# Sustainability Report 2016

# PORTS TORONTO

# PORTS TORONTO

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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. For more information on this report please contact:

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PortsToronto's Sustainability Report is available online at PortsToronto.com.

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GOING FORWARD

# **Our Priorities**

#### ENVIRONMENTAL STEWARDSHIP

- Energy and Climate Change
- Regulatory Compliance
- Biodiversity and Stewardship
- Sustainable Site Design
- Waste Management

#### PEOPLE AND COMMUNITY

- Noise Management
- Traffic Management
- Safety and Emergency Response
- Community Engagement
- Community Investment

#### ECONOMIC PERFORMANCE

- Financial Self-Sufficiency
- City Building and Investing in Public Infrastructure
- Local Job Creation
- Contributing to Toronto's Economic Growth



#### CONTEXT FOR THIS REPORT

The Toronto Port Authority, doing business as PortsToronto, is proud to present, our second annual Sustainability Report. We recognize the importance of sustainability and employing environmental best practices throughout our business operations.

With this recognition comes a responsibility to engage in dialogue on the opportunities that sustainability presents for our business, our operations, and our community. By publishing this report, we are building on the strong foundation set out in our 2015 inaugural Sustainability Report, released in both English and in French, and on a longstanding legacy of environmental stewardship, social responsibility and collaboration with other government agencies and stakeholders to manage Toronto's waterfront. Our efforts this year continue to move us closer toward strategic consideration of sustainability throughout all of our business units. This annual Sustainability Report aims to consolidate all of the work we are doing so that we can continue to measure the impact of our efforts and determine where we can do more.

As in our first report, this year's document is structured around three priority focus areas which, taken together. define sustainability at PortsToronto. Specifically:

- Environmental Stewardship
- **Community Engagement**
- Economic Performance

Our Sustainability Report 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. We use the GRI guidelines to inform our reporting and are working towards fully adhering to the GRI's G4 Sustainability Reporting guidelines in our future reports.

#### REPORTING ON WHAT MATTERS

This year we undertook efforts to refine our sustainability priorities and to ensure that our report reflects the sustainability topics and issues that are most relevant to PortsToronto and to our stakeholders. Together with the Delphi Group, we conducted two workshops with PortsToronto leadership and employees to evaluate these priorities. Our report reflects the areas of greatest importance to PortsToronto's sustainability efforts and these represent our material sustainability areas. In 2017, we will continue to refine our process for establishing material sustainability areas and plan to engage external stakeholders for input as part of our effort toward fully adhering to the GRI G4 quidelines.

# PORTS TORONTO

PortsToronto is a Federal Government business enterprise that owns and operates Billy Bishop Toronto City Airport, Marine Terminals 51 and 52 within the Port of Toronto, the Outer Harbour Marina and various properties along Toronto's waterfront.

Responsible for safety and efficiency of marine navigation in the Toronto Harbour, PortsToronto also exercises regulatory control and public works services for the area, works with partner organizations to keep the Toronto Harbour clean, issues permits to recreational boaters and manages the Leslie Street Spit site. PortsToronto is committed to fostering strong, healthy and sustainable communities and has invested more than \$9 million since 2009 in charitable initiatives and environmental programs that benefit communities and organizations along Toronto's waterfront and beyond.

PortsToronto is financially self-sufficient, as required under the Canada Marine Act, and its activities and operations are not funded by taxpayers.

# Vision

As a guardian and steward of Toronto's waterfront resources, PortsToronto works closely with the broader waterfront community to ensure these assets will provide prosperity and enjoyment for future generations.



# **Mission**

PortsToronto's mission is to effectively manage Billy Bishop 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. Through the successful pursuit of this mission, PortsToronto plays an important city-building role in the economic growth and sustainable future of Toronto.

#### OUTER HARBOUR MARINA





Message from the Chief Executive Officer



#### MESSAGE FROM THE CHIEF EXECUTIVE OFFICER

Welcome to our second annual Sustainability Report, an important document that we provide to our stakeholders, government partners and community to report on our initiatives and progress with regard to conducting our businesses in a sustainable manner. Within this report – and more broadly for the purposes of global reporting – sustainability is defined as being inclusive of economic performance, community engagement, and environmental stewardship. As such, the information within this report is organized into these three main areas.

In this second annual report we continue to look closely at our organization, celebrate the areas where we are doing well, and catalogue the areas where there is still room for improvement. In last year's report we indicated next steps and targets in a few areas and this year's report provides updates on our progress. We also report on initiatives large and small that demonstrate our commitment to operating sustainably. Whether it be small things such as moving to coffee machines that brew coffee from loose beans rather than aluminum pods or largerscale initiatives such as replacing all runway lighting at Billy Bishop Airport to be more energy efficient, every little bit counts as we look around our business to determine what we can do better or differently to maximize our efforts and improve our sustainability.

PortsToronto is in the business of providing gateways and making connections. Whether through Billy Bishop Airport which welcomed 2.7 million travellers in 2016, or through the Port of Toronto which received more than 1.8 million tonnes of cargo on lake freighters and more than 2,400 passengers aboard cruise ships, PortsToronto is about making the connections that drive the economy and fuel growth.

But with this important economic imperative comes an equally important community and environmental obligation. The Canada Marine Act sets forth a federal mandate for Canadian port authorities to contribute to the country's economy in a manner that balances trade and economic activities with the needs of the community and the protection of the environment. It is this mandate to balance commercial pursuits with community and environmental interests that is at the heart of how PortsToronto conducts its operations along Toronto's mixed-use waterfront.

The economic performance of PortsToronto has continued to be strong with the organization reporting its eighth consecutive year of profitability in 2015 with net income of \$5.9 million on revenue of \$55.9 million. As a financially self-sufficient organization that does not receive public funding, PortsToronto is proud of its ability to achieve and maintain profitability, as this puts us in a position to give back to our community and invest in initiatives, infrastructure and improvements that benefit Toronto. In fact, since 2009, PortsToronto has invested more than \$9 million in community and environmental initiatives, supporting such projects as Evergreen Brickworks, Lake Ontario Waterkeeper and Ireland Park Foundation.

In addition to supporting community organizations and causes, PortsToronto takes an active role in environmental protection. This includes efforts to keep Toronto's harbour clean through dredging



efforts, spill prevention and cleanup, and creating green spaces and natural habitats, such as one of our most recent projects that was completed in partnership with the Toronto and Region Conservation Authority (TRCA), which saw the completion of a nine-hectare wetland habitat for fish, birds and wildlife at the Leslie Street Spit in September 2016.

PortsToronto also continues to invest in measures that minimize the environmental impact of our operations. This includes expanding recycling efforts for solid and hazardous material reduction, utilizing hybrid-electric vehicles for maintenance operations where feasible, and choosing 100 per cent renewable energy from sources such as wind and low-impact hydro through Bullfrog Power to meet our electricity requirements. PortsToronto is the only airport and port authority in Canada to choose renewable electricity for all of its operations.

Community engagement is a big part of our goal to conduct our operations in a sustainable manner. As part of our ongoing efforts to reach out to the residents and businesses surrounding Billy Bishop Airport, PortsToronto established a Community Liaison Committee (CLC) in 2010. The committee is designed to provide our neighbours with a regular forum for discussing issues and concerns related to airport operations. The committee is composed of key members of neighbourhood community groups and stakeholders, including local city councillors, and follows best practices of community engagement, meeting four times a year and exploring matters ranging from managing airport noise to improving transportation access. Meeting minutes are taken by a third-party consultant, Lura Consulting, and posted to the PortsToronto website.

By looking at our operations with respect to economic performance, community engagement, environmental protection and reporting on areas such as noise management, Greenhouse Gas (GHG) emissions, waste management and safety, we can ensure that we are investing in the long-term future of our organization and conducting our business with respect for the environment and the community.

We hope you enjoy reading more about PortsToronto and how we are striving to reduce our environmental footprint and strike an effective balance on Toronto's waterfront.

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



#### BILLY BISHOP TORONTO CITY AIRPORT

Billy Bishop Airport is Canada's ninth-busiest airport and welcomed 2.7 million business and leisure travellers last year. The airport is also Canada's sixth-busiest airport with passenger service to the United States. Offering service to more than 20 cities in Canada and the U.S., with connection opportunities to more than 80 international destinations via our airlines' networks, Billy Bishop Airport is an important international gateway and a key driver of Toronto's economy, accounting for more than \$2.1 billion in economic output each year and supporting 6,500 jobs, including 1,960 directly associated with airport operations.

The airport, which hosts two award-winning commercial air carriers in Porter Airlines and Air Canada, has gained an excellent reputation throughout the travelling community for its superior customer service and amenities such as the pedestrian tunnel, enhanced shuttle service, fullservice lounges, proximity to downtown and shorter lines, which have established Billy Bishop Airport as the airport of choice for business and leisure travellers alike. In fact, the airport recently won a series of passenger-driven awards, including being named one of the top airports in North America by Airports Council International's (ACI) 2015 Airport Service Quality Awards and Skytrax 2016 World Airport Awards. In addition, Billy Bishop Airport was named the fourth-best international airport by *Condé Nast Traveler.* 

Billy Bishop Airport is also a base for an air ambulance service, commercial operators, two Fixed Base Operators and is home to a sizable personal/general aviation community that includes approximately 50 private planes and one flight school.











#### PORT OF TORONTO

Serving primarily as a bulk cargo destination, the Port of Toronto boasts a unique location minutes from Toronto's downtown. The port moves goods from countries as far away as Germany, South Korea, China, Brazil, Australia, South America and the United States.

In 2016, more than 1.8 million tonnes of cargo from around the world passed through the Port of Toronto. More than 157 ships visited the Port of Toronto in 2016, bringing sugar, road salt, cement and aggregate directly into the heart of Toronto.

Overall port tonnage was up more than 11 per cent in 2016. Cement cargo reached a twenty-year high with over 670,000 tonnes, representing a 14 per cent increase over 2015. Stone, aggregate and sand cargo levels nearly tripled, totalling 166,207 tonnes, while salt imports increased nearly four per cent. Sugar imports continued to be strong with approximately 493,000 tonnes of raw sugar being delivered via the port. The cargo delivered by ship took approximately 45,000, 40-tonne trucks off Toronto's already congested roads and highways.

In addition to an increase in traditional marine cargo delivered to the port, seven passenger cruise ships carrying more than 2,400 passengers visited PortsToronto's Cruise Ship Terminal in 2016.

#### OUTER HARBOUR MARINA

Located 10 minutes from the downtown core, just outside the Toronto Harbour and a short walk from Tommy Thompson Park, the Outer Harbour Marina (OHM) provides a unique escape from city life, offering breathtaking scenery and a world-class marina without having to leave Toronto.

The OHM is one of the largest freshwater marinas in Ontario, with more than 625 extra-wide slips that can accommodate boats up to 100 feet long —the only docking facility of its kind in Toronto. In addition, the OHM is the only marina in the GTA with heated indoor winter boat storage.

For the sixth year in a row, the OHM has earned a 5 Green Anchor Gold rating from the Ontario Marine Operators' Association—one of the highest rankings a marina can attain for following environmental best practices.

#### REAL ESTATE AND PROPERTY HOLDINGS

Real estate and property holdings are an important component of PortsToronto's business and include such properties as 60 Harbour Street, 30 Bay Street, Pier 6 and 5 Queens Quay West, located on the west side of the Yonge Street Slip. These properties are leased to other businesses and some have potential for redevelopment.



PortsToronto is the successor agency of the Toronto Harbour Commissioners (THC), which managed 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* in 1999, PortsToronto is a Federal Government business enterprise that is mandated to be financially self-sufficient and receives no federal, provincial or municipal funding. 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.

PortsToronto is accountable to the Federal Government through Transport Canada, and is guided by a nine-member board of directors composed of individuals appointed by all levels of government — federal, provincial and municipal. Six members of the board are appointed by the Minister of Transport in consultation with committees representing four identified user groups — commercial, recreation, airport and port operations. The City of Toronto and the Province of Ontario have a direct governance relationship with PortsToronto via their appointees to the PortsToronto board of directors. The PortsToronto board met 15 times in 2016.

The board of directors are 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 nominated by the federal Minister of Transport in consultation with user groups

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

The following four standing committees oversee various organizational matters, various facets of our operations and assess recommendations from management:

- Audit and Finance
- Governance and Human Resources
- Communications and Outreach
- Pension

The board relies on these committees to facilitate business and guide its decisions. During 2016, the committees met 32 times.

For more information about PortsToronto governance, please visit our website.



#### PORTS TORONTO SUSTAINABILITY COMMITTEE

At PortsToronto, every employee is responsible for acting in an environmentally sustainable manner and is required to perform his or her duties with sustainability in mind. In 2016, PortsToronto formed a Sustainability Committee comprising staff from each business unit. The committee meets to share ideas and strategies for sustainability and employing environmental best practices throughout PortsToronto's business units and operations.

> **9** The PortsToronto Sustainability Committee met 9 times in 2016.

From implementing a no-idling policy and eliminating the use of coffee pods and plastic water bottles to placing compost and recycling bins in every office and moving toward a paperless workplace, many of these ideas were generated by members of the Sustainability Committee. The committee also maintains a sustainability calendar to mark special events, which are shared with PortsToronto employees to encourage participation in initiatives such as the Great Canadian Shoreline Cleanup, the Annual Foreign Object Debris Pick-Up at the airport and Waste Reduction Week. PortsToronto strives to promote sustainability and incentivize employees by also creating quizzes and contests designed to engage staff and increase knowledge and awareness of environmentally friendly practices.

#### SENIOR MANAGEMENT





DEBORAH WILSON Vice President of Communications and Public Affairs

CRAIG MANUEL Vice President and Executi General Counsel Ports

GENE CABRAL Executive Vice President, PortsToronto and Billy Bishop Toronto City Airport GEOFFREY A. WILSON Chief Executive Officer ALAN J. PAUL Senior Vice President and Chief Financial Officer

KEN LUNDY Vice President of Infrastructure, Planning and Environment ANGUS ARMSTRONG Harbour Master and Chief of Security

# 8 Schools

were identified and selected for greener playgrounds through Evergreen Canada's Children's Program.

5

### 4 Hives

PortsToronto worked with Alvéole to install urban hives to support the local bee population. Each hive contains 10,000 bees in the spring, and grows to more than 50,000 in summer.

#### Water Refill Station

New refill stations enable airport passengers to refill their water bottles and the reusable glasses available to them in the lounge—thus eliminating the need for plastic water bottles.

## 2020

Replacing all operational vehicles with hybrid models by 2020, where commercially available.

## 100%

PortsToronto is bullfrogpowered with 100% green electricity across all operations.



## Aonarch Butterfly garden

700-square foot garden to help support their declining population.

# Level 4

The Port of Toronto increased its certification in the 5-level *Green Marine* environmental program from Level 1 in 2009 to Level 4 in 2015.

# 9.3 Hectares

Habitat was created for a variety of fish and wildlife, as well as more green space for nature lovers to enjoy the great outdoors just minutes from Toronto's downtown.

# 40,000 Cubic metres

PortsToronto removes approximately 40,000 cubic metres of material from the mouth of the Don River annually. As the owners and operators of Billy Bishop Airport, the Port of Toronto and the Outer Harbour Marina, we appreciate that a sustainability plan inclusive of environmental protection and green business operations is important to our long-term future as a business and the role we play in making connections between Toronto and the world.

Whether through our efforts to keep the harbour clean, build natural habitat or choosing 100% Bullfrog Power across all operations, we are striving to ensure that we reduce the environmental impact of our operations through processes and choices that make a difference.

The environmental stewardship section of the report is based on an extensive internal review, expert analysis from the Delphi Group, and feedback from our stakeholders. PortsToronto's targeted priority areas related to environmental stewardship are as follows:





Environmental Strategies. Business Solutions.

The environmental priority areas detailed in this report were assessed by The Delphi Group. As a pioneer in sustainability and environmental risk management, The Delphi Group has more than 25 years of experience 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. For more information visit **www.delphi.ca**.



#### PROTECTING TORONTO'S HARBOUR AND INCREASING BIODIVERSITY

PortsToronto is committed to sustainability and protecting the environment. Whether it is Billy Bishop Airport, the Outer Harbour Marina or the Port of Toronto, we conduct our operations in a manner that is consistent with protecting the environment, preserving natural habitats and ensuring that we give back to the communities that we serve.

PortsToronto is an engaged member of the Aquatic Habitat Toronto Team. Aquatic Habitat Toronto represents a consensus-based partnership between agencies with a vested interest in the improvement of marine habitat on the Toronto waterfront.

Partners include Fisheries and Oceans Canada, the Ontario Ministry of Natural Resources and Forestry, Toronto and Region Conservation Authority, Waterfront Toronto and PortsToronto, with key participants from Environment Canada and in consultation with the City of Toronto. Aquatic Habitat Toronto is responsible for the implementation of the Toronto Waterfront Aquatic Habitat Restoration Strategy.

The strategy strives to create a more sustainable waterfront by using an ecosystem approach to increase ecological integrity, provide suitable conditions for the maintenance of self-sustaining aquatic communities and improve ecological connectivity. The strategy emphasizes conservation design based on native and naturalized species. It takes into account human usage of the shoreline and nearshore waters and was developed using a consultative, consensus-based approach involving stakeholders and the public. Helping to ensure the safety and enjoyment of those who use Toronto's harbour is a key priority for PortsToronto, and ensuring that the unique biodiversity of the waterfront is both preserved and enhanced is an equally important part of our commitment to the environment.

#### DREDGING AND WETLAND CREATION

Every year, thousands of tonnes of sediment build up in the area where the Don River empties into the Keating Channel. If not removed, this build-up could cause the river to back up and result in flooding. As such, maintenance of the river mouth is imperative to avoid siltation and debris spilling into the harbour.

Each year, PortsToronto removes the sediment by way of dredging, which helps to maintain a navigable river depth that allows for the smooth flow of water and ice through the Keating Channel. Annually, PortsToronto removes approximately 40,000 cubic metres of material from the mouth of the Don River.

The dredging process involves scooping material from the bottom of the channel using an excavator. Once removed from the channel bed, the sediment is transported by dump scow barges to the Leslie Street Spit for proper containment in what is called a cell or Confined Disposal Facility (CDF). Each of the cells located at the spit were designed by PortsToronto to properly and safely contain natural material dredged from the Keating Channel and other parts of the harbour.



"This was a long time in the making and we're thrilled. Thanks to strong partnerships we have created marsh habitat that will improve stopover, nesting and overwinter habitat for many species on the Toronto waterfront."

> —Ralph Toninger Senior Manager of Habitat Restoration Toronto and Region Conservation Authority

Not only does this process help to prevent flooding and debris from entering the harbour, it also provides a home to marsh birds, turtles, small mammals and native fish. In 2007, PortsToronto and the Toronto and Region Conservation Authority (TRCA) completed the Cell 1 Wetland Creation Project, converting the CDF into a seven-hectare coastal wetland. Cell 1 has been very successful to date with reports of significantly increased fish populations and the return of pike and walleye to the harbour.

In September 2016, the Cell 2 wetland was officially completed, providing a new 9.3 hectare habitat to a variety of fish and wildlife, as well as more green space for nature lovers to enjoy the great outdoors just minutes from Toronto's downtown. The completion of the second phase of this three-part project could not have happened without the public-private partnership between the TRCA, Environment Canada, Fisheries and Oceans Canada, the Ministry of Natural Resources and Forestry, the City of Toronto, Coca-Cola Canada and PortsToronto.

The third of three cells, Cell 3, continues to be used for containment of dredged materials, with approximately 30 to 40 years of capacity remaining. As part of our 2015 next steps in sustainability, PortsToronto committed to the purchase of updated dredging and marine spill response equipment to operate more efficiently and effectively. In 2016, a spud barge, one of the pieces of equipment that replaced the derrick, was used for dredging efforts and the new Iron Guppy tugboat replaced the William Rest, which was built in 1961. The Iron Guppy tugboat is now used for flood control dredging, harbour cleanup, placement of critical Marine Exclusion Zone and navigation channel buoys, marine access ice breaking, ice management for airport ferry operations, and emergency response year-round in Toronto's Port and Harbour.

#### HARBOUR CLEAN-UP PROGRAM AND HOTLINE

As part of our 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, we remove approximately 150 million pounds (more than 68,000 tonnes) of dredgeate, debris and driftwood from the harbour each year—the equivalent weight of about 102 cars' worth of material removed every day.



Advancing Environmental Excellence

The Port of Toronto is committed to going beyond compliance by being a participant of the Green Marine is a voluntary initiative promoting a culture of continuous improvement for Green Marine environmental program since 2009. oreen marne is a voluntary milianve promoting a curule of commuous improvement for ports, terminals, shipyards, Seaway corporations and ship owners across North America. Ports, reminars, simplarus, seaway corporations and simp owners across norm America. The program offers a detailed framework for maritime companies to first establish and then

Each participant completes Green Marine's detailed annual self-evaluation. Reports are independently verified every two years to ensure the program's rigor and credibility. The reduce their environmental footprint.

independentity vertiled every two years to ensure the program singor and credibility. The results determine the participant's ranking for each performance indicator on a 1-to-5 scale. Level 1 constitutes the monitoring of regulations, while Level 5 indicates leadership and excellence. Participants, such as the Port of Toronto, have to demonstrate year-over-year improvement in measurable ways to maintain their Green Marine certification. The process is also transparent as each individual results are made public every year.

For example, Port of Toronto increased its results from a level 1 to a level 4 between the rol example, Foll of foromo increased its results from a revert for a revert 4 between the GHG reporting years of 2009 and 2015 for the Greenhouse gases (GHG) indicator. For the GHG

indicator, it means the port adopted an energy performance plan and a plan for reducing air pollutants, which defines reduction measures and establishes reduction targets. Green Marine is pleased to count the Port of Toronto among its certified participants!

J

David Bal

David Bolduc Executive director

25, rue du Marché-Champlain #402, Québec, QC, G1K 4H2

#### **GOING FOR GOLD**

In 2016, the Outer Harbour Marina received the 5 Green Anchor Gold rating for the sixth consecutive year. This designation, awarded by the Ontario Marine Operators' Association (OMOA), recognizes marinas that follow strict environmental best practices to protect and maintain a healthy marine environment





"I learned about pollinators like the monarch butterfly and how important it is to have plants like milkweed so that butterflies have food and a place to sleep."

> —Adeline Richardson, Grade 2, Voice Integrative School

#### MAINTAINING BIODIVERSITY BY PROTECTING THE MONARCH BUTTERFLY

Every year, Monarch butterflies migrate south along the shores of the Great Lakes before making their way to Mexico for the winter season. However, the number of monarch butterflies completing the journey has reached record lows over the past couple of years. This is partially due to the loss of native plants, such as milkweed, that serve as the butterflies' primary food source along their route.

In spring 2016, students from Voice Integrative School returned to the Outer Harbour Marina to visit and maintain the butterfly garden they helped PortsToronto plant in the fall of 2015. Just in time for the monarch butterflies' spring migration, the garden is designed to help support their threatened populations.

In an effort to help bring back the monarchs, students ranging from Grade 2 to Grade 4 rolled up their sleeves to plant wildflowers and create unique paths throughout the garden. Designed by Evergreen Canada, the 700-square-foot garden features several species of native plants that provide food and perching areas for monarch butterflies and other pollinators, as well as an avian habitat for the wide variety of birds that use the Leslie Street Spit as a critical stopover point during seasonal migration.





Thank you for your support – a message from the CEO of Evergreen Three years ago, PortsToronto made a commitment to the children of Toronto's downtown schools. After seeing the benefits of outdoor learning. PortsToronto narthered with Inree years ago, Ports Foronto made a commitment to the children of Foronto's dow schools. After seeing the benefits of outdoor learning, PortsToronto partnered with Evergreen a national charity that works to connect our cities with the natural work schools. After seeing the benefits of outdoor learning, Ports I oronto partnered with Evergreen, a national charity that works to connect our cities with the natural world, to revitalize and oreen the grounde of 18 echoole. Thanks to PorteToronto's investment of Evergreen, a national charity that works to connect our cities with the natural world, to revitalize and green the grounds of 18 schools. Thanks to PortsToronto's investment of \$150,000 over three years, those school arounds are being transformed into outdoor

revitalize and green the grounds of 18 schools. Thanks to PortsToronto's investment c \$150,000 over three years, those school grounds are being transformed into outdoor clasernome where children can engage with nature. Not only are they learning outdoor \$150,000 over three years, those school grounds are being transformed into outdoor classrooms where children can engage with nature. Not only are they learning outdoors, they're getting more active and beying fun while doing it Thanks to financial support and staff volunteers from PortsToronto, these schools now have green gases where before there was only aenhalt. This year, the kindergatten class at they're getting more active and having fun while doing it. Thanks to financial support and staff volunteers from Ports Foronto, these schools now f green oases where before there was only asphalt. This year, the kindergarten class at Second Street Junior Middle School received raised darden beds and will det their har green oases where before there was only asphalt. This year, the kindergarten class at Second Street Junior Middle School received raised garden beds, and will get their hands dirty in the spring as they learn how to grow vegetables from seeds. At St Mary's

Second Street Junior Middle School received raised garden beds, and will get mell dirty in the spring as they learn how to grow vegetables from seeds. At St. Mary's Elementary the students are inventing new names as they play around the freeho dirty in the spring as they learn how to grow vegetables from seeds. At St. Mary's Elementary, the students are inventing new games as they play around the freshly planted trees. Students at Fastdale Collegiate have expanded their roofton garden with a low-energy Elementary, the students are inventing new games as they play around the treshly planted trees. Students at Eastdale Collegiate have expanded their rooftop garden with a low-energy irrination system and now drow vegetables that they cell at a local farmers' market. At each trees. Students at Eastdale Collegiate have expanded their roottop garden with a low-energy irrigation system and now grow vegetables that they sell at a local farmers' market. At each school, children are using their new outdoor clasernome to learn about their local ecologian. Imgation system and now grow vegetables that they sell at a local farmers market. At each school, children are using their new outdoor classrooms to learn about their local ecology, natural systems, and the importance of watersheds in urban space. The response from school, children are using their new outdoor classrooms to learn about their local ecology, natural systems, and the importance of watersheds in urban spaces. The response from the indext teachers and parents has been very positive and they're all evolved about end natural systems, and the importance of watersheds in urban spaces. The response from students, teachers, and parents has been very positive and they're all excited about spending more time outside.

With PortsToronto's support, Evergreen is helping schools in a number of ways. We provide With Ports Foronto's support, Evergreen is helping schools in a number of ways. we provide consultation and expertise to create a customized green space design, funding to purchase landecaning materials, and tools to help teachers promote the importance of the environment. consultation and expertise to create a customized green space design, funding to purchase landscaping materials, and tools to help teachers promote the importance of the environment and local watersheds in the classroom. Project designs are always inspired by the natural landscaping materials, and tools to help teachers promote the importance of the environme and local watersheds in the classroom. Project designs are always inspired by the natural world incorporating elemente such as trees rocks and share to create a diverse landsca more time outside.

and local watersheds in the classroom. Project designs are always inspired by the natural world, incorporating elements such as trees, rocks, and shade to create a diverse landscape for children to explore. We always work with local residents to ensure the design enhances world, incorporating elements such as trees, rocks, and shade to create a diverse landscape for children to explore. We always work with local residents to ensure the design enhances the overall community where the school resides Evergreen is thrilled to have spent the last three years working in partnership with PorteToronto to connect children to the natural world. As more children learn to un Evergreen is thrilled to have spent the last three years working in partnership with PortsToronto to connect children to the natural world. As more children learn to understand, appreciate and respect nature the effects of your investment will be felt for generations to the overall community where the school resides. Ports I oronto to connect children to the natural world. As more children learn to understand, appreciate, and respect nature, the effects of your investment will be felt for generations to

come.

Sincerely,

Geoll Gm

Geoff Cape CEO, Evergreen Students at Dundas Jr. Public School benefit from the garden project on their school ground. Curriculum connections allow them to cultivate vegetables and herbs, supplement their diet with healthy, organic vegetables and give back to their local community.

# EVERGREEN SCHOOL GROUND GREENING PROGRAM

In 2014, PortsToronto signed a three-year agreement to invest in Evergreen Canada's Children's Program, helping to turn downtown school grounds into dynamic, outdoor classrooms where kids can reconnect with and learn about nature and, most important, play in the great outdoors.

In 2016, PortsToronto entered its third year of working with Evergreen to "green" playground spaces at six waterfront and downtown primary schools. The schools that received funding to create greener playground spaces in 2016 were Dundas Junior Public School, Eastdale Collegiate Institute, Second Street Junior Middle School, Father John Redmond Catholic Secondary School and Regional Arts Centre, St. Louis Catholic School and St. Mary's Elementary School.

These six participating schools were among 18 identified and selected by Evergreen through a careful process based on criteria including location, integration with curriculum, existing conditions and innovativeness of approach. For a naturalization project to be truly successful, it is crucial that schools have the opportunity to integrate the development, monitoring and maintenance of the grounds with what happens in the classroom. Many of the schools selected for the program are located in high-traffic neighbourhoods in the downtown core where there is a limited ability to connect with nature due to a lack of greenspace. The projects that have been supported through PortsToronto's contribution to this program range from removing asphalt and planting native plants and vegetable gardens, to creating stone seating and establishing shade trees to enable outdoor classroom experiences. These newly greened school grounds provide a wide range of benefits for children, from an enhanced learning environment and an increase in physical activity to positive community engagement.



"Global honeybee populations are in decline — an alarming trend considering at least one third of our food is pollinated by bees. By converting unused industrial space into a safe haven for honeybees, PortsToronto's urban beekeeping project is just one more way the organization is committing to a more sustainable future."





#### HARBOUR HONEY

The world's bee population is in peril. Habitat loss, pesticide use and new diseases are taking their toll on the pollinators that play an integral role in the food chain. For this reason, this past summer, PortsToronto worked with Alvéole to install urban hives to support the local bee population. With Ontario's colonies in rapid decline, the bees need help now more than ever.

According to Alvéole, since 2007, up to 35 per cent of Ontario's bee colonies have died annually—a significant increase compared with previous losses of 15-20 percent. In fact, last year's losses were reported to be as high as 58 per cent. It may come as a surprise to some that cities provide a thriving environment for bees as there are strict anti-pesticide laws, ample untapped floral diversity and largely unused rooftop space. The benefits of urban beekeeping include local honey and garden pollination throughout the city.

PortsToronto's hives are located on one of our buildings in the Port Lands and provide the ideal location for the bees, given the building's proximity to vegetation and water – and probably the best view of Toronto possible. The hives were installed in June 2016 and the first harvest of honey took place in October, yielding more than 700 jars of sweet, delicious ambercoloured honey.

#### ACHIEVEMENTS:

#### 2016 Targets:

•	Purchase updated dredging and marine spill response equipment to operate more efficiently and effectively.	$\checkmark$
•	Encourage and facilitate sustainability engagement for employees through seminars/lunch-and-learns.	$\checkmark$
•	Create sustainability calendar to help inform employees of upcoming environmental and sustainability events.	$\checkmark$

#### Targets for 2017:

- Explore opportunities to achieve "Fish Safe" designation at Billy Bishop Airport.
- Create Sustainability Pledge for employees and tenants.
- Continue efforts to increase biodiversity through participation in Evergreen Canada's school ground greening program.
- As one of several partners responsible for keeping the harbour and waterfront clean, and as a member of the Aquatic Habitat Toronto Team, continue to co-ordinate with our partners who share responsibility in the cleanup of Toronto's waterfront to ensure continued timely responses.

"PortsToronto is among the 10 largest purchasers of green energy in Canada with Bullfrog Power. Since 2010, PortsToronto has reduced its environmental impact and supported the development of new green energy projects across Canada by choosing Bullfrog Power's green electricity."

> —Ron Seftel CEO, Bullfrog Power

#### ENERGY EFFICIENCY AND CLIMATE CHANGE

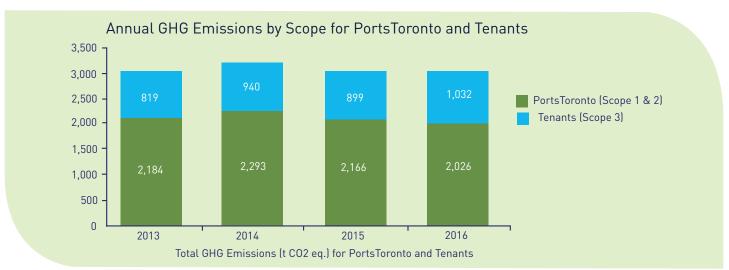
Minimizing greenhouse gas (GHG) emissions is a global necessity. Emissions generated by any operation need to be carefully monitored and reduced where feasible. Under this strategic priority, PortsToronto works to manage emissions and energy use from all of our operations.

The first step to managing emissions is to establish a baseline. Over the past two years, PortsToronto has engaged the Delphi Group to calculate our GHG emissions for each year since 2012<sup>1</sup>. This multiple-year baseline has allowed us to understand the sources of our GHG emissions and the operational influences that impact our emissions over time.

PortsToronto's Scope 1 GHG emissions arise primarily from the energy used in our buildings and vehicles and the fuel used to operate the ferry at Billy Bishop Airport. We also track GHG emissions from the buildings and vehicles operated by our tenants, where we have data.

Our emissions have been relatively stable over the past four-year period. The emissions from our own operations in 2016 were the lowest over the past four years, and total emissions decreased in 2016 from 2015. This decrease is mainly attributable to decreased natural gas consumption for facility heating and decreased fuel used in PortsToronto's ferry fleet.

PortsToronto's overall GHG emissions are modest, however, we continue to make efforts to improve our energy management practices and reduce our energy consumption and associated GHG emissions consumption. Our efforts to reduce GHG emissions focus on our buildings and vehicles.



<sup>1</sup> PortsToronto's GHG emissions are calculated using the globally recognized GHG Protocol developed by the World Resources Institute and World Business Council on Sustainable Development.



building sustainable communitie The past year has seen both progress and uncertainty, but what has remained constant for us is the commitment of our community of hullfrognowared homes and businessee The past year has seen both progress and uncertainty, but what has remained constant for us is the commitment of our community of bullfrogpowered homes and businesses

tor us is the commitment of our community of builtrogpowered nomes and businesses to take action on climate change. For seven years, PortsToronto has been a key part of to take action on climate cnange. For seven years, Forts loronto nas been a key part of our community and has been among the largest green energy purchasers in Canada by hullfroapowering its entire facilities and operations with clean pollution-free electricity our community and has been among the largest green energy purchasers in Canada by bullfrogpowering its entire facilities and operations with clean, pollution-free electricity. But what does it mean to bullfrogpower a building or an airport or a tunnel? It means that Bullfron Power's generators put 100 per cent areen electricity onto the grid to but what does it mean to builtrogpower a building or an airport or a tunnel? It mean that Bullfrog Power's generators put 100 per cent green electricity onto the grid to match the amount of conventional newer used across all of PorteTorento's facilities that Builting Power's generators put TUU per cent green electricity onto the grid to match the amount of conventional power used across all of PortsToronto's facilities and energy to be conventional pulltere Deverties and a location of the second second

match the amount of conventional power used across all of Ports foronto s facilities and operations. Across Canada, Bullfrog Power's green electricity comes from a blend and operations. Across Ganada, Builtrog Power's green electricity comes from a ble of wind and low-impact hydro power sourced from new Canadian renewable energy Today, PortsToronto and Billy Bishop Airport are the only port authority and airport Ioday, Ports loronto 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 953-foot pedestrian turned and connection In Canada to be builtrogpowered entirely by renewable electricity across all oper and facilities, including the airport's 853-foot pedestrian tunnel and connecting facilities.

By choosing Bullfrog Power's green electricity, PortsToronto is reducing its by choosing Builling Power's green electricity, Ports loronto is reducing its environmental impact and supporting the development of new green energy projects in communities across Canada Builters Devertures are supported by the second seco environmental impact and supporting the development of new green energy proj in communities across Canada. Bullfrog Power uses our customers' support to In communities across Ganada. Builtrog Power uses our customers support to help build new, community-based green energy projects—such as solar panels on schools, bioges at the Toronte Zee and renewable energy projects with Firet Nation help build new, community-based green energy projects—sucn as solar panels on schools, biogas at the Toronto Zoo and renewable energy projects with First Nations buildings.

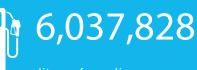
Community impact is essential for advancing sustainability. At Bullfrog Power, we're Community impact is essential for advancing sustainability. At Bullfrog Power, we're impressed by PortsToronto's focus on building a sustainable community. Recent results include reduced noise complaints. An per cent of travelers walking biking or taking Impressed by Ports Ioronto's focus on building a sustainable community. Recent result include reduced noise complaints, 40 per cent of travelers walking, biking or taking transit to the airport and a 75 per cent reduction in vehicles queuing peer the size communities.

Include reduced noise complaints, 40 per cent of travelers walking, piking or taking transit to the airport and a 75 per cent reduction in vehicles queuing near the airport By choosing clean power and encouraging sustainable actions at Billy Bishop Airport by cnoosing clean power and encouraging sustainable actions at Billy Bisnop Airport and beyond, PortsToronto is helping to further the conversations happening all around us about how we can improve our own communities by committing to sustainable action since the opening of the pedestrian tunnel. and beyond, Ports loronto IS helping to turther the conversations happening all around us about how we can improve our own communities by committing to sustainable actions today. Communicating the importance of custainability and cusporting area energy are us about how we can improve our own communities by committing to sustainable actions today. Communicating the importance of sustainability and supporting green energy are essential if we are to achieve our vision of a renewably newered future

today. Communicating the importance of sustainability and supporting g essential if we are to achieve our vision of a renewably powered future.

Ron Seftel CEO, Bullfrog Power Since joining the bullfrogpowered community, PortsToronto has displaced more than

14,175 of CO, Tonnes



litres of gasoline

Since joining the bullfrogpowered community, PortsToronto has displaced more than

Tonnes 14,175 of CO<sub>2</sub>



The same amount of carbon sequestered by more than

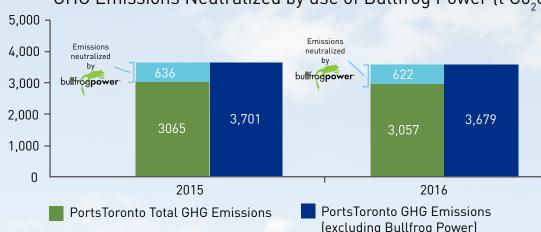
#### 4./0 hectares of forest in 1 year.

#### BULLFROG POWER: PORTSTORONTO'S MOST SIGNIFICANT GHG NEUTRALIZATION EFFORT

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 2016, PortsToronto reduced emissions by approximately 13 per cent using Bullfrog Power's clean energy, which comes exclusively from a blend of EcoLogo<sup>M</sup>-certified wind and low-impact hydro power. These percentages are even greater when tenant emissions are included (17 per cent in 2016) as PortsToronto also purchases Bullfrog Power on behalf of our tenants.

PortsToronto is one of the top ten purchasers in of green energy in the country from Bullfrog Power. 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 853-foot pedestrian tunnel and connecting buildings.



#### GHG Emissions Neutralized by use of Bullfrog Power (t C0,e)

<sup>2</sup> Total PortsToronto GHG emissions (excluding Bullfrog Power) is equivalent to PortsToronto's location based emissions, as per the GHG Protocol Scope 2 Guidance.

Electricity grid emission factors, which are used to calculate GHG emissions, are published annually by Environment Canada. Emission factors are always published in a two-year time lag. For example, emission factors accurate for 2014 are published in 2016. Each year, PortsToronto's historical GHG emissions are updated using the most accurate information available



#### KEEPING VEHICLES OFF TORONTO'S HIGHWAYS

Shipping bulk cargo through the Port of Toronto helps to reduce traffic congestion on Toronto's roads and highways and is a more energy-efficient way to transport goods. Since 1793, the Port of Toronto has served as Toronto's gateway to the St. Lawrence Seaway and to marine ports around the world.

With the expansion of Toronto's urban landscape, construction materials based at the Port of Toronto's storage and staging areas travel shorter distances to get to the worksite, cutting down on construction costs, congestion and unnecessary fuel emissions. 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 on the same amount of fuel. By operating the port and promoting shipping as a more efficient alternative to delivering goods to Toronto, through programs like Highway H20, PortsToronto is working to minimize the road traffic and related emissions that result from transporting goods by truck.

In 2016, more than 1.8 million tonnes of bulk cargo, such as salt, sugar and cement was delivered through the Port of Toronto. The cargo delivered by ship took approximately 45,000, 40-tonne trucks off Toronto's already congested roads and highways.

#### OUR WORLD INTERACTIVE

In August 2016, PortsToronto launched *Our World* interactive on **www.portstoronto.com** which highlights the connections between its business units, the community and the rest of the world. From the new Billy Bishop Airport pedestrian tunnel to dredging operations and the Leslie Street Spit wetlands creation, *Our World* provides an introduction to these diverse sustainable initiatives. In addition, a Port of Toronto map provides an overview of the port and the role it plays in importing goods and materials to the heart of Toronto.

Visit PortsToronto's website to take a tour of the Port of Toronto and learn about the environmental benefit of marine transportation and the time it takes for ships to complete their journey.

#### IMPROVING FLEET EFFICIENCY

The primary objective of any carbon management effort must be, as much as possible, to reduce carbon emissions at the source. To this end, PortsToronto has implemented initiatives aimed at reducing the emissions from the vehicle fleet used to support our business operations, including:

- Implementing an anti-idling policy for vehicles on all PortsToronto properties;
- Phasing out of vessels with two-stroke outboard motors and shifting to cleaner and more efficient four-stroke models; and,
- Replacing all operational vehicles with hybrid models by 2020, where commercially available.



#### CASE STUDY: BILLY BISHOP AIRFIELD REHABILITATION PROJECT

A significant three-year rehabilitation program to replace the existing aging civil and electrical infrastructure (pavements and lighting) for the airport's runways, taxiways and apron areas began in June 2016. Given that some construction activities must take place during night-time hours when the airport is closed to aircraft traffic, PortsToronto implemented measures to minimize the impact of construction activities on local residents including limitations on construction vehicle access and construction-related noise and lighting.

In order to reduce construction-related traffic through the Bathurst Quay Neighbourhood, the majority of equipment and material was transported by barge from wharves located at PortsToronto's Marine Terminal property in the Port Lands to a temporary dock on the east side of the airport. Specifically, the floating barge can carry 900 tonnes of aggregate material from the Port Lands to the airport in one trip, eliminating the need for 64 dump trucks (32 each way) on the roads in the neighbourhood. This accounted for 4,125 less truck movements via the airport neighbourhood's roadways during Phase I of the airfield rehabilitation project.

Further, rather than disposing of the asphalt remnants from the construction process, the grindings were used to build the new perimeter road within the airport property.

#### ACHIEVEMENTS:

#### 2016 Targets:

- Promote energy conservation through internal campaigns aimed at encouraging energy-use reduction.
- Upgrade Billy Bishop Airport's runways and taxiway lights to LED.



• Install more bike racks at the airport.

#### Targets for 2017:

•	Continue to explore more energy- efficient ways to heat Port facilities.	
•	Continue to increase the efficiency of our vehicle and marine fleets.	
•	Make progress toward goal to replace all operational vehicles with hybrid models by 2020, where commercially available.	
•	Explore the possibility of buying/ selling carbon credits to offset our carbon footprint in collaboration with stakeholders, clients and partners.	
•	Maintain HVAC (Heating, Ventilation and Air Conditioning) equipment for leak prevention.	
•	Explore options to conduct	

organization-wide energy audit.



#### RESPECTING ENVIRONMENTAL LAW AND REGULATION

PortsToronto strives to manage all of our operations in a sustainable manner and with minimal environmental impact and, like all ports and airports, is subject to Environment Canada's environmental regulations and laws. PortsToronto conducts internal reviews of environmental compliance, as well as associated record keeping and data-management practices.

No incidents of significant environmental noncompliance and no fines were levied against PortsToronto by Environment Canada in 2016. In fact, there have been no incidents of significant environmental non-compliance and no fines levied against PortsToronto by Environment Canada over the past six 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 the Outer Harbour Marina, Billy Bishop Airport and our owned operations at the Port of Toronto.

# PortsToronto also undertakes regular, detailed environmental compliance audits.

#### DID YOU KNOW?

Porter Airlines has implemented a procedure that requires planes taxiing to the gates to operate on one engine to reduce both carbon impacts and noise.

#### ACHIEVEMENTS:

2016 Targets:

METRIC	2016 RESULTS
Fines for instances of environmental regulatory non-compliance (value).	\$0
Significant spills (volume and material).	0

#### Targets for 2017:

 Continue to engage and train staff in standard operating procedures to ensure continued compliance with environmental regulations.



Lucy is a member of the animal team at Billy Bishop Airport, whose job it is to discourage wildlife from the airport's runways and airspace.



#### WILDLIFE MANAGEMENT AT BILLY BISHOP AIRPORT

To ensure the safety of our 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. We use Falcon Environmental Services, a recognized industry leader in the field of wildlife management at airports in North America, to review our plans and provide extra expertise.

#### PURSUING ENVIRONMENTAL AND SAFETY EXCELLENCE IN MANAGEMENT SYSTEMS

#### ENVIRONMENTAL MANAGEMENT

PortsToronto has a long history of environmental stewardship and responsible management. This is achieved, in part, by maintaining and utilizing management practices and Standard Operating Procedures (SOPs) for each function PortsToronto undertakes.

Various products are used by PortsToronto to maintain our equipment and facilities to ensure safe operation. These products are managed and contained in a rigorous manner to ensure safety and the protection of the environment.

In daily operations, such as aircraft fueling, strict protocols are in place to reduce the risk of spills and, in the unlikely event of a spill, PortsToronto's Works and Environmental Services Department and the airport's maintenance and fire departments are thoroughly trained in mitigation and clean up methods to prevent contaminants from entering the natural environment.

Billy Bishop Airport also carefully manages the use, collection and disposal of de-icing and anti-icing chemicals as governed by a Sanitary Discharge Agreement with the City of Toronto, dated December 20, 2013. Application of de-icing and anti-icing chemicals to aircraft is performed only in designated, approved areas of the airport, designed so that overland drainage flows into designated catch basins and underground sewers. Snow clearing from the designated aircraft de-icing area, which may contain de-icing fluid, is directed to an adjacent airfield location that is drained and directed to the sanitary sewer utilizing metered pumps in accordance with the Sanitary Discharge Agreement. This process is further monitored and audited by the City of Toronto.

Regulations require PortsToronto to follow the Standard System for the Identification of the Hazards of Materials for Emergency Response, which sets out the process used by emergency personnel to quickly and easily identify the risks posed by hazardous materials. This helps determine what, if any, special equipment should be used, procedures followed or precautions taken during the initial stages of an emergency response. It also helps to ensure hazardous materials are disposed of in accordance with environmental law and regulations.



#### DE-ICING AT BILLY BISHOP AIRPORT

PortsToronto manages aircraft de-icing and anti-icing fluids with a dedicated glycol containment system that traps surface runoff and thoroughly contains glycol from de-icing and anti-icing operations.

#### SUSTAINABLE SITE DESIGN AND CONSTRUCTION

In the planning, development and operational phases of any construction activity, PortsToronto and its contractors follow best practices related to sustainability and environmental protection. Over the past two years, PortsToronto has implemented the following initiatives aimed at raising the bar on sustainable construction.

100% builfrogpower

#### **BILLY BISHOP AIRPORT**

#### PEDESTRIAN TUNNEL

On July 30, 2015, PortsToronto opened the pedestrian tunnel connecting the island-based airport to Toronto's mainland. The tunnel allows passengers to walk between the mainland and the airport, 100 feet beneath the surface of Lake Ontario, in less than six minutes, dramatically improving the convenience and efficiency of the airport.

The tunnel was built through a public-private partnership (P3) model, meaning no taxpayer dollars were spent on the project. A portion of the \$20 Airport Improvement Fee (AIF) paid by departing passengers pay for the tunnel's \$82.5-million construction cost.

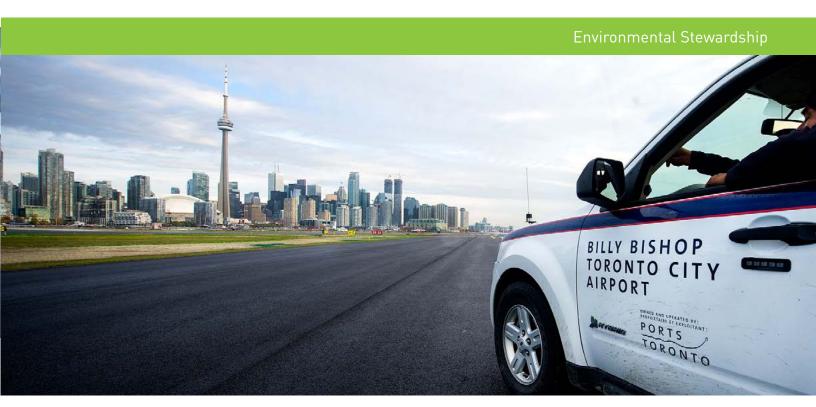
The award-winning pedestrian tunnel represents one of the largest infrastructure investments made to date by PortsToronto. From the project's inception, the tunnel was designed and constructed with sustainability in mind. In addition to being 100 per cent powered with clean, renewable electricity from Bullfrog Power, the energy efficiency with which the tunnel operates was assessed as part of the Request for Proposals, and continues to be monitored and reported on under the project agreement. The tunnel's mainland pavilion and island atrium incorporate such "green" features as LED lighting and double-glazed windows to reduce heat loss in winter and heat gain in summer. Most important, the tunnel serves to reduce the airport's impact on the local community, improving traffic and passenger flow and reducing lineups given that passengers can now travel on their own schedules and no longer arrive and depart in groups according to the ferry's schedule.

The tunnel is also having a positive impact on traffic flow in and around the airport according to an updated research study conducted by Dillon Consulting on behalf of PortsToronto. Now, with more than 90 per cent of passengers choosing to take the convenient, six-minute walk through the tunnel, the study completed by Dillon confirmed a notable ease in traffic and passenger flow at the airport.

#### AIRFIELD REHABILITATION PROJECT

As referenced throughout this report, a significant three-year rehabilitation program necessary to replace existing aging civil and electrical infrastructure (pavements and lighting) for the airport's runways, taxiways and apron areas is currently underway at the airport.

This rehabilitation project will result in energy savings, and by resurfacing the runways and increasing the friction-level of the surface, it may be possible for aircraft to slow down sooner, thereby reducing the carbon emission of the engines.



Given that a portion of construction activities occur during nighttime hours when the airport is closed to aircraft traffic, PortsToronto has implemented a number of measures to minimize the impact of construction activities on local residents.

The following initiatives have been implemented throughout the project to date and will continue to be applied throughout the phases of the Billy Bishop Airfield Rehabilitation Program, which will be completed in 2018, with the goal of raising the bar on sustainable construction.

These initiatives include:

- The overall project plan incorporates multiple individual project elements that would otherwise be completed over a longer construction duration and by multiple contractors thus reducing the overall impacts of construction on the local community;
- The construction schedule has been compressed to improve efficiency and reduce construction noise and emissions;
- Existing airfield lighting fixtures are being converted to LED resulting in energy savings;
- Reduction in the overall quantity of earthworks required through specific pavement design strategies;
- Reusing materials in the construction of new facilities such as airside perimeter roads;
- Reusing asphalt millings to offset total volume of new granular material required;
- Barging of material and equipment, resulting in removing a significant number of trucks from the city roads;

- Construction of a Ground Run-up Enclosure (GRE) facility intended to reduce noise during aircraft engine maintenance run-ups;
- Public outreach and meetings (Community Liaison Committee meetings, Doors Open Toronto information booth, etc.); and,
- Job creation and economic benefits to the GTA

   a large majority of the construction team is
   composed of locally (GTA) based companies.

#### SOLAR-POWERED INTRUSION DETECTION SYSTEM AT BILLY BISHOP AIRPORT

As a commitment to security and sustainability, in 2016 the airport issued a Request for Proposals to identify a contractor capable of designing and implementing a security solution that would assist in protecting airfield assets and restricting access. Environmental responsibility and sustainability were identified as areas that would be taken into consideration during the proposal evaluation stage to determine a suitable contractor. The project was awarded to a contractor offering a solar powered solution, helping prevent an increase to our overall carbon footprint.



#### PORT OF TORONTO

#### THE IRON GUPPY

In July 2016, the Iron Guppy officially came into service, replacing the William Rest, which was built in 1961 for the Toronto Harbour Commissioners (now PortsToronto). The new tugboat, which was built in Wheatley, Ontario, works in the Port and Harbour of Toronto to provide a variety of marine services, including environmental spill response, dredging, ice-breaking and navigation-marker maintenance. When necessary, the tugboat also provides emergency assistance to the Toronto Police Service and Toronto Fire Services marine units. Mechanical systems for the vessel were selected to increase overall efficiency.

#### WAREHOUSE 52

Ten centimetres of insulation were added to the roof of Warehouse 52 at the Port of Toronto as part of the overall roof membrane replacement program. The addition of insulation increases the resistance-value or "R-value" of the roof by 22.5, improving overall facility energy efficiency by reducing heat loss in winter and heat gain in summer within the warehouse and office space of the building. In addition, 15 existing 1000w metal halide rooftop light fixtures have been replaced with a 300w equivalent LED lighting.

The LED retrofit will save approximately 46,000 kWh annually in energy use.



#### **ENGAGING OUR YOUTH**

As part of our commitment to the waterfront community, PortsToronto launched a contest to name our new tugboat. Students from Toronto's waterfront elementary schools harnessed their creativity and put together a long-list of nearly 70 names, from which the top five entries were selected by a panel of judges consisting of Marilyn Bell, the first person to swim across Lake Ontario and for whom the Billy Bishop Toronto City Airport ferry is named; Mike Filey, Toronto Sun columnist; and Angus Armstrong, Harbour Master and Chief of Security for PortsToronto.

Rendering of Billy Bishop Airport Terminal Upgrade

#### IMPLEMENTING SUSTAINABLE PRACTICES WITH OUR PARTNERS

#### TERMINAL UPGRADES

In October 2016, PortsToronto approved plans submitted by Nieuport Aviation Infrastructure Partners, owner and operator of the airport's passenger terminal, to undertake upgrades and enhancements to the terminal at the airport.

The plans include increasing the terminal's footprint to accommodate the airport's growth since 2010, when the terminal was built, and to further enhance its world-class passenger experience. Specific improvements include reconfiguring offices and administrative areas to accommodate passenger processing needs. Overall, the changes will add approximately 2,500 square metres to the terminal, with the majority of the increase being in the passenger lounges. The terminal upgrade will provide the opportunity to incorporate environmentally responsible and sustainable infrastructure in the terminal's design.

#### ACHIEVEMENTS:

#### 2016 Targets:

 Continue to keep sustainability as a key factor in our decisions involving current maintenance and operational work, including operational maintenance work at the Ship Channel Bridge.

#### Targets for 2017:

- Explore opportunities to work with waterfront stakeholders on the Don River Mouth Naturalization and Port Lands Flood Prevention Project.
- Continue to keep sustainability as a key factor in our decision-making as we move forward with future developments.



#### **DID YOU KNOW?**

The Outer Harbour Marina holds an annual auction for abandoned boats and other equipment each fall. In October 2016, 57 items, including 42 boats, were included in the auction. This year's auction was particularly successful with 24 boats and all surplus equipment sold. Rather than ending up in the landfill, this equipment is refurbished and given new life by their purchasers.

#### WASTE MANAGEMENT

The responsible management of waste by minimizing its production and maximizing its reuse is important to PortsToronto's sustainability efforts.

Waste is managed separately at each of PortsToronto's business units and each unit strives to:

- Ensure proper disposal of all hazardous waste;
- Capture all valuable waste streams (such as scrap metal and tires); and,
- Promote general recycling.

Some of the specific ways in which PortsToronto manages waste include:

- The collection and recycling of all used electronics (computer monitors, printers, smartphones, etc.), batteries, toners and cartridges;
- The placement of blue bins at all worksites and work stations to encourage recycling;
- The digitization of our communications, making all reports/publications available online so as to reduce the need for print copies;
- Replacing all pod-based coffee makers with machines that use/grind loose beans to eliminate coffee pod waste;
- Banning single-use plastic water bottle from all offices.

PortsToronto also contracts Safety-Kleen, the largest re-refiner of used oil and provider of parts-cleaning services in North America, to collect, recycle, reuse and/or properly dispose of the antifreeze, oil, oil filters, vehicle batteries and other equipment used to service the Port of Toronto, harbour operations and Billy Bishop Airport.

In 2016, PortsToronto conducted a review of waste management practices and generated an initial baseline for waste metrics. Accurate data for waste metrics are not available across all operations, however, estimates were calculated for most waste streams. These estimates provide a reasonable representation of the amount of waste generated at PortsToronto. The organization will continue to improve waste data collection as part of our waste management efforts.

WASTE TYPE	ESTIMATED WEIGHT (TONNES PER YEAR)
Total Garbage	300-600
<b>Total Recycling</b> -Organics -Mixed recycling	<b>40 - 80</b> 1 - 3 40 - 80
Total Waste	350-700
Estimated Diversion Rate	12%

# Keep hydrated. $H_2O$ to go.

After clearing security, visit our water refill stations to keep hydrated.



#### ENCOURAGING THE USE OF REUSABLE WATER BOTTLES AT BILLY BISHOP AIRPORT

PortsToronto worked with Nieuport Aviation Infrastructure Partners to reduce the need for plastic water bottles in the Billy Bishop Airport lounge.

When going through security, passengers are required to empty their water bottles as liquids over 30mL are not permitted by the Canadian Air Transport Security Authority (CATSA).

The installation of new water stations allows passengers to refill their water bottles or the reusable drinking glasses available in the airport lounges—thus eliminating the need to purchase or use plastic water bottles.

#### CONTINUED IMPROVEMENT

PortsToronto is committed to the continual improvement of responsible waste management. We recognize that while our waste management practices are strong in some areas, there is room for improvement in others. For example, we will continue to work to enhance general recycling across PortsToronto's business units in 2017.

In 2016, the Leslie Street Spit, designed and built by PortsToronto, served as a place for clean surplus fill and rubble from development sites within Toronto to be brought and reused as a base for the construction of parkland associated with Tommy Thomson Park, the much loved natural habitat enjoyed by hikers, bikers and bird-watchers alike.



#### ACHIEVEMENTS:

#### 2016 Targets:

•	Explore options to improve waste diversion rate.	$\checkmark$
•	Continue to promote waste reduction through internal campaigns and engage employees on topics such as e-waste recovery, becoming paperless, and increasing recycling efforts.	$\checkmark$
•	Continue to improve the accuracy of waste metrics and tracking of waste data.	$\checkmark$
•	Install water bottle refill stations at the airport.	$\checkmark$

#### Targets for 2017:

 Human Resources paperless payroll system implementation.

# Community Engagement

Fines for instances of health and safety non-compliance.

# 40%

Travellers walk, bike or take public transit or the airport's shuttle buses to access Billy Bishop Airport.

#### On average only

of all traffic in the surrounding area can be attributed to Billy Bishop Airport.

### 90%

Passengers use the Billy Bishop Airport Pedestrian Tunnel.



Annually more than

organizations.

 $\mathbf{O}\mathbf{O}$ 

provided to charities and community

М°-



Bike Share Toronto's Top 10 Busiest Stations is at Billy Bishop Airport.

Increase

Number of passengers departing via airport's shuttle bus.

aller () aller () (aller



38%

complaints in 2016.



Owning and operating an active port, marina and the ninth-busiest airport in Canada in a sustainable manner along Toronto's thriving, mixed-use waterfront is complex and takes a strong commitment to working with the local community to ensure balance. PortsToronto takes great pride in being part of the community in which we operate and in our ongoing interest in investing in, engaging with, and responding to those who live, work and play in the area.

### PortsToronto's targeted priority areas related to community engagement are:





Toronto Inner Harbour

**DO 70** REDUCTION IN OVERALL NOISE COMPLAINTS IN 2016. 89% REDUCTION IN COMPLAINTS RELATED TO FERRY AND MAINLAND OPERATIONS 3 IN 2016 vs 26 IN 2015

### NOISE MANAGEMENT

Operating an airport that is part of a thriving, mixeduse urban waterfront requires effort to ensure that our operations stay in balance with the neighbourhood, that an effective equilibrium is struck between commercial and community interests, and that measures are in place to mitigate noise from the airport's operations.

### REPORTING BACK TO THE COMMUNITY

### ANNUAL NOISE MANAGEMENT REPORT

In February 2017, PortsToronto released its annual Noise Management Report, which is a compilation of all noise data and complaints submitted to the airport's Noise Management Office over the course of 2016.

Overall noise complaints decreased by 38 per cent, going from 386 complaints in 2015 to 236 complaints in 2016 as we continued to work in concert with the public and the airport's air carriers to develop enhanced programs, procedures and infrastructure aimed at mitigating the airport's noise impact on the surrounding community. Further, in 2016, there were 36 complaints related to engine run-ups, which marks a 37 per cent reduction from 2015. With more than 90 per cent of airport passengers choosing to use Billy Bishop Airport's pedestrian tunnel, surges in traffic demand at the airport's mainland terminal and along Eireann Quay have also been reduced significantly. The recent launch of an enhanced free airport shuttle service that drops-off/ picks-up passengers outside the mainland pavilion and provides travellers with convenient, reliable transport to the airport has reduced car traffic and related noise. In addition, redesigned taxi and parking areas and additional bike racks on both the island and the mainland side of the airport have been installed to encourage non-vehicular access to the airport to further mitigate the airport's noise impact.

### VORTEX

In 2015, Billy Bishop Airport's Noise Management Office implemented Vortex—a customizable tracking and logging software platform designed specifically for the needs of an airport environment—greatly enhancing how noise complaints are tracked, documented and responded to.

As a part of Toronto's thriving mixed-use waterfront, Billy Bishop Airport works with the community to identify and implement solutions that enhance our noise-mitigation efforts. We are proud to have implemented significant noise-reduction initiatives,

### Community Engagement



including the opening of the airport's pedestrian tunnel, the installation of engine mufflers aboard our airport's ferry and the introduction of Vortex to our noise management office.

### WEBTRAK

PortsToronto continues to offer free community access to Webtrak, an Internet-based software service that enables anyone with a computer, smartphone or tablet to gather information on an aircraft they hear flying overhead.

### NOISE MANAGEMENT OFFICE

Billy Bishop Airport's Noise Management Office, which was significantly enhanced in 2010 with the implementation of a state-of-the-art Aircraft Flight Tracking and Noise Monitoring System, has dedicated staff in place to collect, analyze and respond to noise complaints and monitor daily operations. In 2016, 99 per cent of complaints were responded to within a five-day period. In addition to reporting on an annual basis, the Noise Management Office also produces a monthly noise report that is posted to the PortsToronto website.

### NOISE MONITORING TERMINALS

Noise Monitoring Terminals (NMTs) are the foundation of the airport's noise monitoring system and provide ongoing noise-level data to the airport's Noise Management Office. This data is then used in long-term noise mitigation planning and in responding to noise complaints from the surrounding community.

Two NMTs, located on the Toronto Police Marine Unit building and the airport's on-island fire hall, were upgraded and a third NMT was installed on the mainland ferry terminal building in 2016. This new NMT enables enhanced tracking of noise generated by aircraft run-ups and the airport's ferry operation—two key areas of focus under Billy Bishop Airport's overall noise management program.

The noise data transmitted by the NMTs is also viewable through WebTrak.

In March 2017, Billy Bishop Toronto City Airport won the Environmental Achievement Award for Best Noise Mitigation Program. The ACI-NA Environmental Achievement Awards recognize airports that strive to protect and preserve the environment through their programs, initiatives and projects.



### **GROUND RUN-UP ENCLOSURE**

While required and regulated as part of standard aircraft maintenance, engine run-ups can be a disturbance to the community as testing is often done at high power. A Ground Run-up Enclosure (GRE) is a three-sided, open-top facility, able to accommodate an aircraft while maintenance mechanics conduct high-power engine run-up inspections.

Acoustically and aerodynamically designed, a GRE can dampen the acoustic impact from engine run-ups. The steel-framed structure is fully lined with acoustic panels designed specifically for the purpose of absorbing engine sound and reducing noise impacts on the surrounding community.

The construction of a GRE to dampen aircraft engine run-up noise is part of PortsToronto's key infrastructure and capital improvements at Billy Bishop Airport.

### ACHIEVEMENTS:

### Targets for 2017:

- The construction of infrastructure aimed at reducing the noise impact of the airport on the local community, including completing construction of the Ground Run-up enclosure in 2017.
- Continued discussion of noise issues at Community Liaison Committee Meetings.

### TRAFFIC MANAGEMENT

Rapid condominium development combined with other factors, venues and attractions such as the Rogers Centre, and the growth of the airport have meant increases in the number of cars in the local area. The City of Toronto recognizes that rapid residential and business development in the area, with no significant improvement in infrastructure, roads and transit, has led to issues of congestion and poor traffic flow. As such, the City began work in 2015 on a Bathurst Quay Neighbourhood Plan to study improvements that can be made to ensure that this mixed-use community continues to thrive.

For its part, Billy Bishop Airport continues to encourage travellers to bike, walk, shuttle or take transit to the airport and has put measures in place to encourage this shift. For example, ease of airport access by alternate forms of transportation, such as by bicycle and by foot, was prominently featured in the award-winning It's My Airport marketing campaign.

The Billy Bishop Airport pedestrian tunnel is also having a positive impact on traffic flow in and around the airport. According to a research study conducted by Dillon Consulting<sup>3</sup> on behalf of PortsToronto, on average, 40 per cent of travellers observed during the study done in October 2015 walked, biked or took transit to/from the airport. This represents the highest percentage of non-single-vehicle usage for any airport in North America and is a significant component of our traffic management strategy. Prior to the tunnel's opening in July 2015, passengers arrived at and departed from the airport by ferry in large groups every 15 minutes, causing surges in traffic demand at the mainland terminal and along Eireann Quay, the entrance road to the airport. Now, with more than 90 per cent of passengers choosing to take the convenient, six-minute walk through the tunnel, the study completed by Dillon confirmed a notable ease in traffic and passenger flow.

Compared with findings from the last study completed in April 2015, a more even distribution of shuttle ridership was noted, virtually eliminating overcrowded or empty departing shuttle-runs, and more frequent and gradual turnover of taxis.

The study also indicated that, on average, 10-16 per cent of all traffic in the surrounding area can be attributed to Billy Bishop Airport. Specifically:

- on Lake Shore Blvd., only 2-4 percent of traffic can be attributed to the airport;
- on Bathurst Street north of Queen's Quay, 50-60 per cent of the traffic is airport related;
- in the area to the west, including Stadium Road, 5-8 per cent of traffic can be attributed to the airport; and,
- on other routes such as Dan Leckie Way and Queen's Quay to the east, airport traffic constitutes approximately 15-35 per cent of total traffic.

<sup>3</sup>The study conducted by Dillon Consulting was undertaken during airport peak hours and focused on conditions related to traffic volumes, modal splits and taxi occupancy levels for travel to and from the airport. The data gathered will continue to provide background information to measure future conditions related to traffic volumes.

### Community Engagement



### **BIKE RACKS**

Over the past four years, in an effort to continually reduce vehicle traffic associated with the airport, PortsToronto has incorporated bike racks on both the island and mainland side of the airport's property. With four covered racks on the island, cyclists can leave their bikes for the duration of their trip knowing that they are secure and safe from the elements.

In addition, the airport Bike Share station at the Bathurst Street/Eireann Quay intersection is one of the top ten busiest stations in the city's network. Since July 2016, it has generated approximately 90 rides per day, with 49 per cent of these rides starting at the station and 51 per cent ending at the station. The City of Toronto is currently considering plans to expand the 19-bicycle docking station due to its popularity.

### ACHIEVEMENTS:

### 2016 Targets:

 Increased efforts to encourage passengers to use the complimentary airport shuttle to/from the airport with a new PortsToronto App that allows passengers to view the shuttle location in real time on any device —desktop, tablet or smartphone — and to use transit or other forms of transportation to reduce individualvehicle traffic.

### Targets for 2017:

- Increasing the number of bike racks available at the airport.
- Encouraging passengers to use the airport shuttle, public transit or other forms of environmentally friendly transportation to reduce noise from private vehicles.

### BIKE SHARE

### **DID YOU KNOW?**

The Billy Bishop Airport Bike Station at the Bathurst Street/Eireann Quay intersection is one of the top ten Bike Share stations in the City of Toronto's network.



PortsToronto employees wear Mustang Personal Flotation Devices (PFDs) while working near open water.

### EMPLOYEE HEALTH AND SAFETY

Health and safety goes hand-in-hand with environmental management as key priorities for PortsToronto. The wellbeing of our employees is directly related to the success of our businesses, and maintaining a strong track record of health and safety performance is critical. Safe practices for PortsToronto's employees and contractors are embedded into the day-to-day operations of our business units, and health and safety policies are implemented at all levels of our organization.

PortsToronto holds monthly Joint Occupational Health & Safety Committee meetings, with representatives from each business unit in attendance. These meetings provide a consistent and constructive forum for communication with employees across our organization on priority health and safety issues and programs. Furthermore, a monthly Health & Safety calendar is shared with all employees in the PortsToronto internal newsletter providing tips on staying safe in the workplace.

### HEALTH AND SAFETY MANAGEMENT SYSTEM

PortsToronto has developed a comprehensive series of corporate health and safety policies, along with Safe Operating Procedures (SOPs) that provide a thorough guide to compliance with all required regulations and are made available to every employee through unit management. All policies and procedures are reviewed on a regular basis to ensure ongoing improvement.

## MINIMIZING HAZARDS IN THE WORKPLACE

Like many workplaces in Canada, PortsToronto business units are required to conform to Workplace Hazardous Material Information System (WHMIS) requirements to ensure the safe use of chemicals. All employees who have interaction with chemicals as part of their work have been trained in this discipline, as regulated by the Canada Labour Code.

An integral component of WHMIS is Material Safety Data (MSD) sheets, which PortsToronto maintains for every chemical used in the workplace. These sheets expire every three years. In 2014, to help ensure that all employees have access to the most up-to-date information, PortsToronto digitized the MSD sheets into an online service that automatically updates expired sheets and provides new chemical information as it becomes available.



### TRACKING HEALTH AND SAFETY PERFORMANCE

Minimizing workplace injuries is an obvious key component of maintaining a strong track record on health and safety. As such, to address hazards and prevent injuries, PortsToronto continually tracks data related to workplace instances of health and safety compliance, the number and nature of workplace injuries, and total lost days in an effort to create new policies and procedures to eliminate the chance of recurring injuries. In 2016, there were six lost-time injuries, resulting in a total of six lost days of work.

METRIC	2016 RESULTS
Fines for instances of health and safety non-compliance (value).	\$0
Injuries resulting in lost time.	6
Total Lost Days.	6

### CONTINUING EDUCATION AND **AWARENESS**

Prevention is a key component of reducing workplace injuries and creating healthy work environments. For PortsToronto, this is achieved not only by identifying dangers and eliminating risks, but through continued training and educational initiatives.

Health and safety education is part of every employee's orientation and job description. All staff have access to PortsToronto's health and safety policies and procedures, which cover a wide variety of topics from workplace harassment to electrical safety. For more specialized roles, PortsToronto employs an in-house trainer to educate employees in specific disciplines such as safe fork-lift operation certification and how to operate in confined spaces.

At Billy Bishop Airport, all employees are trained in accordance with Transport Canada regulations. Employees are required to attend courses on Safety Management Systems (SMS) and Human and Organizational Factors, which provide instruction on proactive safety management. Billy Bishop Airport management also holds monthly SMS Committee meetings to discuss issues related to safety and develop corrective/preventive action plans to remedy any issues.

### Community Engagement



Over and above this training, employees who work airside servicing Billy Bishop Airport's runways and airfield are provided with specialized equipment and vehicle operation training, which they are required to update each year. Each member of the airport's ferry crew also holds Transport Canada licences for the functions they perform. These licences are renewed on a regular basis.

In addition, the airport's fire department does regular internal and external emergency services training throughout the year, including a full-scale simulation every two years, with a table-top exercise in intervening years. 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 Services (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.

### ACHIEVEMENTS:

### Targets for 2016:

- Streamline reporting and move toward integration of Environment and Health and Safety management systems.
- Work to better inform employees about additional health and safety training programs and courses that are available and encourage them to take part.

### Targets for 2017:

- Standardize and centralize data collection and management across business units.
- Refresh all of our Occupational Health & Safety Policies to ensure we are in line with industry best practices.

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

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### COMMUNITY INVESTMENT

Sustainable organizations care about the community in which they operate and PortsToronto is no exception. PortsToronto has a long tradition of working with community members who share our commitment to fostering strong and sustainable communities along Toronto's waterfront. Each year, PortsToronto provides more than \$500,000 in donations, sponsorships and in-kind contributions to local initiatives, activities and events with the goal of promoting healthier, greener and empowered communities.

### In 2016, PortsToronto funded 25 community initiatives and organizations, including the following:

- Evergreen Brickworks School Greening Program
- Redpath Waterfront Festival
- Aloha Toronto (benefitting children with autism)
- Set Sail for Hope
  - (benefitting Camp Trillium children living with cancer) Toronto Taste (benefitting Second Harvest)
- Harbourfront Centre
- Harbourfront Centre
- Beaches International Jazz Festival
- Ireland Park Foundation
- Global Forum
- CivicAction
- Moorelands
- (benefitting youth living in under-served neighbourhoods) Easter Seals Regatta
- (benefitting youth with physical disabilities)
- Lake Ontario Waterkeeper
- Pollution Probe
- Youth Boatworks (helping disadvantaged youth learn life skills)
- Disabled Sailing Association
- (benefitting people living with a disability)
- Winterfest
- Toronto Brigantine
- (helping to build character in youth through sail training)
- Pilots N Paws (benefitting animals in need)
- Billy Bishop House Museum
- Emily's House and Philip Aziz Centre for Hospice Care (supporting adults and children living with life-limiting illnesses)
- Waterfront Neighbourhood Centre—Room 13
- Make-A-Wish Foundation
- Fly for M.S.
- Hope Air



### SAIL-IN CINEMA<sup>TM</sup>

PortsToronto's Sail-In Cinema was first conceived of six years ago to mark the organization's centennial year and as a means of encouraging people to come and enjoy the sights and sounds of the waterfront. To this day, the free annual event continues to be a way for PortsToronto to give back to the community in which it operates, connect with residents and spread awareness on the role the organization plays in the waterfront community.

# Keep Connected.

### CONNECTING ONLINE

@PortsToronto @BBishopAirport @OHMtoronto

PortsToronto BBishopAirport OHMtoronto PortsToronto continues to engage with the public using technologies and social media tools. Social media platforms are used to promote various community and PortsToronto-related events, as well as to answer questions and address the concerns of our constituents.

PortsToronto also provides daily updates on our website regarding news and information that is of interest to our stakeholders and the community. In 2016, PortsToronto launched its redeveloped mobile optimized website, designed to make it easier for visitors, users and stakeholders to access online information quickly and on any mobile device. Executive correspondence, news releases, project updates and FAQs are regularly updated to ensure transparency and promote greater awareness of PortsToronto and our activities. In operating four business units, we are in constant contact with our partners, stakeholders and the community, and we pride ourselves on our ability to quickly and efficiently connect with anyone who contacts us. The redeveloped website also includes a new feedback portal that makes it easier for passengers, residents and stakeholders to contact PortsToronto with their questions, comments and concerns. Additionally, this new system provides an opportunity for us to track common concerns and trending topics in order to best address community needs.



### STAKEHOLDER AND COMMUNITY ENGAGEMENT

Working in the heart of Toronto's downtown waterfront, PortsToronto has made it a priority to foster and maintain positive relationships and strong connections with its neighbours and stakeholders through open dialogue, transparency, public participation and twoway communication—a critical part of our commitment to sustainability.

### PUBLIC OUTREACH AND MEETINGS

As part of our ongoing efforts to expand engagement with the residents and businesses surrounding Billy Bishop Airport, PortsToronto established a Community Liaison Committee (CLC) in 2010. The committee is designed to provide our neighbours with a forum for discussing issues and concerns related to airport development, operations and activities. Further, it enables airport management to communicate operational activities and information to stakeholders and the broader community. The CLC is composed of key representatives from neighbourhood community groups, local businesses and stakeholders, including local city councillors. The CLC follows best practices of community engagement, meets four times per year, and explores matters ranging from managing airport noise to improving transportation access. The quarterly meetings are open to the public and meeting minutes are taken by a thirdparty consultant, Lura Consulting, and posted to the PortsToronto website.

### FACT:



The CLC is composed of key representatives from neighbourhood community groups, local businesses and stakeholders, including local city councillors.



### CASE STUDY: PUBLIC CONSULTATION FOR GROUND RUN-UP ENCLOSURE (GRE).

In addition to a number of noise mitigation measures already in effect at Billy Bishop Airport, the addition of a Ground Run-up Enclosure (GRE) will take our efforts one significant step further by dampening the acoustic impact from engine run-ups required and regulated as part of standard aircraft maintenance. This is only the second structure of its kind in Canada and will cost approximately \$10 million, which will be paid by PortsToronto through the Airport Improvement Fee.

Under the Federal Government's Duty to Consult requirements, PortsToronto has engaged and consulted with First Nation and Métis communities that have an interest in projects on land and water within PortsToronto's jurisdiction. As such, PortsToronto met with the Mississaugas of the New Credit First Nation community in late 2015 and early 2016 on the planned GRE facility. Mississaugas of the New Credit field archaeologists accompanied PortsToronto and their consultants on an archaeological assessment in May 2016 on the site of the planned GRE facility on airport lands. The assessment concluded that there was no evidence of archaeological Assessment report was filed with the Provincial Government and the City of Toronto. PortsToronto received a letter from the Provincial Government confirming the Stage 1 Archaeological Assessment was complete and that works could proceed at the GRE site, pending any archaeological finds during excavation.

As we are committed to providing our neighbours with detailed and up-to-date information pertaining to the GRE, two community consultation meetings facilitated in concert with the City of Toronto were held in June 2016. Furthermore, correspondence between the City of Toronto and PortsToronto and a detailed FAQ document prepared by PortsToronto, in response to stakeholder questions received by the City of Toronto during the review process of the GRE were posted to the PortsToronto website. The FAQ document is also available at www.BillyBishopAirfieldProject.com. This website is updated on a weekly basis in the interest of keeping the community well-informed on this project.

You can visit www.portstoronto.com to view all Public Outreach meetings minutes or for a listing of all 2017 Public Outreach meetings.

## Economic Performance

## No Taxpayer Dollars

PortsToronto does not receive funding from any level of government and is financially self-sustaining.

\$

## 6,500 jobs

supported by the airport; close to 2,000 of which are associated with airport operations.

## \$28 million

PortsToronto reinvested approximately \$28 million in waterfront and transportation infrastructure in 2016.

## \$2.1 billion

Billy Bishop Airport generates more than \$2.1 billion in total •annual economic output.

## \$2.7 million

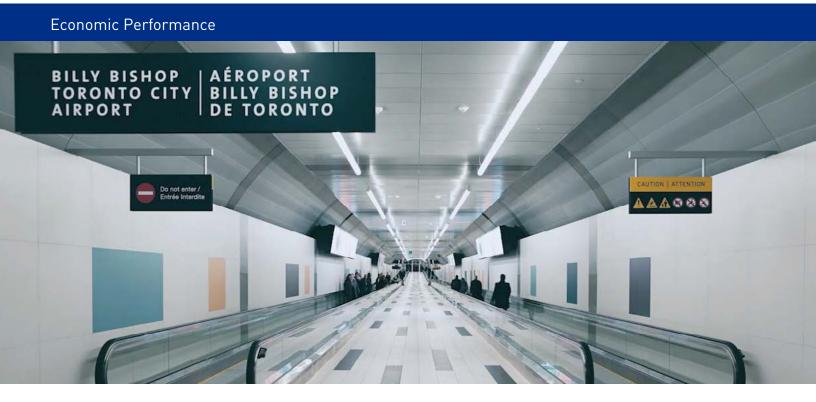
Welcomed 2.7 million passengers through the airport in 2016.

## $\mathbf{4}^{ ext{th}}$ in the world

Ranked 4th best international airport in the world by *Condé Nast Traveler*. Also ranked a top airport by Skytrax and Airport's Council International in 2016.

## \$695 million

Billy Bishop Airport generates more than \$695 million in gross domestic product (GDP)



For PortsToronto, being sustainable not only means being environmentally and socially responsible, it means being financially self-sufficient to ensure that our business remains viable, enabling us to invest back into the communities in which we operate by building infrastructure, conducting public works services, and delivering value locally and nationally.

PortsToronto is a financially self-sufficient government business enterprise that receives no public funding from any level of government. This means that no taxpayer dollars are used to finance the organization's activities or operations. Revenue is instead generated through PortsToronto's four core business operations—Billy Bishop Airport, the Port of Toronto, the Outer Harbour Marina and property ownership and leasing. Profits from these businesses are then reinvested to continue improving the infrastructure and services that make Toronto a world-class city and a great place to live, work and play. PortsToronto's targeted priority areas related to economic sustainability include:



### FINANCIAL SELF-SUFFICIENCY

As mandated in the Canada Marine Act, PortsToronto, like all Canadian port authorities, must remain financially self-sustaining and does not receive public funding from any level of government.

PortsToronto is proud of its financial record—having reported our eighth year of profitability in 2015 (2016 financial data to be released April 2017)—and are pleased that this profitability enables us to invest back into the communities in which we serve. PortsToronto is committed to fostering strong, healthy and sustainable communities and has invested more than \$9 million since 2009 in community initiatives and environmental programs that benefit Toronto communities. Further, the Payments in Lieu of Taxes (PILTs) paid to the City of Toronto and Gross Revenue Charge paid to the Federal Government by PortsToronto benefits taxpayers in Toronto and across the country.

It is these opportunities for reinvestment that are behind PortsToronto's efforts to work toward continued strong financial performance. It will be increasingly important in the coming years to secure additional opportunities for revenue generation in order to ensure PortsToronto can undertake essential public works projects and reinvest in waterfront infrastructure, the environment and community organizations. In 2015, PortsToronto reported its eighth consecutive year of financial profitability, with an operating net income of \$5.9 million and all four of PortsToronto's key businesses reporting strong results. Although 2016 audited financial statements were not available at the time of this report's printing, it is expected that this revenue will remain strong.

In 2015, Billy Bishop Airport generated revenue of \$43.5 million, including \$19.4 million in Airport Improvement Fees. The port and its activities reported revenues of \$6.4 million and operating income from all sources of \$1.5 million. The Outer Harbour Marina's operating income was \$1.2 million on a revenue of \$3.6 million in 2015. Real estate and property holdings recorded operating income of \$1.2 million on revenues of \$2.1 million.



### FACT:

In 2015, PortsToronto reported its eighth consecutive year of financial profitability.



### CITY BUILDING AND INVESTING IN PUBLIC INFRASTRUCTURE

With municipalities responsible for more than 60 per cent of public infrastructure assets and 80 per cent of the Canadian population residing in urban centres, the need for infrastructure investment in cities such as Toronto is crucial. Quality, relevant and innovative infrastructure is essential to cities and pays dividends in terms of attracting capital and talent that drive future growth.

### INVESTING IN THE WATERFRONT

Since its inception in 1911, PortsToronto has made strategic investments in Toronto's waterfront and in developing transportation infrastructure for the city. As the owner and operator of one of Canada's largest major inland ports and Billy Bishop Airport along the waterfront, PortsToronto reinvested approximately \$28 million in waterfront and transportation infrastructure in 2016 with investments ranging from the replacement of equipment to the maintenance and restoration of our various facilities.

PortsToronto also shares responsibility with the City of Toronto and the Harbourfront Centre in upgrading and maintaining our respectively owned sections of the port's dock walls and harbour infrastructure.

### THE BILLY BISHOP AIRPORT PEDESTRIAN TUNNEL

One of the largest infrastructure investments made to date by PortsToronto is the pedestrian tunnel to Billy Bishop Airport that opened in July 2015. PortsToronto invested close to \$135 million over a four-year period in the construction of the pedestrian tunnel. Collaborating with the City of Toronto, PortsToronto incorporated new and much-needed municipal water and sewer mains connecting to the Toronto Islands into the construction of the tunnel, saving Toronto taxpayers an estimated \$10 million in duplicate construction costs. The new city water and sewage mains provide reliable services to the Toronto Islands and replace existing pipes that date back to the 1950s.

The tunnel was built on a P3 model, which in this case ensured the delivery of high-quality infrastructure at no cost to the taxpayer. According to the Canadian Council for Public-Private Partnerships, P3s have generated \$921 billion in total economic output, more than 500,000 full-time-equivalent jobs, and saved taxpayers a total of nearly \$10 billion over the last 10 years.

### FINANCIAL CONTRIBUTIONS TO TORONTO AND CANADA

PortsToronto is a key financial contributor to both the City of Toronto and the Government of Canada. In 2015, PortsToronto paid \$8.6 million in Payments in Lieu of Taxes (PILTs) and \$3.1 million in Property Taxes to the City of Toronto.

PILTs are amounts paid by Federal Government agencies to host municipalities. In addition, PortsToronto contributed \$2.7 million in Gross Revenue Charges to the Government of Canada. When these amounts are combined the result is a total contribution of \$14.4 million that can be used to the benefit of taxpayers.

### Economic Performance



"Billy Bishop Airport plays a significant role in Toronto as a key economic driver, an important piece of transportation infrastructure and a provider of jobs. Ranked alongside airports in Singapore, Hong Kong and Zurich, Billy Bishop Airport is seen as a world-class facility that fuels businesses, facilitates tourism and offers connectivity to all of those who come, go and stay in the world-class city of Toronto."

> —Mayor John Tory City of Toronto

### SUPPORTING LOCAL 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.

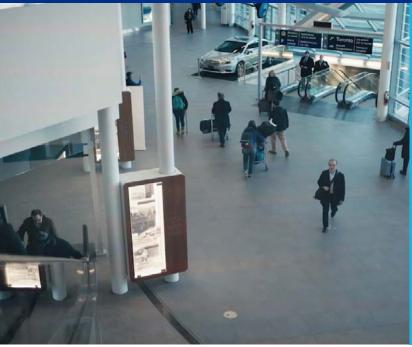
### BILLY BISHOP TORONTO CITY AIRPORT

Each year, Billy Bishop Airport welcomes millions of business and leisure travellers to the city, providing a significant impact on local job creation, both directly and indirectly. In 2014, PortsToronto updated the InterVISTAS study that was first conducted in 2012 to report on the economic output and impact of the airport on the local economy. According to the study, the airport generated more than 6,500 total jobs—including 1,960 jobs directly associated with the airport—and accounts for \$385 million in wages.

In 2016, Billy Bishop Airport broke ground on its Airfield Rehabilitation Program—a significant three-year construction project to replace the existing aging civil and electrical infrastructure (pavement and lighting) for the airport's runways, taxiways and apron. In addition, PortsToronto approved plans submitted by Nieuport Aviation Infrastructure Partners, owner and operator of the airport's passenger terminal, to undertake upgrades and enhancements to the terminal at the airport. Both of these significant construction projects will continue to foster job creation in Toronto for the next several years. "As the region's most accessible employment and institutional centre, downtown businesses and institutions benefit from unparalleled access to skilled labour. These employers are also highly connected to one another as a result of their geographic proximity, providing important economies of agglomeration. Union Station will continue to be the transit hub for the city and region, while Billy Bishop Toronto City Airport and the UPX-linked Toronto Pearson Airport provide national and international connectivity."

> - TOcore Planning Downtown, City of Toronto, November 2016

### Economic Performance



"Toronto continues to rank among the world's leading cities for economic strength, commercial competitiveness and human capital. Billy Bishop Toronto City Airport not only provides a fast and efficient gateway to the city, it also provides high-quality jobs and boosts Toronto's GDP."

> —Michael Thompson Toronto City Councillor and Chair of Toronto's Economic Development and Culture Committee





"Among city-centre airports around the world, Billy Bishop Toronto City Airport provides unusually high market connectivity, as well as providing 2,000 on-site jobs with above-average wages. That makes the airport an important driver to the Toronto economy and, by virtue of Toronto's dominant economic role domestically, the country overall."

> —Dr. Mike Tretheway Chief Economist & Chief Strategy Officer, InterVISTAS



### THE PORT OF TORONTO

Canadian ports serve as valuable economic engines with every one million tonnes of new cargo moved creating 300 new jobs<sup>4</sup>. The Port of Toronto is among Canada's largest major inland ports and provides a direct link to various major transportation services, including marine, rail and major highways.

In 2016, more than 1.8 million tonnes of cargo from around the world were delivered directly into the heart of the city through the Port of Toronto, confirming the port's position as a vital component of Toronto's economic performance.

Beyond providing sustainable employment for terminal workers and other jobs directly related to the shipping industry, the port supports indirect job creation by providing businesses with a convenient, cost-effective and environmentally responsible way to bring goods into Canada's largest city.

### One million tonnes of new cargo moved creates 300 new jobs

<sup>4</sup> "Seize the Moment and Maximize our Supply Chain Advantage: Canada's Port Authorities as Drivers of Jobs, Growth and Trade." Association of Canadian Port Authorities, Aug. 6, 2014 Economic Performance

III

Over 1.8 million tonnes of cargo

SF

2,400+ Cruise Ship Passengers

### **Economic Performance**



"Key industry clusters, from tourism and aerospace to human health sciences and finance, rely on and are supported by Billy Bishop Toronto City Airport's critical connections to key markets in Canada and the United States. Through many important direct and indirect benefits, the airport is a powerful contributor to our region's economic vitality."

> —Jan De Silva President & CEO Toronto Region Board of Trade

### CONTRIBUTING TO TORONTO'S ECONOMIC GROWTH

V

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, costeffective and environmentally sustainable access to the heart of Canada's business capital.

### BILLY BISHOP AIRPORT AS A FACILITATOR OF TOURISM AND TRADE

Since its opening in 1939, Billy Bishop Airport has become an important international gateway and significant economic engine for the GTA.

According to the InterVISTAS study updated in 2014, Billy Bishop Airport generated more than \$2.1 billion in total annual economic output and \$695 million in gross domestic product (GDP), with the airport having become a critical facilitator of the growth of trade and tourism between Toronto and other North American centres.

Through direct and indirect economic benefits, the airport continues to support Toronto's key sectors including financial services, life sciences, food and beverage, travel and tourism, and the film and television industry. The airport also boosts the local economy, with visitors coming through Billy Bishop Airport spending approximately \$150 million a year on accommodation, transportation, retail and food and beverage.

### THE PORT OF TORONTO AS THE CITY'S MARINE GATEWAY TO THE WORLD

Since 1793, the Port of Toronto has served as Toronto's gateway to marine ports around the world. Now serving primarily as a bulk cargo facility, the port's unique location minutes from Toronto's downtown allows goods from countries as far away as Germany, South Korea, Brazil, China and the United States to easily flow into the city.

In 2016, more than 1.8 million tonnes of cargo from around the world was delivered directly into the heart of the city through the Port of Toronto, confirming the port's position as a vital component of Toronto's economic performance.

Beyond the traditional marine cargo, the port also generated revenue for Toronto's travel and tourism sectors as seven cruise ships carrying more than 2,400 passengers visited PortsToronto's Cruise Ship Terminal in 2016.

### FACT:

The Port of Toronto's downtown location enables goods from countries as far away as Germany, South Korea, Brazil, China and the United States to easily flow into the city.

## Going Forward

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GRI is considered a best practice in public disclosure. More than 7,000 organizations from 60 countries use the GRI guidance approach as a baseline to produce their Sustainability Reports.



As PortsToronto moves toward more comprehensive sustainability strategy reporting, we are aiming for alignment with 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 on economic, environmental, social and governance performance.

## CARBON TARGETS AND CLIMATE ACTION PLAN

PortsToronto understands the importance of connecting to policy initiatives prioritized by all three levels of government in order to continue to achieve meaningful results in sustainability.

The Federal and Provincial Government and the City of Toronto have climate change emission reduction goals in place until 2050. These targets will help guide PortsToronto in reducing our organization's carbon footprint and ultimately leading us towards GRI compliance.

For example, the Federal Government released a Pan Canadian Framework for Climate Change Action in December 2016, and last year, the Provincial Government released a Climate Change Action Plan for Ontario. These documents will further identify the policy framework and direction for achieving a low carbon future and meeting the government's established GHG reduction goals.

PortsToronto will be utilizing this governance policy framework in the development of our carbon management strategy and reduction target setting process.

JURISDICTION	2020 EMISSION GOAL	2030 EMISSION GOAL	2050 EMISSION GOAL
Federal	17 percent below	30 percent below	80 percent below
	2005 levels	2005 levels	2005 levels
Provincial	15 percent below	37 percent below	80 percent below
	1990 levels	1990 levels	1990 levels
Municipal	30 percent below 1990 levels	Not Identified	80 percent below 1990 levels

### **Government Emissions Reduction Targets**



### REPORTING ANNUAL TARGETS

Moving forward, PortsToronto will continue to develop new goals with regard to our sustainability efforts, as well as innovative methods to collect and catalogue data. For example, by tracking the status of our sustainability progress through a report card framework, we can ensure the public, stakeholders and government agencies can easily track our performance.

### People and Community Engagement Report Card

FOCUS	2017 TARGET	PROGRESS	DETAILS
Noise Management	Construction of noise reducing infrastructure.	Ongoing	Noise reducing infrastructure installed.
	Encourage passengers to use transit to get to airport.	Ongoing	Dillon Consulting Report shows that 40 per cent of passengers walk, bike or use transit to access the airport.
	Address noise in Community Liaison Committee meetings.	Ongoing	Conducted regular meetings where noise was addressed as a major topic.
Traffic Management	Reduce vehicle traffic associated with the airport.	Ongoing	Airport traffic accounted for a total of 10-16 per cent in the surrounding area.
Stakeholder and Community Engagement	Redesign website to improve accessibility.	Achieved	Newly designed website launched.
Community Investment	Fund projects, communities or organizations.	Achieved	Provided support for 25 community organizations and projects.
Employee Health & Safety	Continue to foster a safety first culture and increase employee health and safety training.	Ongoing	Conducted eight health and safety training programs and courses for employees.

Next Steps

In this second annual report we once again put our organization through its paces -celebrating the areas where we are doing well, but also identifying the areas where there is still room for improvement. In 2017 and beyond, PortsToronto will continue progressing toward GRI compliance by aiming to implement the economic, environmental, social and governance performance initiatives identified in this report. Further, in an effort to keep our government and community stakeholders informed, we will continue to provide on-going transparent reporting on our business in the areas of environmental stewardship, community engagement and economic performance. That is our commitment.

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Geoffrey A. Wilson Chief Executive Officer PortsToronto