister of Transport



One individual appointed by the City of Toronto



One individual appointed by the Province of Ontario



Six individuals appointed by the federal Minister of Transport in consultation with the below industry groups.

- Commercial
- Airport
- Port-related activities/ operations
- Recreational business

*All individuals nominated by the Minister of Transport are appointed by the Governor in Council.*



# Board of Directors



**ROBERT D. POIRIER**  
Robert Poirier retired as Chair of the PortsToronto Board in April 2021 after serving the maximum term.



**AMANDA WALTON**  
City of Toronto appointee and Chair of the Board of Directors (April 2021)



**DARIN E. DESCHAMPS**  
Federal Appointee



**HELLEN SIWANOWICZ**  
Federal Appointee



**DON MCINTYRE**  
Federal Appointee



**CHRISTOPHER REYNOLDS**  
Province of Ontario appointee

# Senior Management



**CRAIG MANUEL**  
Senior Vice President and General Counsel

**ALAN J. PAUL**  
Senior Vice President and Chief Financial Officer

**CHRIS SAWICKI**  
Vice President of Infrastructure, Planning and Environment

**DEBORAH WILSON**  
Vice President of Communications and Public Affairs

**GEOFFREY A. WILSON**  
Chief Executive Officer

**GENE CABRAL**  
Executive Vice President, PortsToronto and Billy Bishop Airport



# Approach to Sustainability

PortsToronto is proud to present our seventh annual Sustainability Report, a document that captures our continuing efforts to employ environmental best practices and engage in an open and ongoing dialogue on opportunities to maximize sustainability efforts within our business, our operations and our community.

Keeping the score, this report offers an accounting of our environmental performance in 2021, tracking key indicators like greenhouse gas emissions (GHG) and economic impact, and measures our progress within global corporate reporting best practices. Consolidating our efforts in this detailed, accessible format keeps our stakeholders informed on the work PortsToronto is doing to foster environmental protection and climate action within our own operations as well as among our community, tenants and partners.

The report is structured around four priority areas that together define sustainability at PortsToronto, and builds on the strong foundations and goals that were set both in previous editions of this report and throughout the organization's longstanding tradition of environmental stewardship, social responsibility and collaboration with government agencies and stakeholders to manage Toronto's waterfront.

- I. **Climate Action**
- II. **Environmental Stewardship**
- III. **Sustainable Communities**
- IV. **Economic Performance**



The PortsToronto Sustainability Committee provides a forum in which volunteer environmental ambassadors from each business unit leverage collective expertise, exchange ideas and strive to build positive, sustainable outcomes for the organization and the environment.

Since 2017, innovative thinking by members of the Sustainability Committee has helped PortsToronto conduct its business in an environmentally sustainable manner, from introducing the award winning, first-in-Canada PortsToronto Seabin Program to eliminating single-use plastic straws and water bottles from our offices.

## 2021 SUSTAINABILITY COMMITTEE

- Michael David, Co-Chair
- Jessica Pellerin, Co-Chair
- Chris Sawicki, Senior Management
- Deborah Wilson, Senior Management
- Craig Manuel, Senior Management
- Michael Leonard, Billy Bishop Airport
- Todd McConnell, Billy Bishop Airport
- Michael Riehl, Port of Toronto
- Allan Seymour, Works and Environmental Services
- Mike Dwyer, Outer Harbour Marina
- George Maniatogiannis, Health and Safety
- Dorothy Kolesnik, Billy Bishop Airport

*“In 2021, our committee continued to meet regularly online and tackled two improvement areas for PortsToronto, namely GHG emissions reductions – a global priority – and waste management. We completed audits of our current practices to identify gaps, and held round table discussions that have generated new ideas and opportunities to further PortsToronto’s impact.”*

– Michael David,  
Co-Chair, PortsToronto,  
Sustainability Committee

On February 7, 2021, the PortsToronto Sustainability Committee organized a Zoom catch-up with colleagues to mark National Sweater Day and help raise awareness about climate change and energy conservation. Since 2010, more than one million Canadians have shown their support for limiting global temperature rise to 1.5 degrees Celsius by turning down their thermostats by the same amount (at home or in the office) and wearing their favourite sweaters to stay warm.



## SUSTAINABILITY COMMITTEE MISSION

As the organization’s environmental ambassadors, the PortsToronto employee-led Sustainability Committee’s mission is to generate and deliver meaningful environmental programs and initiatives aimed at further integrating social, economic and environmental responsibility into the fabric of PortsToronto’s daily operations, reinforcing PortsToronto’s position as a leader and innovator in environmental protection and sustainability.



# Approach to Sustainability

## MEASURING PROGRESS

Our sustainability reporting is guided in part by the Global Reporting Initiative (GRI). The GRI has pioneered and developed a comprehensive Sustainability Reporting Framework that is widely used around the world. It includes guidance in four key areas: economic, environmental, social and governance performance.

Our priorities focus on the areas in which PortsToronto can have the greatest impact and influence in building a sustainable and prosperous future. In 2020, PortsToronto aligned its sustainability reporting with the United Nations Sustainable Development Goals (SDGs) – a series of 17 goals that have been adopted by government bodies and agencies around the world, including the Canadian federal government.

## CONTRIBUTING TO THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

Analyzing our performance and assessing strategic planning within the SDG framework helps measure both the local and global context of PortsToronto's efforts to combat climate change and mitigate the impacts of its operations, and aligns the organization's sustainability goals and targets with those of our government partners as we work to strengthen our collective impact.

Throughout this report, we have indicated where PortsToronto's initiatives have contributed to the United Nations Sustainable Development Goals with the corresponding SDG symbol.

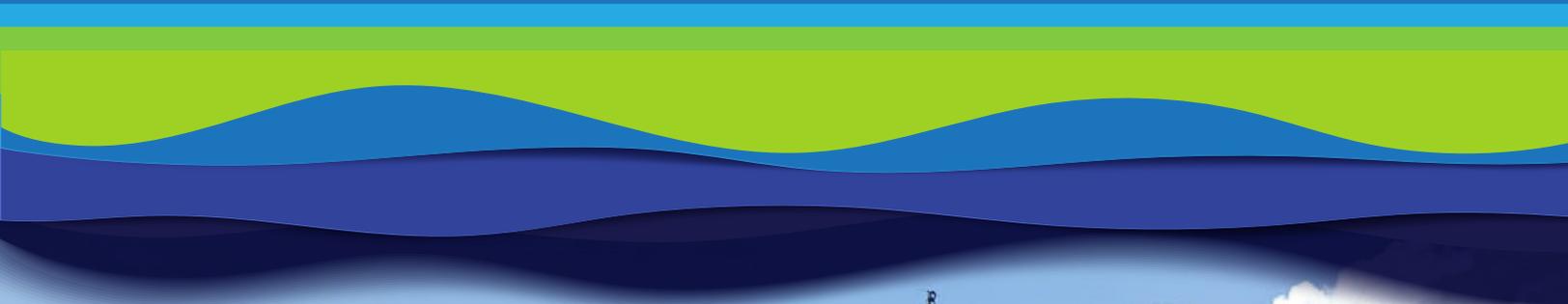
A full accounting of PortsToronto's SDG performance can be found in Appendix A.

# SUSTAINABLE DEVELOPMENT GOALS





# I – Climate Action



Tackling climate change is among the most pressing environmental challenges of our time and one of our top priorities. PortsToronto uses renewable electricity sources to lower its carbon footprint and foster a climate resilient future. By taking immediate action and employing meaningful processes, PortsToronto works to combat climate change and reduce the environmental impact of our operations.

## REPORTING ON GREENHOUSE GAS EMISSIONS

PortsToronto calculates its greenhouse gas (GHG) emissions with the support of Delphi Group. GHG emissions are categorized into three groups or “Scopes” under global reporting protocols. While corporate standards under the Greenhouse Gas Protocol require reporting on Scopes 1 and 2, PortsToronto has made efforts to include Scope 3 emissions in its accounting where data is available.

- Scope 1 covers direct emissions from sources owned or controlled by PortsToronto, such as fuel consumption for company vehicles. PortsToronto’s Scope 1 GHG emissions arise from the energy used in its buildings, and the vehicles and equipment used at Billy Bishop Airport and its port and marina operations.
- Scope 2 covers indirect emissions from the offsite generation of purchased utilities consumed by the company. PortsToronto’s Scope 2 emissions have measured as zero since 2010 due to our use of 100 per cent renewable electricity through Bullfrog Power.
- Scope 3 includes all other indirect emissions that occur in our value chain. These emissions are from operations not controlled or owned by PortsToronto. While PortsToronto tracks GHG emissions from the buildings and vehicles operated by our tenants where data is available, we are working with our partners to gain better visibility into Scope 3 emissions moving forward.



Environmental Strategies. Business Solutions.

## Delphi Group

The environmental priority areas detailed in this report have been reviewed by Delphi Group. As a pioneer in sustainability and environmental risk management, Delphi Group has more than 25 years of experience in helping some of Canada’s best-known companies improve the sustainability of their organizations – as well as the local and global communities in which they operate.

## CARBON REDUCTION STRATEGY

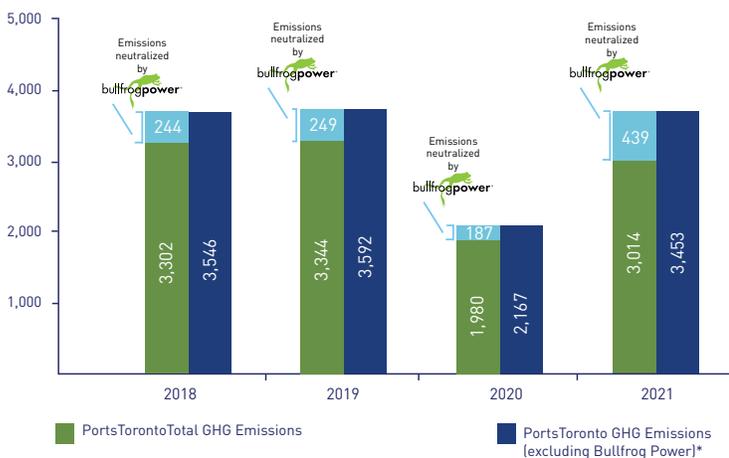
We recognize that reducing GHG emissions is a global necessity and that targeting the source of these emissions is critical. In 2017, under the guidance of Delphi Group, PortsToronto set the target of a 35 per cent carbon reduction below 2015 levels by 2030 and identified a pathway to achieve this goal. At the time, this target was aligned with those set by all three levels of government, however we recognize that it is now outdated and are working on a pathway toward achieving a strengthened target

Since then, PortsToronto has implemented several initiatives aimed at reducing emissions from our direct and indirect emissions (Scopes 1 and 2), and in communicating our carbon reduction strategy PortsToronto aims to lead by example and encourage emissions throughout our value chain (Scope 3).

PortsToronto’s carbon reduction strategy focuses on:

- Powering our operations with renewable energy
- Investing in renewable alternatives
- Prioritizing climate resiliency and sustainable site design in future planning
- Supporting emissions reductions in our community

## GHG EMISSIONS NEUTRALIZED BY USE OF BULLFROG POWER (t CO<sub>2</sub>e)



## ANNUAL GHG EMISSIONS BY SCOPE FOR PORTSTORONTO AND TENANTS



Our Scope 1 emissions are affected primarily by business activity, weather, and our energy management and GHG reduction efforts. Overall, we continue to be a very low emitter of GHG emissions across our operations. In 2021, Scope 1 emissions decreased dramatically due to the temporary suspension of commercial service at Billy Bishop Airport and temporary closure of our offices, both a direct result of the COVID-19 pandemic. We anticipate that these numbers will show a comparable increase in 2022 as Billy Bishop Airport resumes normal operations.

Our Scope 2 emissions are 0 due to our use of 100% renewable electricity for all Billy Bishop Airport’s direct operations.

We will continue our efforts to manage our energy consumption and reduce our GHG emissions across Billy Bishop Airport’s operations. In future years, we will also work to improve our understanding of tenant related energy consumption and associated emissions.

# I – Climate Action

## CHOOSING RENEWABLE ENERGY

One of the ways PortsToronto reduces its environmental footprint is by choosing 100 per cent green energy from Bullfrog Power. Since 2010, PortsToronto has powered all of its operations with clean, renewable electricity from Bullfrog Power. Through our agreement, Bullfrog Power's generators inject renewable electricity back into the grid on our behalf to match the amount of electricity used by PortsToronto's operations.

In 2021, PortsToronto reduced its Scope 1 and Scope 2 emissions by approximately 23.6 per cent by using Bullfrog Power's clean energy, which comes exclusively from a blend of EcoLogo<sup>M</sup>-certified wind and low-impact hydro-power. PortsToronto also purchases Bullfrog Power on behalf of some of its tenants.

PortsToronto is one of the top 10 purchasers of Bullfrog Power green electricity in the country. PortsToronto and Billy Bishop Airport are the only port authority and airport in Canada to be powered entirely by renewable electricity across all operations and facilities, including the airport's *Marilyn Bell I* electric ferry, 853-foot pedestrian tunnel, and connecting buildings.

CLEANER  
GREENER  
QUIETER





CANADA'S FIRST TRULY ZERO-EMISSION, LITHIUM-ION FERRY

Launched in December 2021 and powered by 100 per cent clean electricity through Bullfrog Power, the retrofitted *Marilyn Bell I* will eliminate greenhouse gas emissions from the ferry operation, and will reduce the airport's direct emissions by approximately 530 tonnes per year. Converting the ferry to electric power will eliminate the consumption of approximately 177,000 litres of diesel fuel per year.

Powered by **100%** green electricity

"WATT WATT"





# Leading the way to a brighter future

Despite the ongoing pandemic, we're seeing more demand for clean, green energy than ever before. The momentum created by early adopters like PortsToronto – a Bullfrog Power customer since 2010 – is reshaping Canada's energy landscape. PortsToronto continues to be among the largest green energy purchasers in the country by bullfrogpowering all of their facilities and operations with renewable electricity.

Our network of bullfrogpowered businesses and individuals understand that the energy choices they make affect the health and the future of their communities. They want to make a positive impact on Canada's energy systems, which is driving our ability to bring new solar and wind farms to life.

PortsToronto and Billy Bishop Airport are the only port authority and airport in Canada to be bullfrogpowered entirely by renewable electricity across all operations and facilities, including the airport's 853-foot pedestrian tunnel, connecting buildings, and the newly retrofitted *Marilyn Bell I* ferry.

How does bullfrogpowering a building, ferry, or tunnel work? Bullfrog Power's generators put 100% green electricity onto the grid to match the amount of conventional power used across all of PortsToronto's facilities and operations. Across Canada, Bullfrog Power's green electricity comes from a blend of wind, solar, and low-impact hydro power sourced from new Canadian renewable energy facilities.

The bullfrogpowered community also supports projects that bring social benefits to their local communities. We know that environmental and social issues are deeply intertwined, and we're proud to support more than 160 community-based green energy projects with youth groups, non-profits, Indigenous Peoples, and more. We're grateful for PortsToronto's commitment to green energy and their support of our community projects.

In 2021, the bullfrogpowered community helped fund projects including Youth Challenge International's Youth Climate Leadership Program; this Program gives youth from the Greater Toronto and Hamilton Area comprehensive training on designing a sustainable project, mobilizing youth, and encouraging community development.

PortsToronto is working to build cleaner, healthier communities and help Canada transition to a low-carbon energy grid. By bullfrogpowering their operations and modelling sustainable business practices, PortsToronto is leading the way to a renewably powered future. Supporting green energy — and communicating the importance of sustainability — is essential if we are to achieve our climate goals.

Congratulations to PortsToronto on another year of sustainability milestones and their continued support of renewable energy.

**Suha Jethalal**  
President, Bullfrog Power

## INVESTING IN RENEWABLE ALTERNATIVES

From investing in the conversion of the Billy Bishop Airport *Marilyn Bell I* ferry to electric power, to replacing the Port of Toronto security vehicle with a compact, battery-powered electric vehicle to enforcing a strict anti-idling policy for vehicles on all of its properties, PortsToronto is working to reduce the emissions from its vehicle fleet and maintenance equipment.

## CANADA'S FIRST TRULY ZERO-EMISSION, LITHIUM-ION FERRY

In December 2021, PortsToronto celebrated the return to service of the *Marilyn Bell I* ferry following its conversion to 100 per cent lithium-ion power. The *Marilyn Bell I*, which connects passengers, vehicles and supplies to Billy Bishop Airport, is the first ferry service in Canada powered by a zero-emission power and propulsion system containing no diesel components.

In operation since 2010, and upgraded to bio-diesel fuel in 2018, the vessel's diesel generator and motor were removed in 2021 to make way for a new electric propulsion system and a suite of batteries fueled by 100 per cent Bullfrog Power renewable electricity.

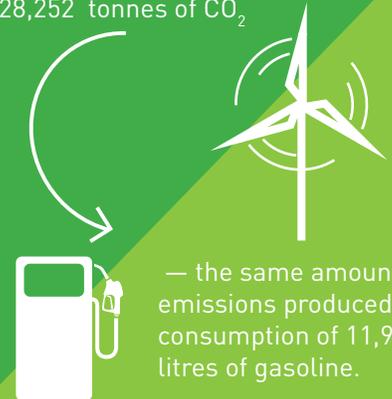
Powered entirely by electricity from clean wind and solar sources provided by Bullfrog Power, the retrofitted *Marilyn Bell I* will eliminate greenhouse gas emissions from the ferry operation, reducing the airport's direct emissions by approximately 530 tonnes per year. In addition to operating more efficiently and eliminating related air emissions, the retrofitted vessel builds on the airport's award-winning Noise Management Program, as it operates far more quietly, dramatically reducing related noise in the surrounding community.

The airport's ferry operation not only transports passengers, airport staff and essential supplies to and from Billy Bishop Airport – including emergency vehicles supporting Ornge's medevac operations – but also serves as a vital link for City of Toronto service vehicles to gain access to the Toronto Islands. In 2021, the airport's ferry service enabled Toronto Island residents to access supplies during the pandemic, and students to attend school when ice cover on the harbour restricted regular access.

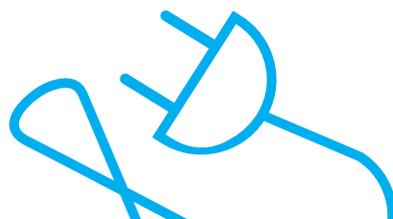


Billy Bishop Airport has replaced gas-powered equipment for grass and vegetation control with battery-operated technology in an effort to reduce the emissions from its fleet of maintenance equipment.

Since joining the bullfrogpowered community, PortsToronto has displaced more than 28,252 tonnes of CO<sub>2</sub>



– the same amount of CO<sub>2</sub> emissions produced by the consumption of 11,977,885 litres of gasoline.



# I – Climate Action

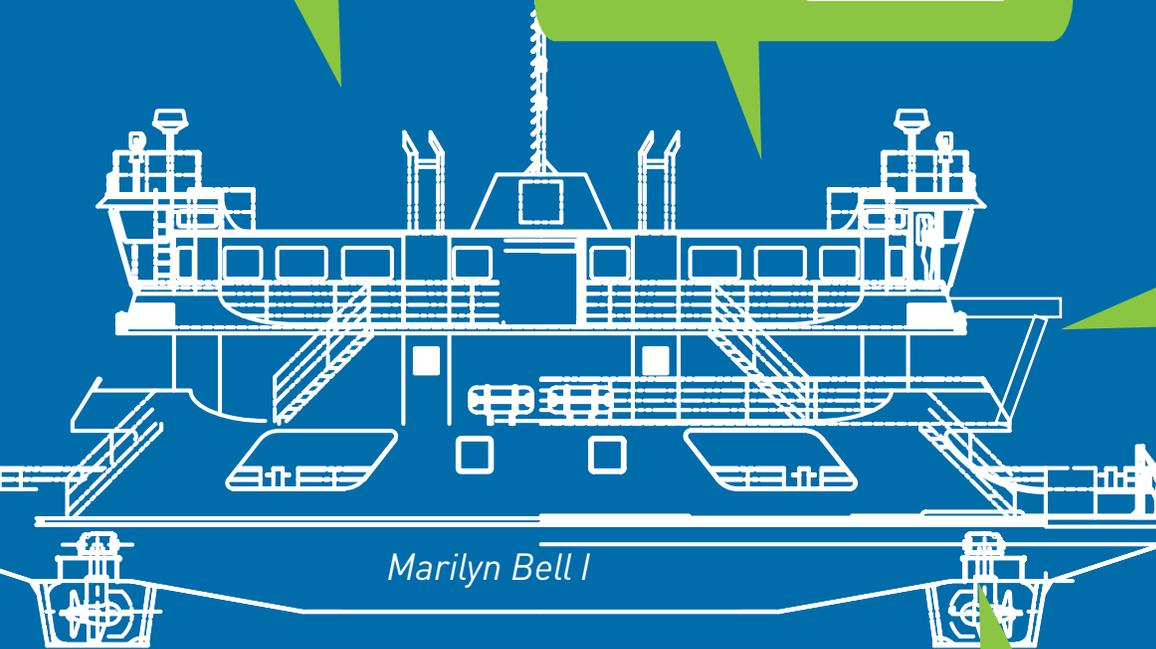
The *Marilyn Bell I* returned to service at Billy Bishop Airport on December 15, 2021, following a 20-week retrofit.



The ferry's diesel components were entirely removed from the vessel to make space for a new electric propulsion system that includes 40 battery modules – each is the size of a shoebox and weighs 60 kilograms.



Converting the ferry to electric power will eliminate the consumption of approximately 177,000 litres of diesel fuel per year.



*Marilyn Bell I*

A charging tower constructed at the mainland ferry terminal is equipped with a charging arm, like those you see on streetcars, which will land on the vessel's new bowsprit – essentially plugging-in the vessel to charge every time it is docked.

Powered entirely by electricity from clean wind and solar sources provided by Bullfrog Power, the retrofitted *Marilyn Bell I* will eliminate greenhouse gas emissions from the ferry operation, reducing the airport's direct emissions by approximately 530 tonnes per year.



The energy storage system for the ferry provides a total of 226-kilowatt hours. The power that these lithium-ion batteries will produce is comparable to the power of four Tesla Model 3 cars with standard-range battery.



# I – Climate Action

*"I would like to congratulate PortsToronto, owners and operators of Billy Bishop Toronto City Airport, on this Canadian-first achievement in providing clean and green transportation that will reduce pollution and bring us all closer to our climate change targets. The conversion of the Marilyn Bell ferry to 100 per cent electric power is an example of the effort and innovation that can be realized to reduce the impact of transportation infrastructure on the environment, and the leadership position that is necessary to make a difference in protecting the environment and promoting sustainable operations."*

– Hon. Minister Alghabra, federal Minister of Transportation

*"I am thrilled to see the progression and excitement on the new electric ferry at Billy Bishop Airport, and the attention brought forward to environmental impacts occurring and different methods of living to bring restoration of change to the ways of living in the spaces we share. It is a key element to incorporate the thoughts and reflections of our actions always within the sense of communal accumulative causal impacts. When we see the accommodations criteria not only benefit human but also the life sources in the ecosystems, the overall benefits have succeeded in our actions and pursuit to change the ways in which we see sustainable living and being."*

– Former Councillor Cathie Jamieson, Mississaugas of the Credit First Nation



*"I was thrilled to have been a part of the launch of Marilyn Bell I as Canada's first all-electric and zero-emission ferry service. This is smart climate action at its best, reducing the airport's emissions by 530 tonnes per year – the equivalent of permanently removing 115 cars – with a made-in-Canada solution that supported local jobs and technology. This innovation improves livability for our local community and advances our vision for a more sustainable future. I look forward to continuing the work with all partners for a cleaner, greener, and better airport."*

– M.P. Kevin Vuong, Spadina-Fort York

*"Toronto's waterfront has long been a driving force for environmental action, innovation, and leadership. The introduction of the first zero-emissions ferry in Canada to be powered entirely by electricity from wind and solar sources, is an example of this essential work. Congratulations to PortsToronto on this important achievement."*

– Councillor Joe Cressy, Ward 10, Spadina-Fort York

*"We want Toronto and all our great partners to continue to lead the way when it comes to addressing the impacts of climate change. The new zero emission electric ferry at Billy Bishop airport is a great initiative and a first of its kind in Canada. I want to thank PortsToronto for making this possible and look forward to seeing the new Marilyn Bell on our waterfront."*

– John Tory, Mayor, City of Toronto

*"The conversion of the Marilyn Bell ferry to fully electric power is an important milestone for Billy Bishop Airport. This made-in-Canada retrofit will help ensure this critical transportation link between downtown Toronto and the island is clean, efficient, and reliable for years to come."*

– Hon. Caroline Mulroney, Ontario Minister of Transportation

## SUSTAINABLE SITE DESIGN

PortsToronto and its contractors follow best practices related to sustainability and environmental protection during the planning, development and operational phases of all projects.



## A CANADIAN PROJECT

In compliance with PortsToronto’s sustainable procurement practices, three Canadian companies that share PortsToronto’s vision for sustainable operations were selected for the conversion of the *Marilyn Bell I* ferry to electric power. As developers of the winning concept and proposal, St. Catharines-based leaders in marine electrical engineering Canal Marine & Industrial Inc. (CANAL) were the prime designers for this project. The project’s naval architect was Concept Naval, Quebec-based naval architects and marine engineers recognized for their innovative and customized solutions in Canada’s shipbuilding industry. PortsToronto also engaged Nova Scotia-based E.Y.E marine consultants to assist with the implementation of the project.



# I – Climate Action



Billy Bishop Airport celebrates Women in Aviation Week in March 2021.



I grew up flying and love aviation. What I love most about my job is working silently in the background to keep people safe so they can experience the joy of flying and everything that goes along with it.

**Jenna - Airport Duty Manager**



In October, PortsToronto welcomed Dr. Larissa Vingilis-Jaremko, Founder and President of the Canadian Association for Girls in Science (CAGIS) to interview Project Manager Jelena Ognjanovic and learn more about the *Marilyn Bell I* conversion project. CAGIS is Canada's largest and longest-running STEM club for girls and gender nonconforming youth aged 7-16, and supports interest in Science, Technology, Trades, Engineering, and Mathematics (STEM).



## BECOMING CLIMATE RESILIENT

It is increasingly important to ensure infrastructure and operations are resilient against the impacts of a changing climate. PortsToronto has already begun to integrate climate resiliency into its strategic planning and will continue to assess climate resiliency as part its climate change action plan moving forward.

## CITYSIDE MODERNIZATION PROJECT

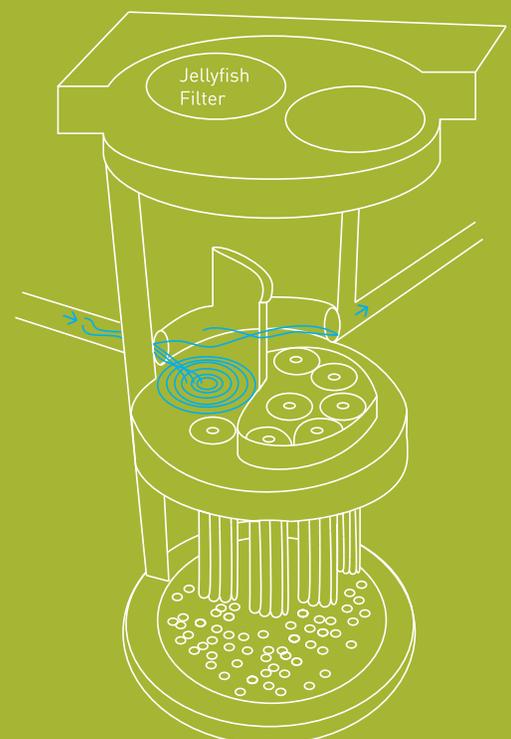
A key element of the Cityside Modernization Project at Billy Bishop Airport included the implementation of climate resiliency measures identified in PortsToronto's 2018 Climate Change Vulnerability Assessment. These included flood prevention and mitigation infrastructure that will help protect facilities in the long term. As part of this project, a pair of jellyfish filters were installed at Billy Bishop Airport. As storm water flows, it collects dirt, dust and oil from the roadway. Jellyfish filters – large, in-ground storm water filters – collect and clean this storm water before it reaches Lake Ontario.

## SUSTAINABLE SEWAGE SOLUTIONS AT THE PORT OF TORONTO

PortsToronto's wastewater treatment facility at the Marine Terminal property manages sewage by means of a Rotating Biological Contactor (RBC). Also known as rotating biological filters, RBCs are fixed-bed reactors consisting of stacks of rotating disks mounted on a horizontal shaft. They are partially submerged and rotated as wastewater flows through. RBCs are used in conventional wastewater treatment plants as secondary treatment after primary sedimentation of domestic grey or blackwater, or any other biodegradable effluent. The microbial community is alternately exposed to the atmosphere and the wastewater, allowing both aeration and assimilation of dissolved organic pollutants and nutrients for their degradation.

Since joining the bullfrogpowered community, PortsToronto has displaced more than 28,252 tonnes of CO<sub>2</sub>. This is the equivalent of taking 6,131 cars off the road for one year or diverting more than 9,606 tonnes of waste from the landfill.

It is the amount of carbon that would be sequestered by about 13,720 hectares of forest in one year.



## SUPPORTING EMISSIONS REDUCTIONS IN OUR COMMUNITY

Our efforts to reduce carbon emissions extend beyond our own operations. PortsToronto supports and encourages our partners, tenants and community members to work with us in creating a sustainable and low-carbon transportation system.

### AVIATION

It is important to recognize that aircraft emissions have an impact on the environment, and while airline operations at Billy Bishop Airport are not controlled or owned by PortsToronto, it is within everyone's best interest to work collaboratively with our partners to contribute to a sustainable future for the aviation industry.

- **Porter Airlines:** In 2021, Porter Airlines introduced lighter aircraft seats as part of a modernization of their fleet. Switching to 50 per cent lighter seats reduced total aircraft weight by approximately 1,000 pounds, and corresponding annual fuel consumption decreased by approximately 500,000 litres. This is equivalent to decreasing corresponding CO<sub>2</sub> emissions by 1,200 metric tons each year.<sup>1</sup>
- **Air Canada:** In addition to its goal of net-zero GHG emissions throughout global operations by 2050, Air Canada has taken a leadership role as a founding member of the Aviation Climate Taskforce (ACT), which was established in 2021 to accelerate research and advance innovation related to emerging decarbonisation technologies, including through the development of sustainable aviation fuels.<sup>2</sup>
- **Connect Airlines:** PortsToronto is following with interest Connect Airlines' plans to become a zero emission airline as early as 2025<sup>3</sup>, aligning with Billy Bishop Airport's efforts to be cleaner, greener and quieter. It is anticipated this airline will begin service at Billy Bishop Airport in 2022.

## QUEENS QUAY TERMINAL

Queens Quay Terminal, where PortsToronto headquarters is located, uses water from the Inner Harbour for air conditioning in the summer, reducing the building's electrical consumption.



<sup>1</sup> Travel Pulse

<sup>2</sup> Air Canada News Release

<sup>3</sup> Connect Airlines

# I – Climate Action

## HIGHWAY H<sub>2</sub>O

One tonne of freight can travel 240 kilometres on a single litre of fuel by ship, whereas it can travel only 30 kilometres by truck. By operating the port and promoting shipping as a more efficient alternative to delivering goods to Toronto through programs like Highway H<sub>2</sub>O, PortsToronto is working to minimize the road traffic and related emissions that result from transporting goods by truck.

In 2021, more than 2.2 million tonnes of bulk cargo, such as salt, sugar, cement and steel were delivered through the Port of Toronto. The cargo delivered by ship took approximately 57,000, 40-tonne trucks off Toronto's already congested roads and highways.

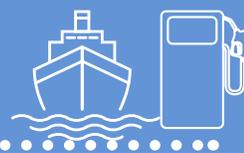
## SUPPLYING SHORE POWER

In the winter months, the Port of Toronto supplies laid-up ships with electric power, reducing emissions associated with vessel generators. In 2021, three vessels – the *MV Spruceglen*, *MV Algoma Discovery* and *NACC Capri* – overwintered at the Port of Toronto while the St. Lawrence – Great Lakes Seaway system closed for the winter months.

One tonne of freight can travel

**240 kilometre**

on a single litre of fuel by ship...



**30 kilometre**

whereas it can travel only 30 kilometres by truck.



# I – Climate Action

## A WALKABLE, BIKEABLE AIRPORT

One of the most walkable, bikeable airports in North America, Billy Bishop Airport is known throughout the travelling community for its unbeatable convenience. In fact, 41 per cent of passengers departing Billy Bishop Airport choose to walk, bike, take public transit or the complimentary shuttle to Union Station – effectively reducing the number of carbon-emitting vehicles in the airport’s vicinity.

The airport’s proximity to downtown in conjunction with the state-of-the-art pedestrian tunnel, enhanced shuttle service, interconnectivity with regional transit, and bicycle rental and maintenance stations have made Billy Bishop Airport the travel hub of choice for business and leisure travellers alike looking to make a conscientious choice to reduce their travel emissions.

Billy Bishop Airport encourages passengers to use green transportation to get to and from the airport. In fact, 41 per cent of travellers walk, bike or take transit from Billy Bishop Airport – one of the highest percentages in North America.



As part of continued efforts to reduce vehicle traffic associated with the airport by encouraging greener methods of transportation, PortsToronto has incorporated bike racks that are conveniently located on both the island and mainland, as well as a bicycle maintenance station for cyclist use.

The Bike Share Toronto station located at Bathurst Street and Queens Quay, at the airport entrance, is another favourite among passengers and staff.



15 min.

Billy Bishop Airport has a complimentary shuttle —departing every 15 minutes to Union Station.

YTZ

less than 3 km

Billy Bishop Airport is located less than 3 kilometers from downtown Toronto.



1.5 km

TORONTO

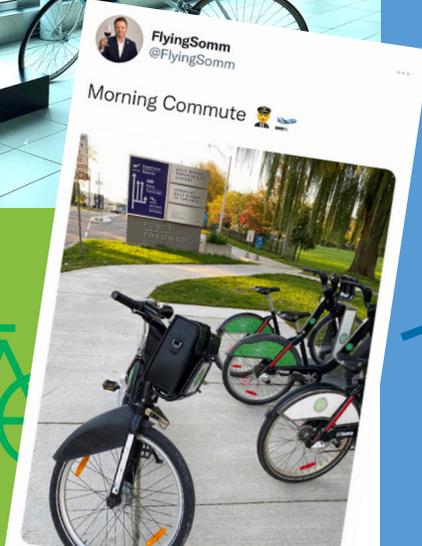
less than 3 km



UNION STATION

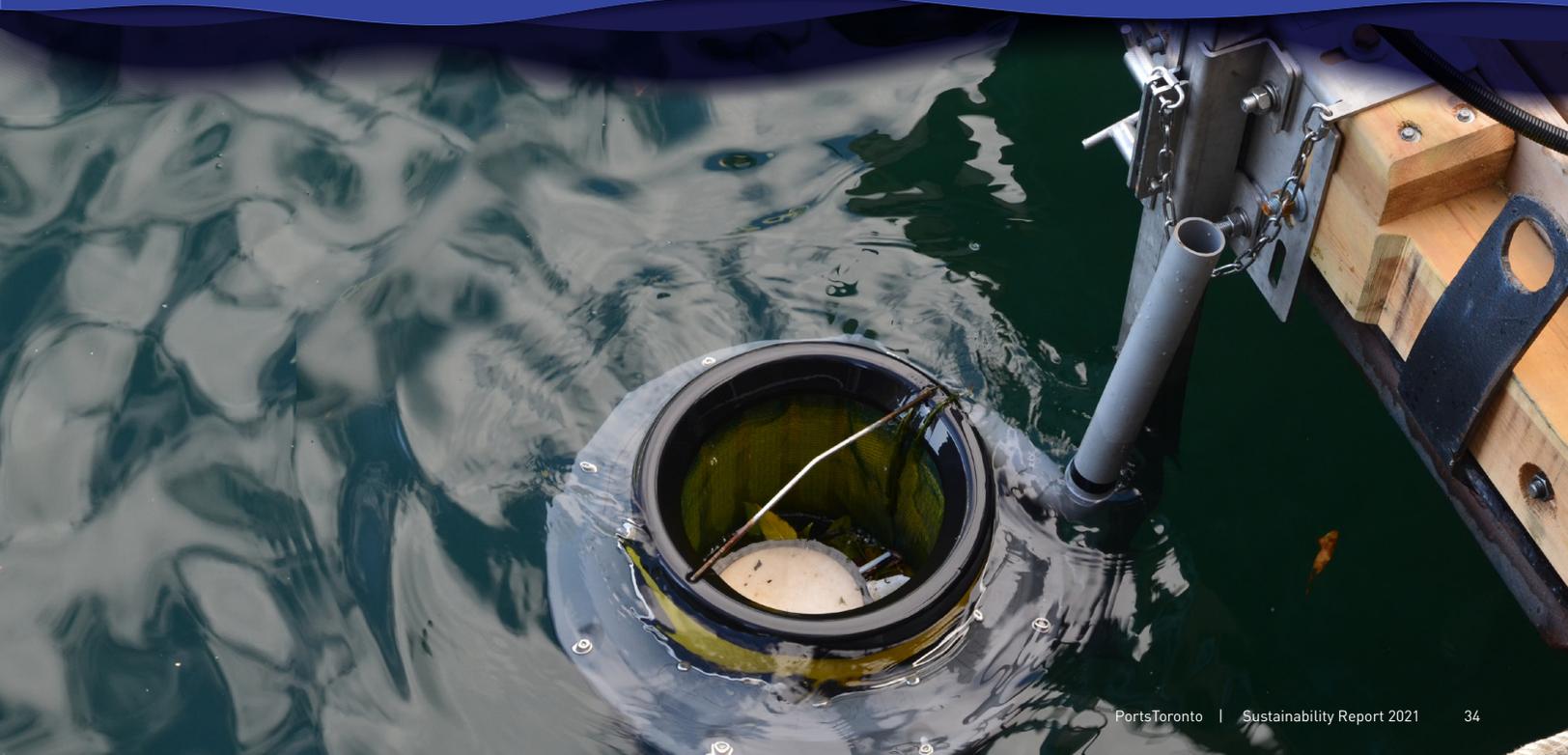
12 min.

TTC departing every 7 minutes to Union Station.\*





## II – Environmental Stewardship



# II – Environmental Stewardship



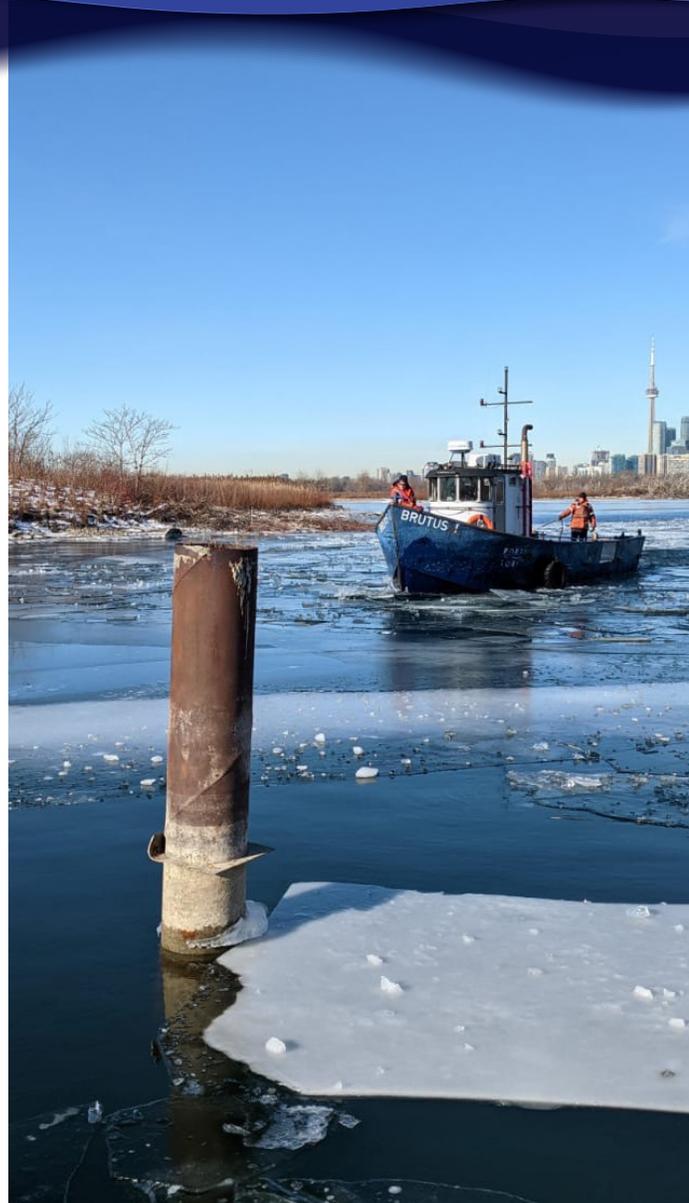
At the core of PortsToronto's operations is a commitment to protect and restore natural habitat, promote wildlife protection and biodiversity, and encourage the safe, sustainable enjoyment of Toronto's waterfront.

As the owners and operators of key transportation hubs located on Toronto's shores, PortsToronto appreciates that a sustainability plan inclusive of environmental protection and green business operations is important to its long-term future as a business and the role the organization plays in making connections between Toronto and the world.

## AQUATIC HABITAT TORONTO

Striving to create a more sustainable waterfront through an ecosystem approach, the Toronto Waterfront Aquatic Habitat Toronto strategy seeks to increase ecological integrity, provide suitable conditions for the maintenance of self-sustaining aquatic communities and improve ecological connectivity. Conservation design in the strategy is based on native naturalized species. Human usage of the shoreline and nearshore waters was taken into account during development of the design, and the strategy for it was based on a consultative, consensus-based approach involving stakeholders and the public.

Team partners include Fisheries and Oceans Canada, the Ontario Ministry of Natural Resources and Forestry, Toronto and Region Conservation Authority (TRCA), and Waterfront Toronto, with key participants from Environment Canada and in consultation with the City of Toronto.



# II – Environmental Stewardship



## PORTSTORONTO SEABIN PROGRAM

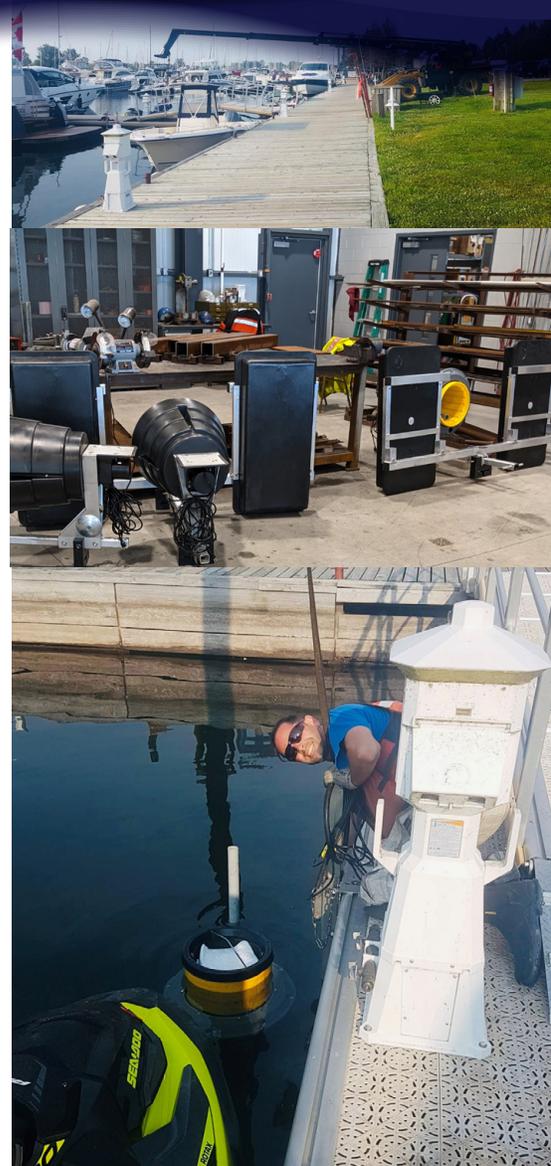
In an effort to combat and study single-use plastics and microplastics in waterways, PortsToronto launched its award-winning Seabin Program in 2019 at the Outer Harbour Marina and at Pier 6 on Toronto's waterfront. Project partners, the University of Toronto Trash Team (Trash Team), count and characterize the materials captured by PortsToronto Seabins in order to further understand the origination of floating plastic and litter in the Toronto Harbour, and to inform technological and behavioural solutions to prevent these materials from entering Lake Ontario in the first place.

### PHASE THREE

The PortsToronto Seabin Program's Phase Three, which commenced in 2021, saw the deployment of four additional Seabins in Toronto's Harbour, in addition to PortsToronto's four existing Seabins located at the Outer Harbour Marina. In 2022, we expect the network to grow to include 14 seabins.

In summer 2021, PortsToronto was engaged to install two Seabins on the Toronto Islands at the Ward and Centre Island Ferry Docks on behalf of TRCA and the City of Toronto. This installation was an important step in TRCA's Toronto Inner Harbour Floatables Strategy, which seeks to work toward a thriving marine ecosystem and harbour with abundant recreational opportunities, free of floating debris.

Further, thanks to a new partnership with the Waterfront Business Improvement Area (Waterfront BIA), the program will be expanded along Toronto's waterfront with the deployment of six new Seabins, expected to be operational in 2022. These will be installed in areas of concern for floating litter identified during a Visual Audit undertaken by Trash Team researchers in 2020, and will be operated in partnership with community partners including Harbour Tours Inc., Toronto Police Services Marine Unit, Nieuport Aviation and Harbourfront Centre.



*"The Seabin Program is a continuation of PortsToronto's commitment to environmental protection, and indicative of our organization's readiness to innovate, employ technology and support critical research to help move the needle toward cleaner water here in the Toronto Harbour and throughout the Great Lakes. By sharing our experience using trash-trapping technology, and supporting and communicating the research resulting from our program partnership with the U of T Trash Team, we hope to help shape a better, cleaner future for wildlife and the people that live, work and play along Toronto's shores."*

– Geoffrey Wilson, CEO of PortsToronto.



# II – Environmental Stewardship

## RESEARCH RESULTS

PortsToronto and the U of T Trash Team report that the PortsToronto Seabin Program diverted tens of thousands of small pieces of plastic pollution from Lake Ontario over the course of a seven-week field season in 2021.

Individual Seabins removed an estimated 209 pieces of small plastic per day, with the entire network capable of diverting 33-kilograms (72-lbs) of litter throughout an entire season – the weight of approximately 3,400 plastic water bottles, which includes more than 230,000 pieces of small plastic.

Research by the U of T Trash Team confirms the important role trash-trapping technology, like Seabins, can play in capturing floating plastics and microplastics and removing these items/particles from the water. In addition to increasing waste literacy among the public, the U of T Trash Team’s work to characterize and quantify litter diverted by Seabins can serve to inform policies that mitigate plastic pollution and protect the wildlife and people of the Great Lakes. For example:

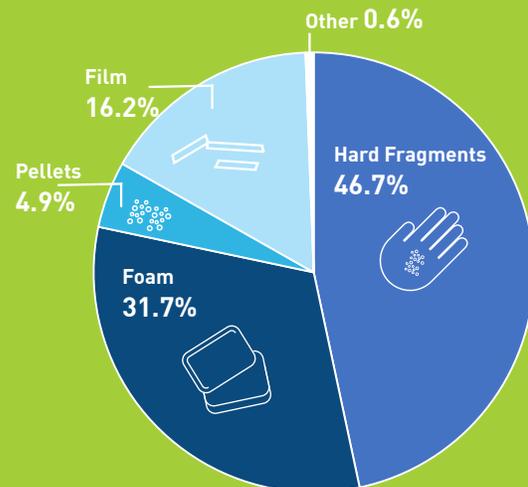
- The top small items captured by Seabins were small hard fragments, plastic foam (including insulation foam from construction) and pre-industrial plastic pellets. Pollution mitigation measures could include preventing foam leakage from construction sites and regulations calling for zero pellet loss from plastic industries.
- The top large items captured by Seabins included single-use plastics like bottle caps, food packaging and stir sticks. The Canadian federal government’s ban on single-use plastic items, expected to be introduced in late 2022, will help address this problem.



### TOP 10 LARGE ITEMS COLLECTED FROM THE SEABINS IN 2021



### 2021 SEABIN RESULTS - SMALL ITEMS COLLECTED



# II – Environmental Stewardship



## ENGINEERING DESIGN STUDY

In addition to Seabins, PortsToronto is exploring the use of other complementary trash-trapping technology, including a capstone engineering design study in partnership with the University of Toronto with the aim of creating a trash-capturing device built specifically with Toronto’s unique waterways in mind. As with the Seabins owned and operated by PortsToronto, any trash-trapping technology installed as part of our program will be part of the Trash Team and Ocean Conservancy’s global research network.

*“This partnership and project does more than just trap trash. Together, we increase waste literacy in the community, inform research-based solutions, and mitigate plastic pollution. The data collected by our students from PortsToronto’s Seabins also informs upstream solutions-based research projects aimed at increasing our understanding of litter from construction foam and industrial pellets to guide effective policy. We can’t wait for next year to increase the network and learn more about the issue of plastic pollution on our waterfront.”*

– Chelsea Rochman, Assistant Professor at University of Toronto and co-founder of the U of T Trash Team.



*Mike David, PortsToronto Project Manager leading the Seabin Program, invited University of Toronto engineering students on a site visit to view Seabins as they explore how site-specific trash trapping devices could be implemented in the Toronto Harbour to further combat floating litter.*

*On March 24 and 25, members of the PortsToronto team joined the University of Toronto Trash Team and Ocean Conservancy to host an online workshop on trash trapping solutions and devices to capture floating litter and clean waterways. The PortsToronto Seabin Program featured prominently in several panels with Sustainability Committee members Jessica Pellerin, Chris Sawicki and Michael David participating as panellists. The workshops were presented to a capacity audience of 250 people from around the world.*



# II – Environmental Stewardship



## INTERNATIONAL TRASH TRAP NETWORK

The PortsToronto Seabin Program is part of the International Trash Trap Network, a global research network coordinated by the Trash Team and Ocean Conservancy that seeks to inspire groups around the world to trap trash on their waterfronts, and to quantify this impact collectively through research and data-collection as part of the International Coastal Cleanup.

## FOSTERING NATIVE TREES AND SHRUBS

In 2021, 600 native plants, including 15 coniferous trees, 85 deciduous trees and 500 shrubs, were planted at the Outer Harbour Marina as part of a broader effort to ensure Toronto's waterfront assets provide a wildlife refuge and recreational opportunities for generations to come. Trees and shrubs are important components of a healthy environment and can filter air and water, absorb carbon dioxide from the atmosphere to slow the rate of climate change, release oxygen, and even control storm water and prevent flooding. Native trees and shrubs in particular, along with the insects that co-evolved with them, play a vital role in urban biodiversity, providing habitat, food and protection for birds and wildlife.

This initiative was coordinated through a partnership between PortsToronto, TRCA and Grand Trees – an organization founded by grandparents concerned about the effect of previous generations' neglect of the environment on their children and grandchildren.



Analyzing data collected during the Tagging Trash Study, Trash Team researchers were able to track one bottle's journey some 300-kilometres through Lake Ontario toward Rochester, New York. Meanwhile, a second bottle escaped Toronto Harbour and spiraled clockwise in Lake Ontario for a few hundred kilometres before landing on a beach in the Ajax Waterfront Conservation area, approximately 35-kilometres from its starting point, illustrating that trash can travel long distances but does not necessarily become stranded far from its source. Learn more about the study's results here.



# II – Environmental Stewardship

## DREDGING AND WETLAND CREATION

Thousands of tonnes of sediment build up every year where the Don River empties into the Keating Channel. This sediment, if not removed, could cause the river to back up and result in flooding. For this reason, maintenance of the river mouth is imperative to prevent siltation and debris from spilling into the harbour.

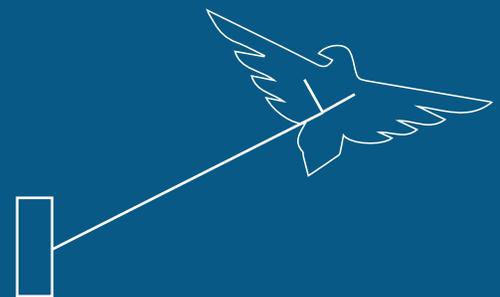
Each year, approximately 30,000 cubic metres of sediment material is removed from the mouth of the river through PortsToronto's dredging process. Dredging removes sediment in order to achieve a navigable river depth and allow the smooth flow of water and ice through the Keating Channel. Once removed, the natural sediment is transported to the Leslie Street Spit for containment in a Confined Disposal Facility (CDF). These cells were designed by PortsToronto to properly contain the natural materials dredged from the channel and other parts of the harbour.

While helping to prevent flooding and the potential for debris to enter the harbour, over time, this process also provides new habitat for marsh birds including nesting Common Terns, turtles and small mammals at the Leslie Street Spit, as well as helping to increase fish populations, notably facilitating the return of pike and Muskie to the harbour.

## WILDLIFE PROTECTION

PortsToronto is committed to doing what it can to make the Toronto Harbour clean, safe and enjoyable for wildlife and humans alike. We also employ dedicated wildlife officers and work with Falcon Environmental Services — a recognized leader in the field of wildlife management — at both Billy Bishop Airport and the Port of Toronto.

To ensure the safety of passengers — and in accordance with Transport Canada requirements and Canadian Aviation Regulations — Billy Bishop Airport, like all major airports across North America, runs a comprehensive Wildlife Management Program dedicated to keeping birds out of aircraft flight paths and ensuring runways are free of birds and other wildlife.



As part of the airport's program, dedicated wildlife officers deter birds and other wildlife by using natural deterrence methods, such as monitoring movements and behaviour, maintaining proper grass levels and landscaping, using falcon kites and installing physical barriers.



## DUCKLING DOCKS IN THE TORONTO HARBOUR

In response to reports about a lack of resting places for ducklings along the waterfront in spring 2021, PortsToronto, in consultation with the Toronto Wildlife Centre, designed a duckling dock that would provide an accessible floating rest area for young ducklings still growing their waterproof down. PortsToronto installed four duckling docks at water level at Portland, York, Yonge and Jarvis slips.



The duckling docks are wooden platforms, 12-inches wide and six-feet long, attached to an existing floating dock or dock wall. Each dock is equipped with a beveled edge to make it easier for ducklings to climb aboard.

*“Toronto Wildlife Centre is thrilled that PortsToronto would react to this situation as quickly and as professionally as they have, and we expect many other waterfowl will also benefit from these floating docks. This is a relatively simple solution to a large problem.”*

*– Andrew Wright, Rescue and Release Manager at Toronto Wildlife Centre*

The Outer Harbour Marina is not only a home to boaters, but is also part of an important native plant feeding ground for butterflies and damselflies.



# II – Environmental Stewardship



## WASTE MANAGEMENT

Improving waste diversion throughout PortsToronto operations is a priority within the organization's sustainability program. From collecting and recycling all used electronics to banning plastic water bottles in our offices, PortsToronto is committed to working with its partners and tenants to do its part to recover, reuse and recycle materials.

## BILLY BISHOP AIRPORT

PortsToronto works with Billy Bishop Airport passenger terminal owner and operator, Nieuport Aviation Infrastructure Partners, to encourage the use of sustainable materials in the lounge food and beverage service. The water refilling stations in the passenger lounges prevent thousands of plastic water bottles from being sent to landfill each year. Further, in partnership with service provider SSP Canada, the airport lounge restaurants have diverted thousands of pounds of waste from the landfill by replacing biodegradable single-use cutlery and plates with reusable silverware and charcuterie boards.

## HARBOUR HOTLINE

As part of its commitment to keeping the harbour clean, PortsToronto manages a 24/7 Harbour Hotline (416-462-3937) and responds immediately to reports of pollution, spills and debris in the harbour. Through the program, PortsToronto removes approximately 150 million pounds (more than 68,000 tonnes) of dredgeate, debris and driftwood from the harbour each year.

In 2021, PortsToronto crews responded to 31 calls reporting debris and spills to the Harbour Hotline.

Through its employee-led Sustainability Committee, PortsToronto has provided all employees with a reusable water bottle and has banned single-use plastic straws and water bottles from all offices.



The PortsToronto Harbour Hotline team often collects driftwood, which can pose a navigational hazard in the harbour. Instead of wasting this material, the driftwood collected by PortsToronto is delivered to a facility where it is carefully separated, inspected and repurposed into raw material for the manufacturing of animal bedding and mulch, among other things.



# II – Environmental Stewardship



## URBAN LITTER CHALLENGE

In September 2021, PortsToronto volunteers and members of the Sustainability Committee were proud to support the University of Toronto Trash Team's third annual Urban Litter Challenge. Part of the Great Canadian Shoreline Cleanup, the Urban Litter Challenge asks teams of volunteers to collect litter in neighbourhood parks and encourages reflection on the interconnectivity of our watershed, in which storm drains connect with larger waterways and render inland litter a danger to Lake Ontario. This year, more than 16,000 pieces of litter – weighing more than 166 kilograms – were removed from 10 Toronto parks through this initiative.

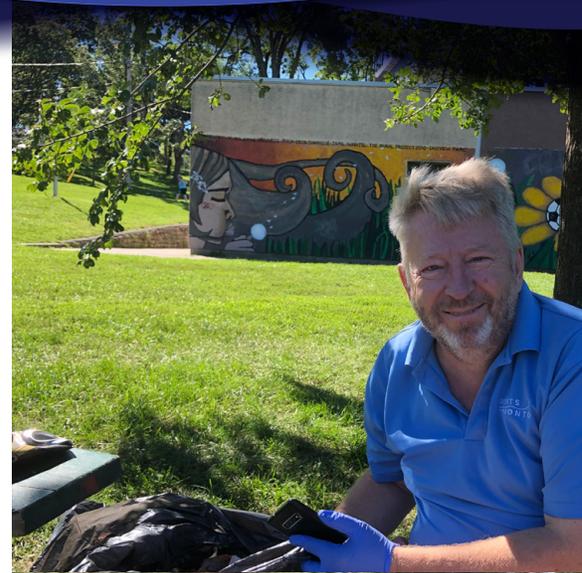
## ENVIRONMENTAL MANAGEMENT SYSTEMS

As a steward of the waterfront for more than a century, PortsToronto has a legacy of environmental responsibility. This is achieved, in part, by maintaining and utilizing management practices and standard operating procedures for each function PortsToronto undertakes.

The products necessary for the safe operation and maintenance of PortsToronto's equipment and facilities are managed and contained in a rigorous manner to ensure safety and the protection of the environment. Strict protocols are in place for daily operations, such as aircraft fueling and de-icing, to reduce the risk of spills. In the unlikely event of a spill, PortsToronto's Works and Environmental Services Department and the airport's fire and maintenance departments are thoroughly trained in mitigation and cleanup methods to prevent contaminants from entering the natural environment.

## HAZARDOUS WASTE RECYCLING

PortsToronto is committed to ensuring that hazardous waste is properly contained and recycled. This includes hazardous oil-based paint such as primers, stains, thinners, aerosols and electronic waste such as monitors, printers, charging cords, speakers, radios, headsets and outdated fluorescent bulbs.



# II – Environmental Stewardship

## ENVIRONMENTAL LAWS

In 2021, there were no orders issued and no fines levied against PortsToronto by any regulatory agency. Furthermore, there have been no incidents of significant environmental non-compliance and no fines levied against PortsToronto over the past 11 years. This is a result of PortsToronto's efforts to follow best practices from around the world to achieve our sustainability goals and prevent pollution at Billy Bishop Airport, the Outer Harbour Marina and our owned operations at the Port of Toronto.

## DE-ICING AND GLYCOL CONTAINMENT AT BILLY BISHOP AIRPORT

PortsToronto is committed to protecting the water environment and preserving the natural habitat for all users of the waterfront. A key aspect of this is the collection and containment of glycol used in the de-icing of aircraft. PortsToronto manages aircraft de-icing and anti-icing fluids with a dedicated glycol management system that traps system runoff and thoroughly contains glycol from de-icing and anti-icing operations. In addition, the glycol pumping system features a duplex pump, which offers further protection against runoff.

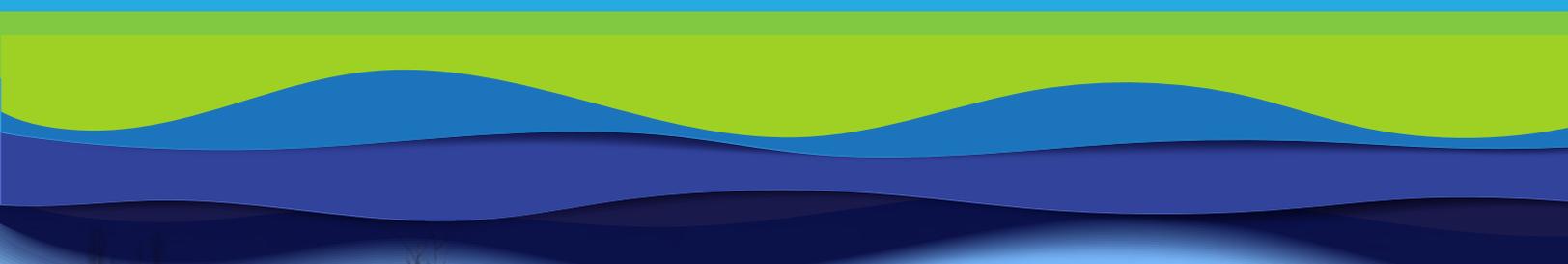
## PFAS-FREE FIREFIGHTING FOAM

Per- and Polyfluoroalkyl Substances (PFAS) are a group of thousands of manufactured chemical compounds that have been widely in use since the 1940s in materials ranging from everyday items like stain resistant fabric, water repellent clothing, food wrappers and non-stick cookware, to Aqueous Film Forming Foam – a material mandated for use in Airport Rescue and Firefighting efforts for years. In August 2019, Billy Bishop Airport received approval from Transport Canada and became the first airport in Canada to use PFAS/AFFF-free foam for its firefighting efforts.





### III – Sustainable Communities



# III – Sustainable Communities

## SUSTAINABLE COMMUNITIES.

PortsToronto plays an important role in the sustainable future of Toronto. Its mission – which is to manage Billy Bishop Airport, the Port of Toronto, the Outer Harbour Marina and its real estate properties on a self-sustaining basis – enables PortsToronto to support environmental health, community programming, marine safety and sustainable infrastructure for its city.

Whether conducting meetings with community residents and airport stakeholders designed to ensure Billy Bishop Airport is responsive to the needs of its neighbours, or investing more than \$12 million since 2009 in charitable initiatives and environmental programs that benefit communities along Toronto’s waterfront and beyond, PortsToronto is committed to fostering resilient, safe and sustainable communities.

## PROMOTING HEALTHIER, GREENER AND EMPOWERED COMMUNITIES

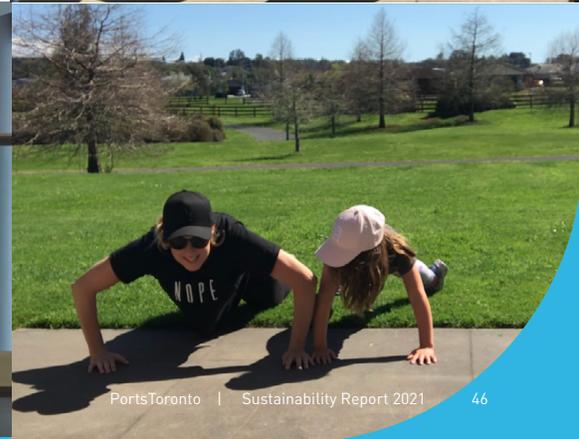
As part of its dedication to being a sustainable organization, PortsToronto is committed to its local community. With a long tradition of working with community members and organizations to foster strong and sustainable communities along Toronto’s waterfront, PortsToronto provides donations, sponsorships and in-kind contributions to local initiatives, events and causes each year. These initiatives share a common goal of promoting healthier, greener and empowered communities.

In 2021, PortsToronto funded community initiatives and organizations including:

- Hope Air (medical travel assistance)
- Evergreen School Ground Greening Program
- ALS Canada
- CP24 CHUM Christmas Wish

## COMMUNITY INVESTMENT MISSION

To create a legacy of giving based on our commitment to fostering strong, healthy and sustainable communities along Toronto’s waterfront. Our giving is focused on the waterfront, education and youth in ways that support strong communities and a healthier environment.



# III – Sustainable Communities

## ALS CANADA VIRTUAL PLANE PULL

The Plane Pull to End ALS is ALS Canada’s signature annual fundraising initiative and brings people together to raise funds for ALS research and advocacy. In past years, the Plane Pull has taken place at Billy Bishop Airport’s Ground Run-up Enclosure on the south end of the airfield, an area not typically accessible to the public that offers unmatched views of Toronto’s skyline as a backdrop for the pulls.

In 2021, Billy Bishop Airport was proud to continue to support the event by participating in the virtual three-week skills challenge and contributing to the online “Duty Free” silent auction. This year, participants and organizations raised more than \$79,000 to support ALS research and advocacy.

## EVERGREEN SCHOOL GROUND GREENING PROJECT

In 2021, PortsToronto supported the Evergreen school ground greening project at Lord Dufferin Public School. Through this program, Toronto’s downtown school grounds are transformed into dynamic, outdoor classrooms where kids can re-connect with and learn about nature and, most importantly, play in the great outdoors.



## HOPE AIR

Beautiful views from a Hope Air flight between Billy Bishop Airport and Ottawa International Airport after a patient’s medical appointment at Sick Kids Hospital. PortsToronto is proud to support Hope Air, a unique national charity that provides Canadians in financial need with free travel and accommodations for medical care far from home.



# III – Sustainable Communities

## TORONTO ISLANDS COMMUNITY

Many households in the Toronto Islands community, including more than 100 residents over the age of 65, needed groceries and/or medications delivered in order to remain safely at home during the pandemic. Throughout the pandemic, PortsToronto did its small part in helping to get food and essential supplies to Toronto Island residents, and ensuring student access to the Toronto Island School, by facilitating crossings aboard the Billy Bishop Airport ferry and providing a safety escort across the airfield.

## LESLIE STREET SPIT FLOATING PEDESTRIAN BRIDGE

In February 2021, the Leslie Street Spit Floating Pedestrian Bridge was transported to the PortsToronto Works and Environmental Services facility in order to complete necessary structural repairs. This structure serves to secure the third Confined Disposal Facility (CDF), and to provide safe pedestrian traffic access to the endikement roadway leading to the east headlands.

Appreciating the importance of finding enjoyment during the pandemic, particularly outdoors, PortsToronto set out to repair this ageing structure to prevent unplanned maintenance and repair work, and to support a safe environment for park users in the warmer months.



**Joe Cressy** @joe\_cressy

Through a partnership with our Parks, Forestry & Rec department and @PortsToronto, a solution was found to keep the Island School open this winter.

Well done, @tdsb. And thanks @PortsToronto and @TorontoPFR for stepping up.

cbc.ca  
TDSB to use airport ferry to help shuttle Islan...

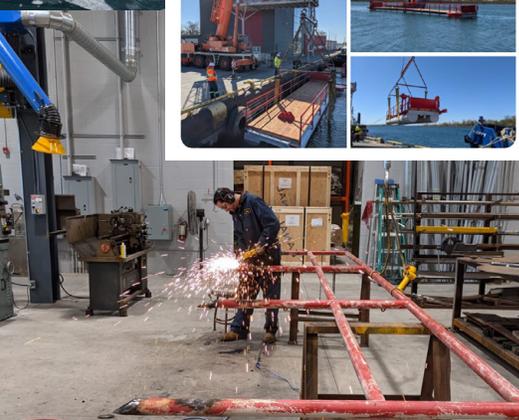


**Paula Fletcher** @PaulaFletcherTO

The Leslie St. Spit Floating Pedestrian Bridge, which has been undergoing necessary repairs, was returned to the water and transported to the Spit this morning. @PortsToronto will complete the rehabilitation project and the bridge should return to operation in coming days.



While the original steel supports and handrails were in good condition and able to be salvaged, the bridge floats and wooden decking were heavily deteriorated and needed to be replaced as part of this rehabilitation project. To ensure its longevity and structural integrity, the entire bridge was re-welded, sandblasted and epoxy coated, and a new wooden decking for the pedestrian crossing, built of Douglas fir, was installed.



# III – Sustainable Communities

## PROTECTING THE TORONTO HARBOUR

For over 100 years, PortsToronto has worked with the waterfront community to keep the Port and Harbour of Toronto clean and free of debris, harmful materials and spills.

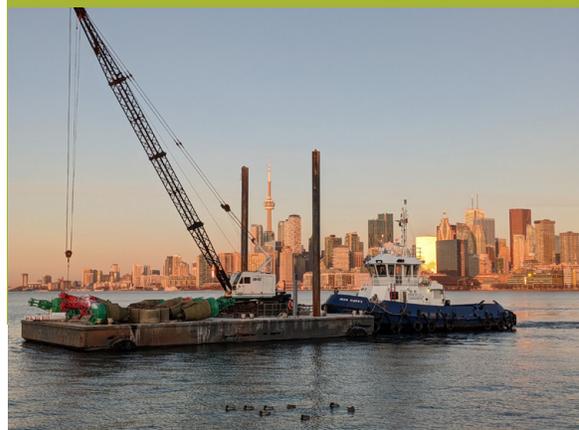
PortsToronto works to keep Toronto's waterways safe and navigable for all to enjoy through:

- Dredging operations, which help prevent flooding and maintain safe navigation depth for boaters;
- The removal of driftwood and debris, and;
- Annual buoy deployment to mark safe swimming and boating zones throughout Toronto's inner and outer harbour.

## POWERED VESSEL OPERATOR'S PERMIT PROGRAM

Through its Powered Vessel Operator's Permit program, PortsToronto educates powered vessel operators on speed limits in effect in the harbour and works closely with the Toronto Police Services Marine Unit to monitor the harbour and promote safe boating. Further, as part of its stewardship of the harbour, PortsToronto provides authorizations for activities that occur in, on, over, under, through or across the waters in its jurisdiction, including marine events, construction, diving and filming.

Every winter the PortsToronto Works and Environmental Services department removes navigational buoys in preparation for winter and ice formation in the harbour. In the spring, buoys are deployed to mark safe swimming and boating zones throughout Toronto's inner and outer harbour.

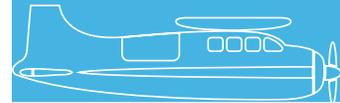


## NOISE MANAGEMENT AT BILLY BISHOP AIRPORT

Billy Bishop Airport is continuously looking at processes and investments that will mitigate the impact of operations and ensure the airport is remaining in balance with the surrounding community. Many of these advancements are pursued within the context of the airport's Noise Management Program that encompasses all areas of operations and any special projects being undertaken.

Billy Bishop Airport's Noise Management Office, which boasts a state-of-the-art Aircraft Flight Tracking and Noise Monitoring System, is responsible for collecting, analyzing and responding to noise complaints and monitoring daily operations. In addition to producing a detailed, annual Noise Report, the Noise Management Office also produces a monthly noise report that is posted to the Billy Bishop Airport website.

Billy Bishop Airport is one of the most noise-restricted airports in North America and must adhere to a strict curfew that closes the airport to commercial flight activity at 11:00 p.m. and ensures that noise from airport operations remains within a limited and monitored Noise Exposure Forecast.



# III – Sustainable Communities

## GROUND NOISE STUDY

PortsToronto is currently completing a noise study to identify sources of ground noise at the airport and, through analytical noise modelling techniques, assess opportunities to reduce the impact of ground-sourced noise on the community. As part of the study, PortsToronto is working in close collaboration with the Noise Management Sub-Committee of the Community Liaison Committee.

## RECOGNITION

Over the years, Billy Bishop Airport has continued to improve its Noise Mitigation Program. These awards recognize years of hard work and dedication to our community relations and environmental strategy, from working together with the community to identify solutions that assist with our noise reduction efforts, to implementing new noise mitigation transportation infrastructure.

- In April 2019, Billy Bishop Airport won the ACI-NA Environmental Achievement Award for Best Innovative Project for the airport's successful implementation of the three-year Airfield Rehabilitation Program. The Airfield Rehabilitation Program at Billy Bishop Airport included the construction of the Ground Run-up Enclosure facility that has all but eliminated noise impacts in the community associated with high-power aircraft engine run-up operations. In addition to the positive environmental results achieved by the program, the project incorporated innovative measures to reduce the impact of construction on the community, such as noise.
- In 2017, Billy Bishop Airport won the Airports Council International (ACI-NA) Environmental Achievement Award for its Noise Mitigation Program.
- In August 2020, the airport won the ACI-NA Environmental Award in the category of Environmental Improvement for its updated Master Plan, which was inclusive of many initiatives to mitigate operational noise, improve air quality and protect the environment.



The Billy Bishop Toronto City Airport won the 2017 Airports Council International (ACI-NA) Environmental Achievement Award for its Noise Mitigation Program.



The Billy Bishop Toronto City Airport won the 2019 Airports Council International (ACI-NA) Environmental Achievement Award for Best Innovative Project for the airport's successful implementation of the three-year Airfield Rehabilitation Program.



The Billy Bishop Toronto City Airport Master Plan won the 2020 Airports Council International (ACI-NA) Environmental Achievement Award.

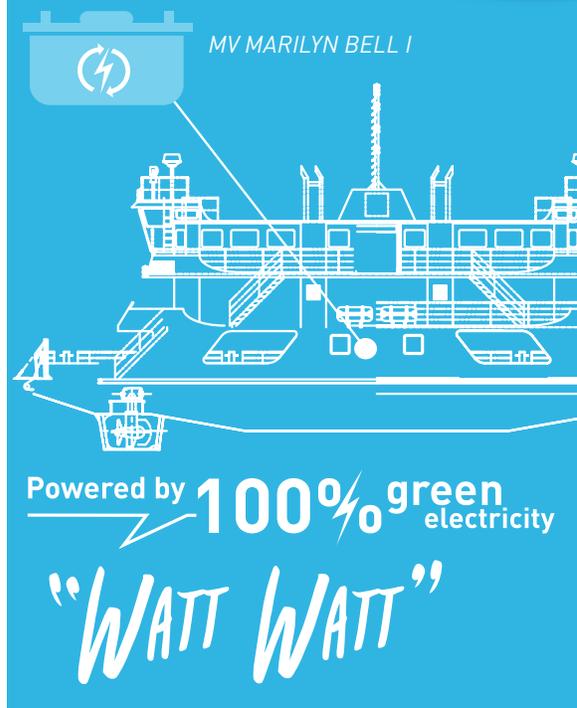
## AIR QUALITY

The communities in close proximity to the airport have been, and continue to be, concerned with the air quality impacts from airport operations. Billy Bishop Airport continuously seeks out new and innovative measures to complement sustainable practices and infrastructure already in place with the aim of mitigating emissions from all of its operations. Most recently, Billy Bishop Airport has converted the *Marilyn Bell I* biodiesel airport ferry to electric-power, which has eliminated greenhouse gas emissions associated with the ferry's operation.

PortsToronto has partnered with the Bathurst Quay Neighbourhood Association, the City of Toronto, Toronto Public Health and the University of Toronto to study the air quality exposure in the Bathurst Quay neighbourhood over. The lead scientist with the University of Toronto, Dr. Marianne Hatzopoulou, is the Canada Research Chair in Transportation and Air Quality and leads the Transportation and Air Quality (TRAQ) research group. The expertise of her research team is in modelling road transport emissions and urban air quality as well as evaluating population exposure to air pollution. The partners have received matched funding through the Natural Sciences and Engineering Research Council of Canada to conduct the study and meet regularly to review technical information and develop communication materials to provide updates at key milestones. The study kicked off in early 2021 with a target to be complete in early 2023.

## AIR SHED

The communities in close proximity to the airport have been, and continue to be, concerned with the air quality impacts from airport operations.. Based on a study commissioned by Toronto Public Health, the report noted that the largest contributor to the local community is from vehicle traffic on the Gardiner Expressway/Lakeshore Boulevard and surrounding highway network. The airport contributed approximately 10-15 per cent of emissions in the air shed, with the primary contributor being the diesel fuel from the airport ferry.<sup>4</sup> In 2021, the conversion of the *Marilyn Bell I* ferry from a bio-diesel engine to an electric-powered motor eliminated greenhouse gas emissions associated with the ferry's operation.



<sup>4</sup> Presentation from Toronto Public Health communicated to the Billy Bishop Airport CLC at meeting #26 held on May 3, 2017.

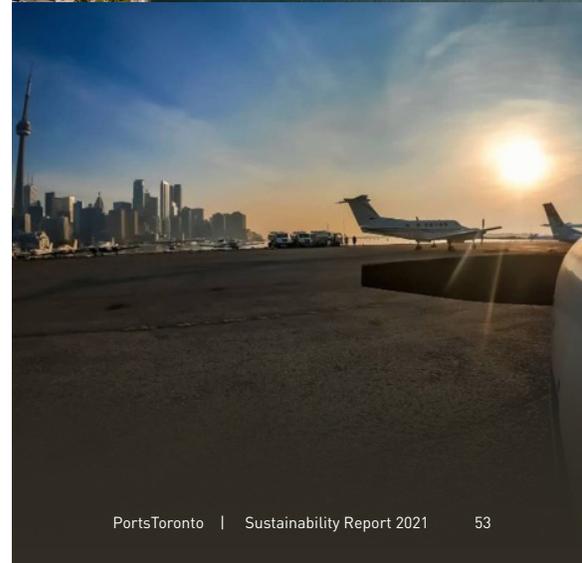
## COMMUNITY ENGAGEMENT

PortsToronto established a Community Liaison Committee (CLC) in 2010 to further expand engagement with the residents and businesses surrounding Billy Bishop Airport. The CLC gives neighbours a forum to discuss issues and concerns related to airport development, activities and operations. The committee also enables airport management to communicate operational activities and information with stakeholders and the broader community.

Key representatives from neighbourhood community groups, local businesses and stakeholders, as well as local city councillors and members of provincial and federal parliaments, make up the membership of the CLC. The committee follows best practices of community engagement, meeting regularly and addressing matters such as airport noise management, air quality and transportation access. The CLC's quarterly meetings are open to the public and minutes taken by third-party consultant Lura Consulting are posted to the PortsToronto website. In 2021, four meetings of the CLC were held through an online platform given the restrictions around gathering specific to the pandemic.

## CLC NOISE MANAGEMENT SUB-COMMITTEE

A Noise Management Sub-Committee of the CLC was formed in late 2017 to further research, understand and address noise impacts from airport operations. The Noise Sub-Committee consists of three community members, two staff members from PortsToronto, one staff member from the City of Toronto and a facilitator from Lura Consulting. The committee has two co-chairs, one from the community and one from PortsToronto. The committee met three times in 2021 through an online meeting platform.



# III – Sustainable Communities

## HEALTH AND WELLNESS

In promoting a supportive work environment and maintaining a strong record of accomplishment in health and safety performance, PortsToronto recognizes that the well-being of its employees is fundamental to the continued success of its businesses.

PortsToronto prioritizes employee health and safety, with several systems in place to minimize workplace hazards, prevent injuries and educate employees on health and wellness, as well as their rights and responsibilities. The well-being of employees is directly related to the success of PortsToronto businesses, and maintaining a strong record of accomplishment of health and safety performance is critical. Safe practices for PortsToronto employees and contractors are embedded into the day-to-day operations of all business units, and health and safety policies are implemented at all levels of the organization.

## SAFE TRAVELS PROGRAM

The Safe Travels Program, a comprehensive initiative developed in response to the COVID-19 pandemic, includes operational measures and safety protocols implemented to ensure a safe and healthy environment for passengers, staff and partners at Billy Bishop Airport.

In August 2021, Billy Bishop Airport achieved accreditation under the Airports Council International (ACI) Airport Health Accreditation program (AHA). The global health certification confirmed that Safe Travels addresses the needs and requirements of travel in today's world and served to reassure passengers and staff that the airport would provide a safe and healthy environment.



## AIRPORT HEALTH ACCREDITATION

ACI's Airport Health Accreditation program assists airports by assessing new health measures and procedures introduced as a result of the COVID-19 pandemic in accordance with ICAO Council Aviation Recovery Task Force recommendations. Areas of assessment for accreditation include cleaning and disinfection, physical distancing (where feasible and practical), staff protection, physical layout, passenger communications and passenger facilities.



# III – Sustainable Communities

## HEALTH AND SAFETY PROGRAM

PortsToronto has developed a comprehensive series of corporate Health and Safety Policies, along with Standard Operating Procedures (SOPs) that provide a thorough guide to compliance with all required regulations. Policies and procedures are made available to every employee through Business Unit management and are reviewed on a regular basis to ensure continuous improvement.

PortsToronto continually tracks all known or foreseeable hazards, associated risks and Corrective Action Plans (CAPs). Employee concerns, near-miss incidents, the number and nature of workplace injuries and total lost days are also monitored.

METRIC	2021
Fines for instances of health and safety non-compliance (value)	0
Injuries resulting in lost time	2
Total Lost Days	27
Injuries resulting in no lost time	5



The Billy Bishop Airport Rescue and Fire Fighting team completes an annual fire inspection, which includes the verification of more than 100 fire extinguishers throughout PortsToronto facilities, including buildings, vehicles and ferries.



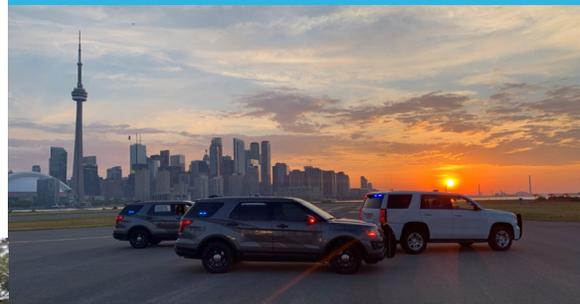
# III – Sustainable Communities

## BILLY BISHOP AIRPORT EMERGENCY EXERCISE

The airport's resident Airport Rescue and Firefighting Service completes regular internal and external emergency services training throughout the year, including a full-scale and tabletop safety simulation or security exercise every year, exceeding the airport's Transport Canada regulatory requirement.

These exercises test the airport's protocols, procedures, communications and planning for emergency and security-related incidents, and ensure that the airport is ready to respond to any situation. They are critical to ensuring that the airport maintains a high level of emergency response preparedness and involve multiple agencies including Toronto Fire, Toronto Police Service (and related Marine Units), Toronto Paramedic Services, NAV CANADA, as well as staff and officials from the various agencies, airport stakeholders and airlines that operate out of Billy Bishop Airport.

A routine, full-scale training exercise was held at Billy Bishop Airport on June 19, 2021. Exercises such as this are critical to ensuring that airport security personnel can assess and respond to threats and incidents, and are essential to ensure that the airport maintains a high level of emergency response preparedness.



In March 2021, the Billy Bishop Toronto City Airport Fire Department held its annual ice and cold-water rescue training at the Toronto Island Park. As ice rescue operations are fairly rare, practice scenarios such as these allow our emergency rescue team to refresh their skills in executing rescues on ice and ensure that they are up-to-date on the latest techniques.







## IV – Economic Growth





For PortsToronto, sustainability not only encompasses environmental and social accountability but also economic growth. Ensuring that its business remains viable enables PortsToronto to invest back into the communities in which it operates and helps to build a sustainable city.

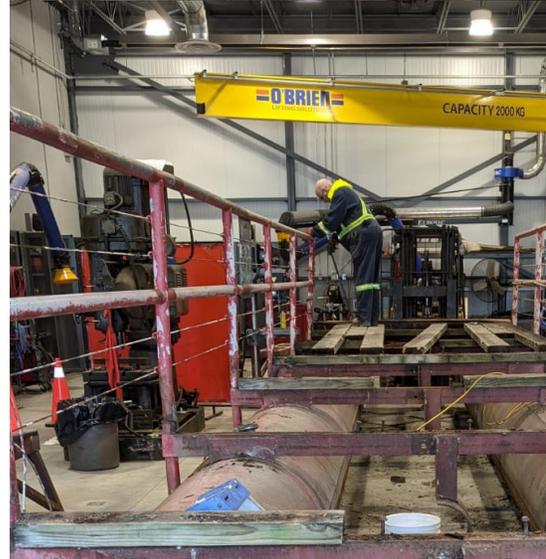
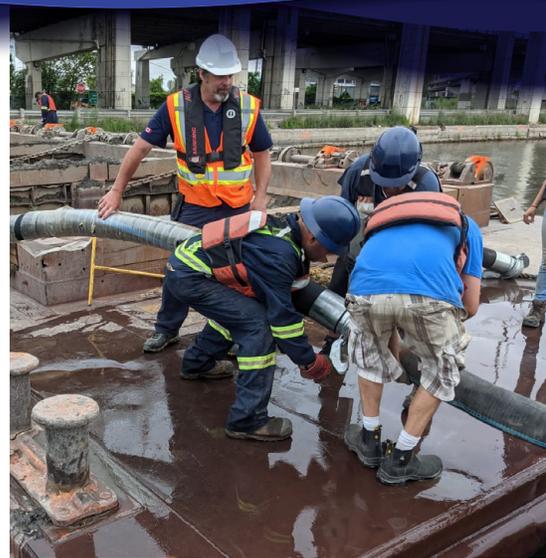
The unique downtown locations of Billy Bishop Toronto City Airport and the Port of Toronto make them key urban transportation hubs for Canadian and international businesses to gain convenient, cost-effective and environmentally sustainable access to the heart of Canada's business capital. By making these connections, PortsToronto is able support the regional economy in which our business thrives by facilitating tourism and trade.

## COLLABORATING WITH GOVERNMENT PARTNERS

PortsToronto is a key federal agency that works with other organizations to manage the harbour, engage in sustainable initiatives and work collaboratively to ensure a vibrant waterfront. As such, its management and staff members are engaged with all levels of government to ensure collaboration and coordination of current operational works and future projects along the waterfront. PortsToronto has regular meetings with the City of Toronto, Transport Canada, Waterfront Toronto and the Mississaugas of the Credit First Nation, and is a member of several Landowner and Stakeholder Advisory Committees for projects including the Bathurst Quay Waterfront Revitalization Plan, Waterfront Transit Reset, the Waterfront School Playground Master Plan, Toronto Island Master Plan and the Port Lands Planning Framework.

PortsToronto staff also provide technical support to several agencies and committees on projects including the Port Lands Flood Protection and Enabling Infrastructure Project, Port Lands Public Realm and River Project, and the Gibraltar Point Erosion Control Project.

PortsToronto is also a key agency supporting the work of Aquatic Habitat Toronto (AHT) since its inception in 2003, which represents a consensus-based partnership among agencies with a vested interest in the improvement of aquatic habitat on the Toronto Waterfront.



# IV – Economic Growth

## INVESTING IN TORONTO'S WATERFRONT

Since the beginning of the 20th century, PortsToronto has made strategic investments in Toronto's waterfront and in developing transportation infrastructure for the city. As the owner and operator of the marine Port of Toronto, the Outer Harbour Marina, Billy Bishop Airport and various real estate and property holdings along the waterfront, PortsToronto reinvested nearly \$5 million in infrastructure in 2021.



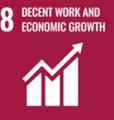
Bathurst Quay Waterfront Revitalization project

## BATHURST QUAY WATERFRONT REVITALIZATION PROJECT

In November 2021, PortsToronto joined the City of Toronto and the Ireland Park Foundation in celebrating the successful completion of the first phase of the Bathurst Quay Waterfront Revitalization project. The first phase of this project included PortsToronto investments to reduce Billy Bishop Airport's footprint, improve traffic flow in the area and provide new parking and pick-up, drop-off zone for the Waterfront School. The project's second phase will build on these contributions to provide practical and valuable outdoor space for the community and a welcoming entry point for visitors to Toronto.



# IV – Economic Growth



## FACILITATING TOURISM AND TRADE

Since its opening in 1939, Billy Bishop Airport has become an important international gateway and significant economic engine for the GTA. The airport plays an important role in Toronto’s billion-dollar tourism industry, with visitors coming through Billy Bishop Airport spending approximately \$150 million a year on accommodation, transportation, retail and food and beverage pre-pandemic. As the tourism sector recovers from the economic impacts of the pandemic, Billy Bishop Airport will continue to support Toronto’s key industries including the financial services, life sciences, the food and beverage sector, travel and tourism, and the film and television industry through direct and indirect economic benefits.

According to a study by Destination Toronto, the Toronto region is home to 38 per cent of Canadian business headquarters and accounts for 18.5 per cent of Canada’s GDP<sup>5</sup>. With an estimated 135 million people living within a 90-minute flight of Toronto<sup>6</sup>, Billy Bishop Airport is well positioned to support pandemic recovery in our region as it continues to serve as an essential transportation gateway to Canada’s largest city – supporting jobs, tourism and trade in the Greater Toronto Area.

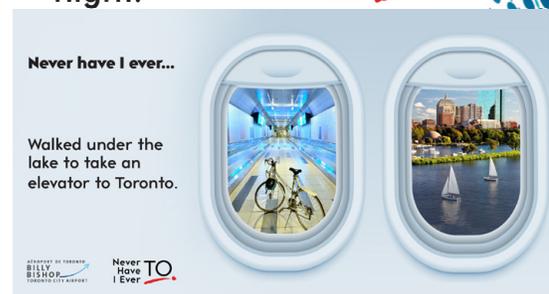
The Port of Toronto can also generate revenue for Toronto’s travel and tourism sectors. A gateway to Canada’s largest city, the Port of Toronto is a turnaround port, allowing Toronto to host arriving and departing cruise ship passengers for several days as they enjoy the many accommodations, restaurants and attractions the city has to offer.

As a response to the COVID-19 pandemic, the Government of Canada suspended the 2020 and 2021 cruise ship seasons. With the return of cruise ships to Canadian waters in 2022, PortsToronto expects to break its current record and welcome up to 40 cruise ships this season, including a number of new cruise ships designed for expedition cruising on the Great Lakes.



In 2021, Billy Bishop Airport participated in Destination Toronto’s Never Have I Ever campaign, a tourism recovery campaign supporting some of the hardest hit businesses within Toronto’s tourism and hospitality community. Toronto welcomed more than 9.7 million visitors in 2019. In 2021, only 1.8 million visitors.

**Never have I ever...  
Walked under the lake  
to get to my  
flight.**



Never have I ever...

Walked under the lake to take an elevator to Toronto.



Elevators to Toronto  
Ascenseurs vers Toronto

AÉROPORT DE TORONTO  
BILLY BISHOP  
TORONTO CITY AIRPORT  
JUST ONE MORE THING TO LOVE ABOUT  
TORONTO

**Never have I ever...**

Walked under the lake to take an elevator to Toronto.

# IV – Economic Growth

## RESTART OF COMMERCIAL SERVICE AT BILLY BISHOP AIRPORT

On September 8, 2021, Billy Bishop Airport staff, stakeholders and government partners marked the restart of commercial service and recognized the conclusion of a difficult period for the aviation industry by welcoming back passengers and getting back to the business of making connections and supporting Toronto’s economy.

His Worship John Tory, Mayor of Toronto, and Michael Deluce, President and CEO of Porter Airlines joined Geoffrey Wilson, CEO of PortsToronto, in offering remarks to celebrate the occasion.

*“This is a day that we have all been looking forward to and planning for since March 2020, when the pandemic emerged and our world changed overnight. Today we mark a return to commercial service at Billy Bishop Airport and a return to the business, passengers and experiences that make our airport truly unique and inspire our love of travel. The restart of Billy Bishop Toronto City Airport is also an important component of the City of Toronto’s recovery strategy as our restart means a return of jobs, a return of trade and tourism, and a return of a valuable gateway to one of the best cities in the world.”*

– Geoffrey Wilson, PortsToronto CEO

*“The restart of commercial service at Billy Bishop Toronto City Airport is an important sign of the progress we have made combatting the pandemic and getting residents vaccinated. We are safely reopening our city and I’m so confident that our economic recovery will be a success. Toronto will come back stronger than ever thanks to all of our collective efforts across the city. I want to thank everyone who has worked on the airport restart effort. Today we are welcoming back commercial service and all that it brings with it – more jobs, more business, and more tourism.”*

– John Tory, Mayor of Toronto



Toronto Global Forum’s Stronger Than Ever Summit.

## TORONTO GLOBAL STRONGER THAN EVER SUMMIT

On September 9, 2021, Billy Bishop Airport hosted Toronto Global Forum’s Stronger Than Ever Summit. Among speakers including Mayor John Tory, PortsToronto CEO Geoffrey Wilson joined Toronto Global’s CEO Stephen Lund to chat about the role Billy Bishop Airport will play in bringing back business and tourism travel as the GTA emerges from the pandemic.

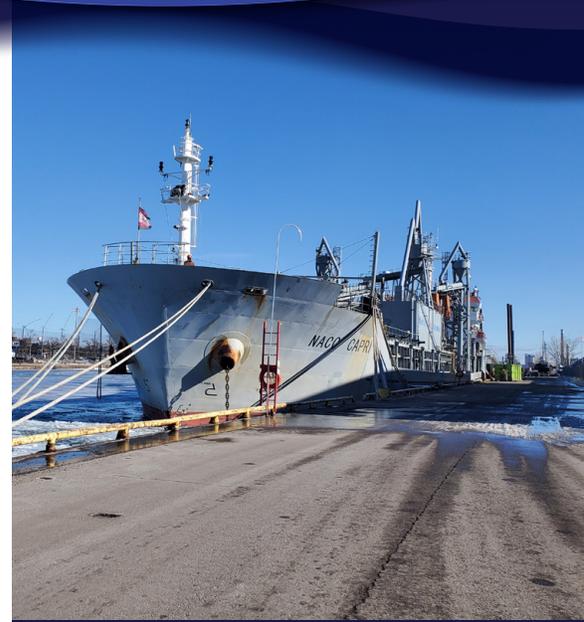
In October 2021, Air Canada launched commercial service between Billy Bishop Airport and Ottawa International Airport. This addition to the carrier’s successful Montreal offering provides passengers loyal to Air Canada with the ability to travel to and from the national capital from the convenience of Billy Bishop Airport.



## SUPPLY CHAIN RESILIENCY AT THE PORT OF TORONTO

Shipping has a major role to play in ensuring the sustained resiliency of our national supply chain. In 2021, the Port of Toronto continued to provide a reliable trade gateway for the transportation of goods to the Greater Toronto Area, connecting Toronto to marine ports around the world while much of our transportation sector experienced delays. Further to the economic benefits to the region, shipping is a more efficient way to move goods and produces far less carbon emissions per tonne kilometre than other industries in Canada's transportation system.

Bypassing trade gateways disrupted by the pandemic, Great Lakes – St. Lawrence Seaway shipping routes remained reliable and congestion free, reinforcing the Port of Toronto's important role in the national supply chain. Overall, 190 cargo vessels visited the Port of Toronto in 2021, delivering a range of bulk, project and general cargo products totalling 2,295,815 metric tonnes – a four per cent increase from 2020.



## GREAT LAKES – ST. LAWRENCE SEAWAY

Supply chain resiliency kept commodities flowing through the St. Lawrence Seaway in 2021, with more than 24.1 million metric tonnes of cargo transiting to Canadian Great Lakes ports, including the Port of Toronto, between March and September, up 2.6 per cent from the same period in 2020<sup>7</sup>.



# IV – Economic Growth

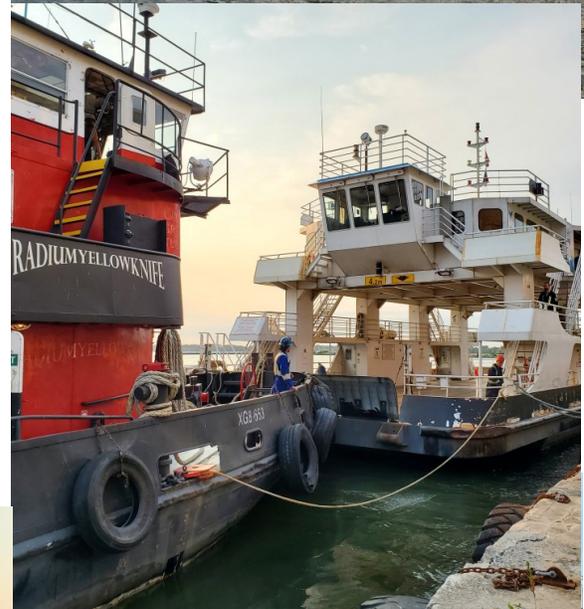
## JOB CREATION

As key international transportation hubs, Billy Bishop Airport and the Port of Toronto serve as economic engines that contribute to their local market profitability and support job creation in the communities they serve. Efficiently moving both cargo and people, these transportation networks create links between communities and regions that foster economic growth across multiple industries.

As a key transportation hub connecting travellers directly into the heart of Canada’s largest city, Billy Bishop Airport helps to drive the finance, technology and healthcare innovation sectors in the GTA. According to a 2021 study by York Aviation, Billy Bishop Airport could contribute \$4.8 billion in GDP annually to the City of Toronto and Province of Ontario by 2025<sup>8</sup>.

The Port of Toronto continues to be a vital connection to the world, not only boosting tourism and trade, but also providing sustainable employment for terminal workers and other jobs related directly to the shipping industry. Marine cargo arriving and managed at the Port of Toronto generated \$377.7 million in economic activity and 1,566 jobs in Ontario in 2017<sup>9</sup>.

Additionally, the Port of Toronto supports indirect job creation by providing businesses with a convenient, environmentally responsible and cost-effective way to get goods and people into the heart of downtown Toronto. Marine cargo and vessel activity from the Port of Toronto’s marine terminals created 482 direct jobs and generated \$24.5 million in wages and salaries in 2017<sup>10</sup>.



8. Nieuport Aviation news release.  
 9. Economic Impacts of Maritime Shipping in the Great Lakes (2018) was carried out by economic consultants Martin Associates of Lancaster, Pennsylvania, retained to conduct this analysis by a coalition of Canadian and American Great Lakes and St. Lawrence marine industry stakeholders. The methodology for this study is based on analysis of a core group of 40 Canadian and U.S. Great Lakes-St. Lawrence River ports. The study team conducted detailed interviews with marine terminal operators, service providers, railroads, port tenants and other stakeholders at each port.  
 10. See footnote on 8.

# IV – Economic Growth

## SUPPORTING TORONTO'S FILM AND TECHNOLOGY INDUSTRIES

PortsToronto also contributes to the success of Toronto's \$2-billion film industry by providing filming locations. In 2021, PortsToronto supported productions including the *Most Dangerous Game* and *The Expanse*. This is in addition to the films and digital content that is produced from Cinespace production studios that occupy the PortsToronto-owned Marine Terminal 51 and portions of the Cruise Ship Terminal. This production activity contributes to Toronto's film and television sector, which saw remarkable growth even during the pandemic. In 2021, Toronto reached historical investments with more than \$2.5 billion in direct spend in productions - compared to 2019 (pre-pandemic) that is roughly 13.9% growth<sup>11</sup>.

Global brands and technology giants such as Amazon and Uber choose the Greater Toronto Area to base their operations. With international borders now open and travel ramping up, Billy Bishop Airport will play a more vital role than ever before in connecting businesses in Toronto to key technology markets in the U.S. such as New York and Boston, providing fast, efficient and daily connections between technology hubs.



Cinespace's Toronto studio facilities, which occupy PortsToronto's Marine Terminal 51 and portions of the Cruise Ship Terminal, are known for housing award-winning productions such as TV series *The Handmaid's Tale*, and Oscar Best Picture winner *The Shape of Water*. In 2021 *Nightmare Alley* was filmed at the Cinespace studios. Cinespace is a significant employer that has brought thousands of new jobs to the Toronto area, and a contributor to the vibrant film and television industry in Canada.

# V – 2022 and Beyond

In this report, we once again put our organization through its paces — highlighting areas where we are succeeding, while also reflecting on how we can continue to improve in order to maximize the impact of our sustainability efforts.

In 2022 and beyond, PortsToronto will continue to enhance our sustainability strategy and reporting and strive to achieve a strengthened carbon reduction target.



# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 5 ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS</p> 	<p>5.5 Ensure women’s full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life</p> <p>5.5.2 Proportion of women in managerial positions</p>	<p>PortsToronto is committed to enacting policies and procedures that promote diversity and inclusion throughout our businesses.</p> <p>We are continuing to progress in this area by recognizing the contributions of all employees through policies like the Pay Equity Plan, which ensures equal pay for equal work and addresses the systemic discrimination for historically undervalued female positions.</p> <p>We also celebrate the full participation of all employees in our organization through initiatives such as Women in Aviation Week, and through collaborations with organizations including the Canadian Association for Girls in Science, which produced a video interview with Project Manager Jelena Ognjanovic to promote STEM (science, technology, math and engineering) learning among girls and gender nonconforming youth.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• Canadian Association for Girls in Science, p. 29</li> <li>• Women in Aviation Week, p.29</li> </ul>

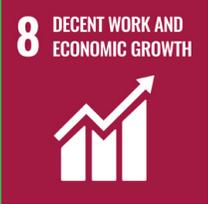
# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 6 ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL</p> 	<p>6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally</p> <p>6.b Support and strengthen the participation of local communities in improving water and sanitation management</p>	<p>As a steward of the waterfront for more than a century and an organization operating on Toronto’s shores, PortsToronto is dedicated to balancing its operations with the protection and conservation of water resources.</p> <p>As part of our efforts to preserve localized water quality, PortsToronto has invested in trash-trapping technology and has supported microplastic pollution and floating waste research through the PortsToronto Seabin Program and our partnership with the University of Toronto Trash Team. The program has influenced the launch of similar trash trapping and data collection programs throughout the Great Lakes, and, through its education and outreach efforts, has reached many individuals, organizations and classrooms.</p> <p>With respect to operations, strict environmental management protocols are in place in all business units – from the containment of glycol at Billy Bishop Airport to PortsToronto’s 24/7 Harbour Hotline, which responds to public reports of pollution or spills in the Harbour in order to prevent contaminants from entering the natural environment.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• PortsToronto Seabin Program, p. 36</li> <li>• Glycol Management at Billy Bishop Airport, p. 44</li> <li>• Environmental Management at PortsToronto, p.43</li> <li>• Harbour Hotline, p. 42</li> <li>• Use of PFAS-free firefighting foam at Billy Bishop Airport, p. 44</li> </ul>

# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 7 – AFFORDABLE AND CLEAN ENERGY</p> 	<p>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix</p> <p>7.2.1 Renewable energy share in the total final energy consumption</p>	<p>Since 2010, PortsToronto has directly contributed to increasing renewable wind and solar energy in our electrical grid by choosing 100 per cent green energy from Bullfrog Power to power all of its operations with clean electricity.</p> <p>One of the top 10 purchasers of Bullfrog Power green electricity in the country, PortsToronto and Billy Bishop Airport are the only port authority and airport in Canada to be powered entirely by renewable electricity across all operations and facilities, including the retrofitted <i>Marilyn Bell I</i> ferry at Billy Bishop Airport.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• Choosing renewable energy through Bullfrog Power, p. 23</li> <li>• Conversion of the <i>Marilyn Bell I</i> ferry to electric power, p. 25</li> <li>• Electrifying our fleet, p. 25</li> </ul>

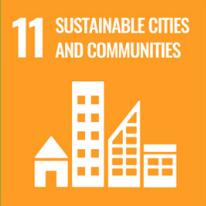
# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 8 DECENT WORK AND ECONOMIC GROWTH</p> 	<p>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</p> <p>8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment</p> <p>8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products</p>	<p>As key international transportation hubs, both Billy Bishop Airport and the Port of Toronto serve as economic engines that contribute to PortsToronto's local market profitability, support job creation in the communities we serve and support our regional economy by facilitating tourism and trade.</p> <p>Recognizing that the well-being of our employees is fundamental to the continued success of our businesses, PortsToronto provides a supportive work environment and benefits from the efforts of a Wellness Committee, which promotes physical and mental health both in the workplace and at home.</p> <p>Throughout the pandemic, PortsToronto has maintained its strong record of accomplishment in health and safety performance. By swiftly implementing measures like the Billy Bishop Airport Safe Travels Program, which achieved the Airports Council International (ACI) Airport Health Accreditation for its protection of staff and passengers, and a COVID-19 vaccination policy for all staff, PortsToronto has reaffirmed its commitment to maintaining a safe and healthy workplace.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• Facilitating Tourism and Trade, p. 61</li> <li>• Job Creation, p. 64</li> <li>• Safe Travels Program at Billy Bishop Airport. p. 54</li> <li>• Airports Council International Airport Health Accreditation, p. 54</li> <li>• PortsToronto Wellness Committee, p. 57</li> </ul>

# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SG 9 INDUSTRY, INNOVATION, AND INFRASTRUCTURE</p> 	<p>9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all</p> <p>9.1.2 Passenger and freight volumes, by mode of transport</p> <p>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities</p> <p>9.4.1 CO<sub>2</sub> emission per unit of value added</p>	<p>As part of our strategic future planning, PortsToronto has made a commitment to pursue projects and partnerships that align with sustainable site design, and to prioritize innovative, climate-resilient infrastructure that will allow our businesses to thrive in the long-term.</p> <p>Proof in point, the innovative, first of its kind in Canada retrofit of the <i>Marilyn Bell I</i> ferry to electric power will see significant improvements in air quality, noise management and the elimination of GHG emissions from the ferry's operation.</p> <p>Moreover, as part of our Cityside Modernization Project at Billy Bishop Airport, PortsToronto implemented measures recommended in a Climate Change Vulnerability Assessment, including the installation of two jellyfish filters at the mainland passenger transfer facility that filter and clean storm water before it enters the city stormwater system.</p> <p>The port also serves an important environmental purpose as the goods delivered by ship in 2021 took the equivalent of approximately 52,000, 40-tonne trucks off Toronto's congested roads and highways while using one-eighth as much fuel as trucks to carry the same amount of cargo.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• Conversion of the <i>Marilyn Bell I</i> ferry to electric power, p. 25</li> <li>• Jellyfish Filters, p. 30</li> <li>• Highway H<sub>2</sub>O, p. 32</li> <li>• Sustainable Sewage Solutions, p. 30</li> <li>• A Walkable, Bikeable Airport, p. 33</li> <li>• Sustainable Site Design, p. 28</li> </ul>

# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 11 SUSTAINABLE CITIES AND COMMUNITIES</p> 	<p>11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management</p>	<p>Whether conducting meetings with community residents and airport stakeholders designed to ensure Billy Bishop Airport is responsive to the needs of our neighbours, or investing more than \$12 million since 2009 in charitable initiatives and environmental programs that benefit communities along Toronto’s waterfront and beyond, PortsToronto is committed to fostering resilient, safe and sustainable communities.</p> <p>Over the years, Billy Bishop Airport has continued to improve its Noise Mitigation Program and has won several awards recognizing these efforts. Whether through ongoing studies related to ground noise and air quality in the vicinity of the airport, diligent monthly and annual reporting through our Noise Management Office, or consistent dialogue with our Community Liaison Committee, PortsToronto will continue to prioritize processes and investments that mitigate the impact of our operations and ensure we remain in balance with our surrounding community.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• Noise Management Program, p. 50</li> <li>• Ground Noise Study, p. 51</li> <li>• Air Quality Study, P. 52</li> <li>• Community Liaison Committee, p. 53</li> <li>• Community Investment, p. 53</li> </ul>

# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> 	<p>12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment</p> <p>12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment</p> <p>12.6.1 Number of companies publishing sustainability reports</p> <p>12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities</p>	<p>Each year, PortsToronto conducts a full audit of its environmental performance in an annual Sustainability Report – recognized by the Canadian Public Relations Society with a Gold Award of Excellence in 2018 – which consolidates all of the work we are doing so that we can continue to measure our progress and maximise the impact of our efforts.</p> <p>Best practices related to sustainability and environmental protection are followed by PortsToronto and its contractors during all planning, development and operational phases of any project.</p> <p>Further, PortsToronto is committed to working with our partners and tenants to do our part to recover, reuse and recycle materials.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• Hazardous Waste Recycling, p. 43</li> <li>• Glycol Management, p. 44</li> <li>• PFOS-free Firefighting Foam, p. 44</li> <li>• Environmental Management, p. 43</li> <li>• Award-winning Annual Sustainability Reports for PortsToronto and Billy Bishop Airport, p. 51</li> </ul>

# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 13 CLIMATE ACTION</p> 	<p>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</p> <p>13.2.2 Total greenhouse gas emissions per year</p>	<p>PortsToronto uses renewable electricity sources to lower our carbon footprint and foster climate resiliency. By taking immediate action and using meaningful processes, PortsToronto works to combat climate change and reduce the environmental impact of our operations.</p> <p>One key project bringing us closer to our overall emissions reduction target is the conversion of the <i>Marilyn Bell I</i> ferry to electric power, which will result in an overall reduction of approximately 530 tonnes of CO<sub>2</sub> emissions per year at Billy Bishop Airport.</p> <p>It is increasingly important to ensure our infrastructure and operations are resilient against the impacts of a changing climate. To this end, we have begun to integrate climate resiliency into our strategic planning and will continue to assess climate resiliency as part our climate change action plan moving forward.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• Carbon Reduction Strategy, p. 22</li> <li>• Reporting on Greenhouse Gas Emissions, p. 21</li> <li>• Supporting Emissions Reductions in our Community, p. 31</li> <li>• Becoming Climate Resilient, p. 30</li> <li>• Electrifying our Fleet, p. 25</li> <li>• Choosing Renewable Energy through Bullfrog Power, p. 23</li> </ul>

# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 14 – LIFE BELOW WATER</p> 	<p>14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution</p> <p>14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans</p>	<p>In an effort to combat and study single-use plastics and microplastics in our waterways, PortsToronto launched its award-winning Seabin Program in 2019 at the Outer Harbour Marina and at Pier 6 on Toronto’s waterfront. During the 2021 season alone, the program removed tens of thousands of pieces of plastic debris from the Toronto Harbour.</p> <p>As part of this project, our partners the University of Toronto Trash Team (Trash Team), count and characterize the materials captured by PortsToronto Seabins in order to further understand the origination of floating plastic and litter in the Toronto Harbour, and to inform technological and behavioural solutions to prevent these materials from entering Lake Ontario in the first place.</p> <p>In an effort to combat and study single-use plastics and microplastics in our waterways, PortsToronto launched its award-winning Seabin Program in 2019 at the Outer Harbour Marina and at Pier 6 on Toronto’s waterfront. During the 2021 season alone, the program removed tens of thousands of pieces of plastic debris from the Toronto Harbour.</p> <p>As part of this project, our partners the University of Toronto Trash Team (Trash Team), count and characterize the materials captured by PortsToronto Seabins in order to further understand the origination of floating plastic and litter in the Toronto Harbour, and to inform technological and behavioural solutions to prevent these materials from entering Lake Ontario in the first place. We are also a proud partner of the Trash Team’s Tagging Trash Study, which employed GPS-tracked bottles to reveal movement patterns and investigate potential pathways and sources of floating litter in the Toronto Harbour.</p>

# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 14 – LIFE BELOW WATER</p> 	<p>14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution</p> <p>14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans</p>	<p>For more than a decade, PortsToronto has been certified in the Green Marine environmental certification program for the marine industry, which works to address key environmental impacts to air, land, water, and communities. Moreover, the Outer Harbour Marina has earned the Green Anchors Gold rating in the Clean Marine Eco-Rating Program from the Ontario Marine Operators Association for the 11th year in a row – one of the highest rankings attainable for marinas that follow environmental best practices.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• PortsToronto Seabin Program, p. 36</li> <li>• International Trash Trapping Network, p. 38</li> <li>• Tagging Trash Study, p. 39</li> </ul>

# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 15 – LIFE ON LAND</p> 	<p>15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements</p> <p>15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world</p> <p>15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.</p>	<p>At the core of our operations is a commitment to protect and restore natural habitat, promote wildlife protection and biodiversity, and encourage the safe, sustainable enjoyment of Toronto’s waterfront.</p> <p>Each year, approximately 30,000 cubic metres of sediment material is removed from the mouth of the Don River through PortsToronto’s dredging process. While helping to prevent flooding and the potential for debris to enter the harbour, over time, this process also provides new habitat for marsh birds including nesting Common Terns, turtles and small mammals at the Leslie Street Spit, as well as helping to increase fish populations, notably facilitating the return of pike and muskie to the harbour.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• Dredging, p. 40</li> <li>• Wetland Creation at the Leslie Street Spit. p. 40</li> <li>• Tree planting at Outer Harbour Marina, p. 39</li> </ul>

# Appendix A.

SDG	RELEVANT TARGETS	CONTRIBUTIONS
<p>SDG 17 PARTNERSHIPS</p> 	<p>17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries</p> <p>17.17 Encourage and promote effective public, public private and civil society partnerships, building on the experience and resourcing strategies of partnerships</p>	<p>PortsToronto is a key federal agency that works with other organizations to manage the harbour, engage in sustainable initiatives and work collaboratively to ensure a vibrant waterfront. As such, our management and staff members are engaged with all levels of government to ensure collaboration and coordination of current operational works and future projects along the waterfront.</p> <p>We are also a key agency supporting the work of Aquatic Habitat Toronto (AHT) since its inception in 2003, which represents a consensus-based partnership among agencies with a vested interest in the improvement of aquatic habitat on the Toronto Waterfront.</p> <p>Internally, PortsToronto benefits from the efforts of an employee-led Sustainability Committee. Environmental ambassadors from each business unit meet regularly to share ideas and identify strategies for employing environmental best practices throughout PortsToronto's business units and operations.</p> <p>Learn more:</p> <ul style="list-style-type: none"> <li>• Collaborating with Government Partners, p. 59</li> <li>• Aquatic Habitat Toronto, p. 35</li> <li>• PortsToronto Sustainability Committee, p. 18</li> <li>• PortsToronto Seabin Program, p. 36</li> <li>• International Trash Trapping Network, p. 39</li> </ul>

# PORTS TORONTO

