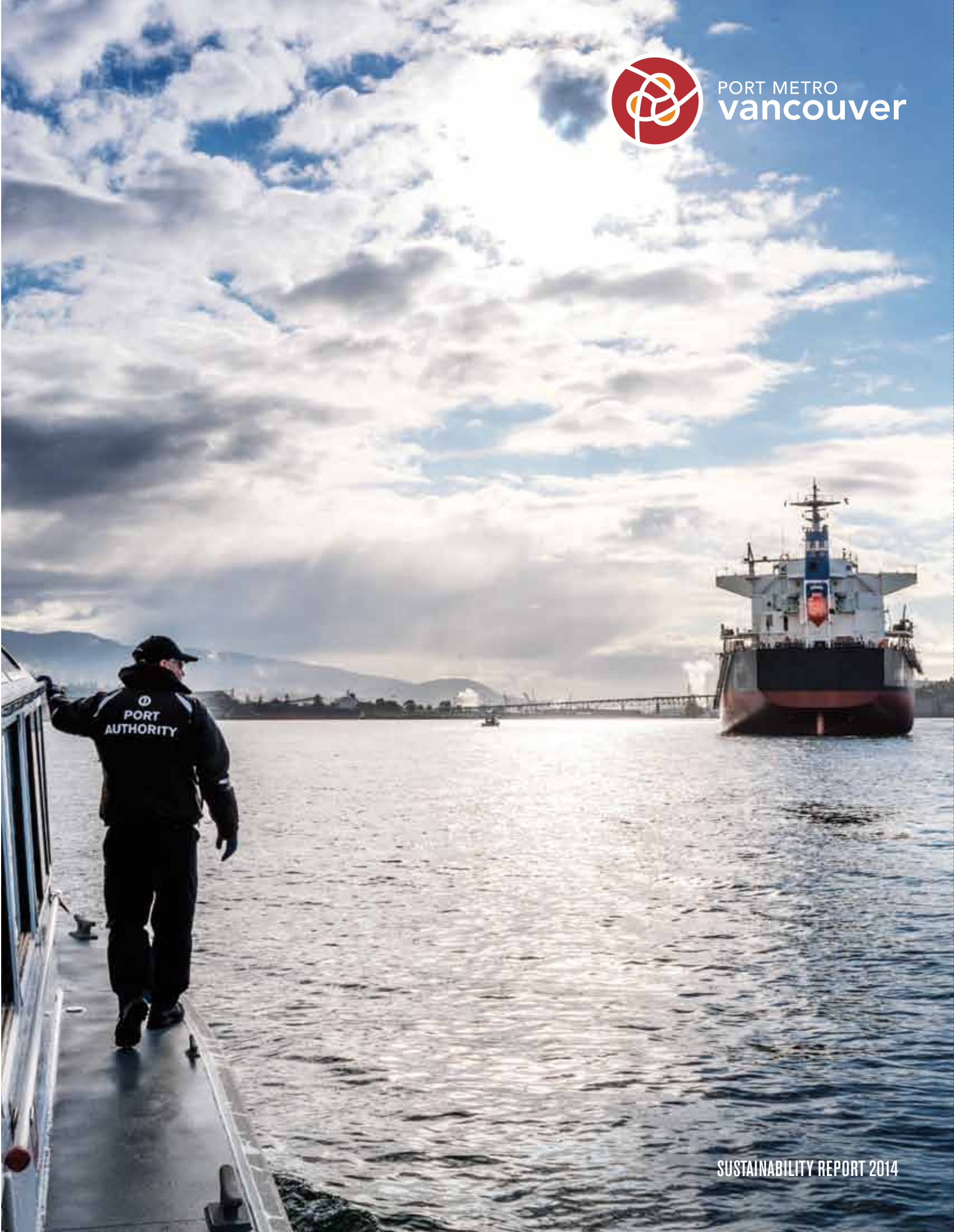




PORT METRO  
vancouver



SUSTAINABILITY REPORT 2014

# BALANCING PRIORITIES

## ECONOMIC PROSPERITY THROUGH TRADE



MOVING

\$510 million

IN CARGO EVERY DAY



CONNECTING CANADIANS TO OVER

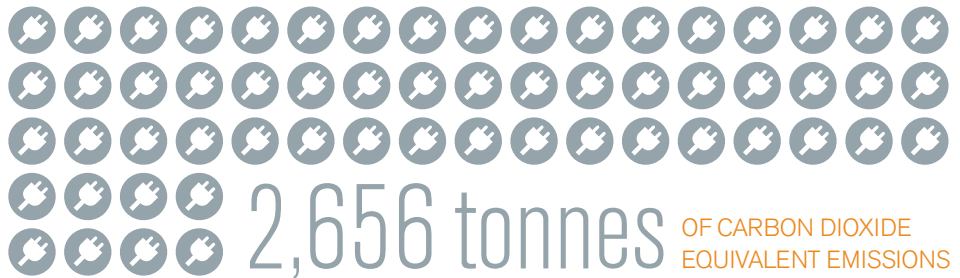
160

TRADE ECONOMIES

## HEALTHY ENVIRONMENT



CONNECTING 76 CRUISE SHIPS WITH SHORE POWER, RESULTING IN A REDUCTION OF



OF CARBON DIOXIDE EQUIVALENT EMISSIONS

## THRIVING COMMUNITIES



LAUNCHING 10 real-time acoustic monitors THROUGHOUT THE PORT



WORKING TOGETHER WITH 3 community liaison committees

FACILITATING TRADE OF  
**140 million**  
TONNES OF CARGO ANNUALLY



CREATING ABOUT  
**100,000 jobs**  
IN THE SUPPLY CHAIN  
ACROSS CANADA

REDUCING SHIP EMISSIONS TOGETHER WITH

**520**



PARTICIPANTS IN OUR ECOACTION PROGRAM

PARTNERING WITH METRO VANCOUVER TO INSTALL

**7** new air quality monitors  
IN BURRARD INLET

PROTECTING OUR ENVIRONMENT BY CONDUCTING

**265** environmental reviews

TRAINING WITH OVER

**120** people from  
**30** organizations

TO STRENGTHEN EMERGENCY  
RESPONSE COORDINATION



**407** ENGAGEMENT EVENTS AND  
PUBLIC CONSULTATIONS

The Vancouver Fraser Port Authority, doing business as Port Metro Vancouver, oversees Canada's largest port. The lands, waters, infrastructure and services, which together form the Vancouver Gateway, open Canada to the world, connecting people with economic potential. Our mandate, as outlined in the *Canada Marine Act*, is to support the competitiveness, growth and prosperity of the Canadian economy while providing a high level of safety, protecting the environment and responding to local needs and priorities.



## **IN THIS REPORT**

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**OUR APPROACH TO SUSTAINABILITY BEGINS WITH THREE THEMES:**



**ECONOMIC PROSPERITY THROUGH TRADE**



**HEALTHY ENVIRONMENT**



**THRIVING COMMUNITIES**

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## MESSAGE FROM THE CHAIR, BOARD OF DIRECTORS



“Our business is dynamic and involves many stakeholders, making it critical that we engage and incorporate their views as we plan for the long term.”

### FINDING THE RIGHT BALANCE

We oversee the nation's largest port, connecting Canadians with over 160 global economies. The broad range of goods that move through the port contribute to our quality of life. We need only consider a typical morning routine – coffee, a banana or even the shoes that get us to work – to understand how the port impacts each of us, every day. Consider the journey that those products make, and we begin to see the complex nature of the global supply chain that supports our daily lifestyle.

After five years as a member of Port Metro Vancouver's board of directors, I can confidently say this business is complex, our role as the port authority is challenging, and success requires a careful and constant balance of multiple priorities and interests.

Balancing complex priorities and providing leadership on sustainability requires a solid perspective on long-term change and future challenges. Our business is dynamic and involves many stakeholders, making it critical that we engage and incorporate their views as we plan for the long term.

That's why I am proud to say, in 2014, our Port 2050 scenario planning initiative continued to bring stakeholders together – government, industry and communities – to discuss our common future. We revisited the four plausible future scenarios developed four years ago to improve our understanding of key drivers of

change and to refresh our perspective of what the region may look like in 35 years.

In addition to Port 2050, we completed a two-year engagement process to develop our definition of a sustainable gateway, providing another important reference for long-term planning.

After nearly three years of consultation, we completed our comprehensive Land Use Plan that will guide port development over the next 15 to 20 years.

Input from stakeholders was essential to these initiatives and will no doubt be the catalyst for ongoing discussion around the long-term sustainability of the gateway. Only by working together can we collectively plan the future of this port to ensure the next generations of Canadians enjoy the economic prosperity that trade delivers.

I would like to thank board members for their continued leadership throughout 2014 and congratulate the executive team and all port authority staff for another record-setting year. Most importantly, I want to recognize the eager and enthusiastic involvement of all the port stakeholders who have participated with us along the way and who underpin our success.

A handwritten signature in black ink, appearing to read 'C. Neeser'.

Craig Neeser  
Chair, Board of Directors

## MESSAGE FROM THE PRESIDENT

AND CHIEF EXECUTIVE OFFICER



### OUR PASSION DRIVES US IN THE PURSUIT OF SUSTAINABILITY

Our passion for serving Canada and enabling economic prosperity through trade drives us to plan for the long-term sustainability of the port. We want to ensure future generations continue to enjoy the benefits of trade, a healthy environment and thriving communities. In 2014, we were faced with some difficult challenges and we responded with solutions that will have a positive impact for years to come.

For example, the port was significantly disrupted when truck operators took job action and stopped work at major container terminals, impacting businesses across the country. We worked with truck operators, government and industry to implement the Smart Fleet program to address wait times and the rate undercutting that affected drivers' ability to earn a living wage. There is still work to be done, and although it remains a challenging process, the solution developed in 2014 will help position the industry for long-term success by bringing stability and a better balance of economic, environmental and social priorities.

In the Lower Mainland, the scarcity of available industrial land is a critical and challenging reality. The sustainability of the port requires careful planning and development of infrastructure. We're collaborating with all levels of government and industry to increase

the efficiency of our existing lands and reduce community impacts. The Low Level Road and South Shore Corridor projects, along with several other projects now complete or near completion, serve as great examples of this collaboration and demonstrate what we can achieve when we plan and work together.

To further improve management of the impacts the port can have on neighbouring communities, we implemented a series of initiatives, including real-time noise monitoring, air quality monitoring stations and a program to reduce particulate matter emissions from non-road diesel equipment. Together with a variety of other environmental programs, we are moving the port in a direction we can all be proud of.

I thank the board of directors for their support and guidance throughout 2014, and extend my sincere gratitude to all the dedicated and passionate employees and port stakeholders who collectively contributed to our success.

Robin Silvester  
President and Chief Executive Officer

“Our passion for serving Canada and enabling economic prosperity through trade drives us to plan for the long-term sustainability of the port.”

## ABOUT US

The Vancouver Fraser Port Authority, doing business as Port Metro Vancouver, is responsible for facilitating trade through Canada's largest port. We are a non-shareholder, financially self-sufficient corporation established by the Government of Canada in January 2008, pursuant to the *Canada Marine Act*, and accountable to the federal Minister of Transport. Our mandate, as outlined under the Act, is to contribute to the competitiveness, growth and prosperity of the Canadian economy while providing a high level of safety, protecting the environment, and responding to local needs and priorities.


**OUR MISSION** To lead the growth of Canada's Pacific Gateway in a manner that enhances the well-being of Canadians and inspires national pride.

**OUR VISION** To be recognized as a world-class gateway by efficiently and sustainably connecting Canada with the global economy, inspiring support from our customers and from communities locally and across the nation.

### GOVERNANCE

Our diverse and independent board of directors is composed of 11 members: four appointees from federal, provincial and local government, which includes one appointee from the Prairie provinces of Alberta, Saskatchewan and Manitoba, along with seven federal appointees recommended by port users.

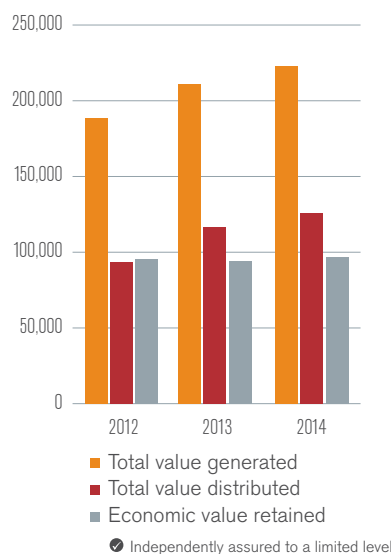
The Community and Corporate Social Responsibility Committee of the board provides oversight and strategic direction on related matters, including this Sustainability Report.


 [Read more about our governance at portmetrovancover.com/about](http://portmetrovancover.com/about)

### FINANCIAL PERFORMANCE

Our annual Financial Report provides an overview of financial performance, including management discussion and analysis, and detailed financial statements.

### FINANCIAL RESULTS (in thousands of dollars)



 [Read more about our financial performance at portmetrovancover.com/accountability](http://portmetrovancover.com/accountability)

### DID YOU KNOW?

Canadian port authorities are not funded by tax dollars. We are financially self-sufficient corporations, collecting rental income from terminals and other tenants as well as various commercial fees, which are reinvested in port-related infrastructure and services.

### JURISDICTION

We are responsible for managing over 16,000 hectares of water, over 1,000 hectares of land and assets along hundreds of kilometres of shoreline. From Roberts Bank and the Fraser River up to Burrard Inlet, our jurisdiction borders 16 municipalities and intersects the asserted and established traditional territories and treaty lands of several Coast Salish First Nations.

We operate out of our head office at Canada Place in downtown Vancouver, as well as facilities on the south shore of Burrard Inlet and on Annacis Island. Our corporate operations have been carbon neutral since 2010, including an investment of 1,419 tonnes of carbon offsets for 2014.

● Independently assured to a limited level



# 321 employees

PORT METRO VANCOUVER  
EMPLOYS 321 PEOPLE  
WORKING IN A BROAD  
RANGE OF DISCIPLINES

# 16,000 hectares

WE ARE RESPONSIBLE  
FOR MANAGING OVER  
16,000 HECTARES OF WATER  
AND OVER 1,000 HECTARES  
OF LAND

# 16 municipalities

OUR JURISDICTION BORDERS  
16 MUNICIPALITIES AND  
INTERSECTS THE ASSERTED  
AND ESTABLISHED  
TERRITORIES AND TREATY  
LANDS OF SEVERAL COAST  
SALISH FIRST NATIONS



\*Port Metro Vancouver's head lease with the Province of British Columbia expired on December 31, 2014. Read more on page 19.


## OUR APPROACH TO SUSTAINABILITY

Our approach to sustainability starts with defining what sustainability means for our business. We engaged a lot of people – industry, government, First Nations and communities – to develop a better understanding of our long-term anticipated future through the Port 2050 scenario planning initiative. We also engaged our stakeholders to help us create our Sustainable Gateway Definition. These two initiatives help inform and frame our corporate vision.

Guided by our corporate vision, we develop strategies and collaborate with stakeholders to implement a broad array of initiatives that move us toward our goals. Progress is tracked monthly, quarterly and annually using a balanced scorecard approach, which is tied to individual incentive plans. Throughout this process, we work with stakeholders to solve problems, seize opportunities and obtain constructive feedback on how to improve.

Finally, we report on our progress in this report, which helps us gain perspective on our achievements and opportunities for improvement.

This report has been developed with input from stakeholders who helped identify key topics. We've structured the report content around these key topics and provide a complete overview of this approach on pages 8 and 9.

 For more information on business planning, see our Financial Report at [portmetrovancover.com/accountability](http://portmetrovancover.com/accountability)

### PROMOTING LONG-TERM SUSTAINABILITY OF THE GATEWAY

We lead the sustainable development of Canada's largest port by facilitating dialogue and collaboration around long-term planning.

2010	2013	2014	2015	2050
We invited over 100 stakeholders to participate in the Port 2050 scenario planning process to help us develop a shared perspective of our anticipated future.	We invited an external advisory panel to help us create a draft Sustainable Gateway Definition, and then set out to engage with more stakeholders to hear their views.	We hosted a Port 2050 event to promote further dialogue, and also invited a diverse group of stakeholders to revisit the Port 2050 scenarios, validate key drivers of change and identify aspects that needed updating to reflect current trends.	We continue to integrate Port 2050 and the Sustainable Gateway Definition into our business, and will host another event to engage stakeholders on the long-term sustainability of the gateway.	We are planning for the long term by tracking key drivers of change, using our scenarios to challenge our assumptions, and identifying opportunities to integrate sustainability into our business planning process and strategic priorities.

Our definition of sustainability is structured around economic, environmental and social themes that are defined by 10 focus areas.



**ECONOMIC PROSPERITY THROUGH TRADE**

- Competitive business
- Effective workforce
- Strategic investment and asset management

Read more about our definition of sustainability at [portmetrovanancouver.com/sustainability](http://portmetrovanancouver.com/sustainability)



**HEALTHY ENVIRONMENT**

- Healthy ecosystems
- Climate action
- Responsible practices



**THRIVING COMMUNITIES**

- Good neighbour
- Community connections
- First Nations relationships
- Safety and security

**PORT 2050 FUTURE SCENARIOS**

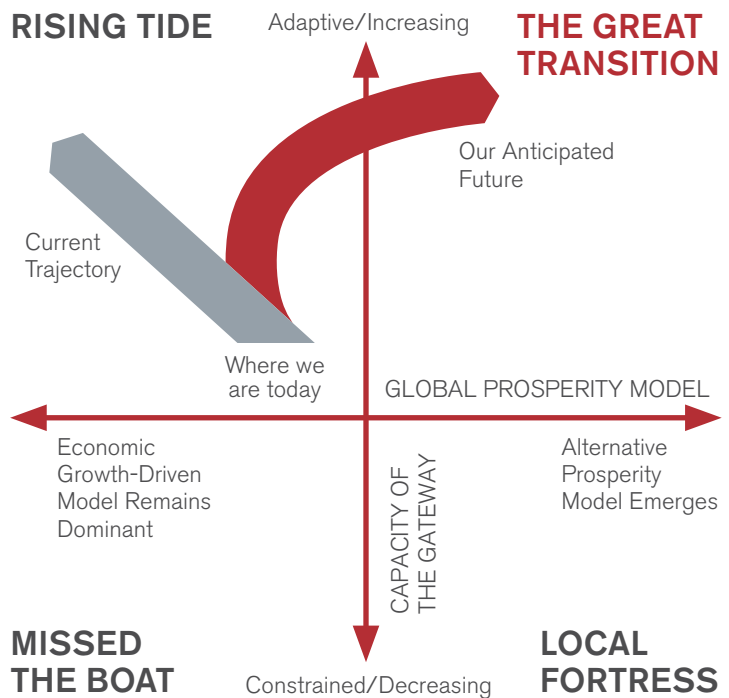
**Local Fortress:** This is a scenario where gateway growth is constrained because the Lower Mainland focuses on the regional economy and local resilience.

**Missed the Boat:** This is a scenario where emerging market growth is strong, but the gateway misses key opportunities and doesn't live up to expectations, due to problems in the supply chain, poor coordination, lack of community buy-in and diminishing industry support.

**Rising Tide:** This is a scenario of continued growth, but in a context of increased volatility due to resource conflicts and climate instabilities.

**The Great Transition:** This is a scenario where we see a paradigm shift – a rapid transition to a post-industrial/post-carbon model.

Read more about Port 2050 at [portmetrovanancouver.com/port2050](http://portmetrovanancouver.com/port2050)



# OUR APPROACH TO REPORTING

This report, which is intended to provide greater transparency and accountability in how we conduct our business, focuses on material topics across three themes – economic prosperity through trade, a healthy environment and thriving communities.


## MATERIALITY

**Materiality in sustainability reporting means identifying the economic, environmental and social impacts that most influence an organization's ability to deliver value – for itself, its stakeholders, the environment and society at large.**

## DEFINING WHAT IS MATERIAL

We strive to continually improve the quality of our sustainability reporting by focusing on the most important topics for our organization and our stakeholders. The material topics reflect our most significant sustainability impacts and opportunities.


An important step in our materiality process is engagement with an external panel of customer, government, community and Aboriginal participants who provide critical feedback that drives continuous improvement. [G4-18](#)



 [Read more about our approach and the panel's feedback at portmetrovancover.com/accountability](https://portmetrovancover.com/accountability)

## STAKEHOLDER ENGAGEMENT

To keep cargo moving through the port, grow Canadian trade, protect the environment and be good neighbours to the communities in which we operate, we need to engage and collaborate with a wide variety of groups with a stake in the future of the gateway. We take an inclusive approach and use the International Association of Public Participation core values and principles to help us identify stakeholder interests, and consider these when making decisions.

The table below shows the different groups we engage with and what we've heard from them, alongside the material topics they helped us identify for our report. [G4-25, G4-26](#)

MATERIAL TOPIC <a href="#">G4-19</a>	WHY IS IT IMPORTANT?	INTERESTED GROUPS <a href="#">G4-24</a>	WHAT WE'VE HEARD <a href="#">G4-27</a>	LEARN MORE
 <b>ECONOMIC PROSPERITY THROUGH TRADE</b>				
<b>Gateway Efficiency and Reliability</b>	Efficiency and reliability are essential to the competitiveness and profitability of the port. Supply chain disruptions can cause serious problems and significant costs for Canadian consumers and businesses, damaging the reputation of the port.	<ul style="list-style-type: none"> <li>Customers</li> <li>Service providers</li> <li>Communities</li> </ul>	<ul style="list-style-type: none"> <li>Facilitate collaboration among supply chain stakeholders to ensure cargo moves efficiently and reliably.</li> <li>Lead infrastructure developments that respond to customer needs and plan for future efficiencies.</li> <li>Increase transparency of supply chain performance to help businesses make informed decisions on cargo movement.</li> <li>Keep port commercial fees and cost structures competitive.</li> </ul>	Pages 14–15
<b>Land Use and Availability</b>	Industrial land is scarce, expensive and in significant demand in the Lower Mainland. Given anticipated growth in the region, pressure on land will intensify.	<ul style="list-style-type: none"> <li>Local government</li> <li>Communities</li> <li>Customers</li> </ul>	<ul style="list-style-type: none"> <li>Identify and secure an industrial land base to reduce pressure on industrial and agricultural land, meet future demand for trade, and protect the jobs and economic activity that it enables.</li> <li>Demonstrate that existing port lands are being optimized and used efficiently before acquiring new land.</li> <li>Ensure land use and development balances economic, environmental and social objectives in a transparent way.</li> </ul>	Pages 18–19
<b>Infrastructure Development</b>	We handle 19 per cent of Canada's trade in goods by value. Demand for Canadian trade is increasing, and Port Metro Vancouver is growing as a result. We need to improve infrastructure to ensure the gateway can facilitate the needs of the growing local and national economy.	<ul style="list-style-type: none"> <li>Customers</li> <li>Service providers</li> <li>Communities</li> <li>Federal, provincial and local governments</li> </ul>	<ul style="list-style-type: none"> <li>Consult on major infrastructure developments and conduct a thorough review of environmental and social impacts.</li> <li>Develop infrastructure to meet long-term demand for trade, especially for containerized cargoes.</li> </ul>	Pages 20–21

MATERIAL TOPIC G4-19	WHY IS IT IMPORTANT?	INTERESTED GROUPS G4-24	WHAT WE'VE HEARD G4-27	LEARN MORE
 <b>HEALTHY ENVIRONMENT</b>				
<b>Air Emissions</b>	Regional air quality is affected by criteria air contaminants and greenhouse gas emissions from port-related activities, many of which are heavily dependent on diesel fuel. These emissions affect local air quality and contribute to climate change.	<ul style="list-style-type: none"> <li>· Local government</li> <li>· Communities</li> <li>· Non-government organizations</li> <li>· Aboriginal groups</li> <li>· Health authorities</li> </ul>	<ul style="list-style-type: none"> <li>· Provide greater transparency of port-related air emissions, especially those affecting human health or contributing to climate change.</li> <li>· Accelerate the adoption of clean technology and alternative energy in port operations.</li> </ul>	Pages 24–25
<b>Biodiversity</b>	The port operates in one of the most beautiful and ecologically rich regions of the world. It is critical that this ecosystem remains intact for future generations.	<ul style="list-style-type: none"> <li>· Local government</li> <li>· Aboriginal groups</li> <li>· Non-government organizations</li> <li>· Communities</li> </ul>	<ul style="list-style-type: none"> <li>· Ensure port operations are conducted in a manner that protects the environment and promotes stewardship of fish and wildlife.</li> <li>· Better understand and mitigate the impact of port operations on key species at risk, such as southern resident killer whales.</li> <li>· Ensure infrastructure development doesn't result in a loss of habitat and impacts on birds, fish, and ecosystem health.</li> </ul>	Pages 28–29
 <b>THRIVING COMMUNITIES</b>				
<b>Aboriginal Relationships</b>	The lands and waters Port Metro Vancouver manages border 16 different municipalities and intersect the asserted and established traditional territories and treaty lands of several Coast Salish First Nations.	<ul style="list-style-type: none"> <li>· Aboriginal groups</li> </ul>	<ul style="list-style-type: none"> <li>· Understand and consider the social and environmental impacts of port activities on Aboriginal rights.</li> <li>· Engage Aboriginal peoples to better understand their contemporary interests in the lands and waters we manage.</li> <li>· Support business opportunities that facilitate the participation of Aboriginal peoples in the economic benefits of port activities.</li> </ul>	Pages 32–33
<b>Impacts on Neighbouring Communities</b>	Our port operates 24 hours a day to facilitate international trade. Port operations are industrial in nature and can impact the quality of life for neighbouring communities, through noise, truck traffic, air emissions, dust, and light pollution.	<ul style="list-style-type: none"> <li>· Local government</li> <li>· Communities</li> <li>· Aboriginal groups</li> </ul>	<ul style="list-style-type: none"> <li>· Community values and priorities need to be considered in decision-making processes.</li> <li>· Minimize nighttime noise and light from port operations, which impact the quality of life of neighbouring communities.</li> <li>· Provide more information and data about port impacts on communities.</li> </ul>	Pages 34–35
<b>Safety and Security</b>	Port operations must be safe and secure to enable international trade, to protect our reputation as a safe, efficient and reliable place to do business, and to ensure the safety and well-being of port users and neighbouring communities.	<ul style="list-style-type: none"> <li>· Aboriginal groups</li> <li>· Communities</li> <li>· Non-government organizations</li> <li>· Customers</li> <li>· Federal, provincial and local governments</li> </ul>	<ul style="list-style-type: none"> <li>· Ensure vessels, especially tankers carrying crude oil, can travel safely through the port.</li> <li>· Improve understanding of safety and security practices to help neighbouring communities feel safe and secure.</li> <li>· Promote collaboration, coordination and training among responsible parties to ensure a rapid and effective response to emergencies such as a spill.</li> </ul>	Pages 38–39

Customers include terminal operators, tenants, major shippers and marine carriers. Service providers include railways, truck operators, tug operators and labour.

# ECONOMIC PROSPERITY THROUGH TRADE





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A sustainable gateway delivers economic prosperity through trade, focusing on:

### **COMPETITIVE BUSINESS**

THE GATEWAY:

- Continuously improves efficiency and reliability, providing exceptional customer service
- Is profitable, delivering lasting value locally and nationally
- Reinforces innovation, diversity, resilience and adaptability

### **EFFECTIVE WORKFORCE**

THE GATEWAY:

- Maintains a skilled and productive workforce to meet current and future needs
- Provides an attractive work environment and rewarding career choices

### **STRATEGIC INVESTMENT AND ASSET MANAGEMENT**

THE GATEWAY:

- Optimizes the use of land and infrastructure assets
- Anticipates and delivers infrastructure to meet capacity needs in a timely way

---

READ ABOUT THE FOLLOWING TOPICS IN THIS SECTION:

- Economic highlights
- Gateway efficiency and reliability
- Land use and availability
- Infrastructure development

## ECONOMIC PROSPERITY THROUGH TRADE

### Economic Highlights

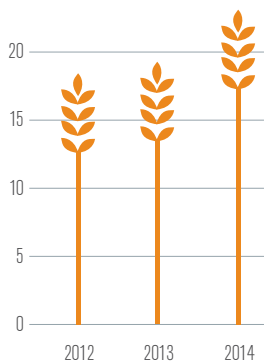
Port Metro Vancouver is Canada's largest and busiest port, handling 19 per cent of Canada's total trade in goods by value. It is also the third-largest port in North America in terms of total tonnage. The average daily value of cargo moving through port facilities is \$510 million, creating an economic wave of activity that resonates from coast to coast to coast.

#### A SUSTAINABLE GATEWAY IS PROFITABLE, DELIVERING LASTING VALUE LOCALLY AND NATIONALLY.

Growth in agricultural exports such as grains has been driven by record production volumes in the Canadian Prairies, combined with increasing demand for food imports in India and China.

#### GRAIN EXPORT VOLUMES

(million metric tonnes)



#### NEW SHANGHAI OFFICE

In 1992, Port Metro Vancouver opened a dedicated office in Beijing, China, the first port outside of China to do so. In recent years, Shanghai's port has emerged as one of the world's busiest, and the city has become an important international business centre. In 2015, we will be relocating our Beijing office to Shanghai, to reinforce customer engagement, marketing and promotion activities throughout Asia, including the critical markets of China, Japan, Taiwan, Hong Kong, Korea and Singapore.

A RECORD  
**140 million tonnes**

OF CARGO VALUED AT OVER \$187 BILLION

OVER  
**160**

GLOBAL TRADING ECONOMIES

**680 km**  
OF RAIL LINES



**1,560 km**  
OF MAJOR TRUCK ROUTES

**28**

MAJOR  
DEEP-SEA  
TERMINALS

**3,157**

FOREIGN VESSEL CALLS



**↑ 22%**

INCREASE IN CRUISE  
PASSENGERS SINCE 2012



Port-related activities generate close to 100,000 supply chain jobs across Canada, including about 57,000 direct and indirect jobs in B.C.'s Lower Mainland. These jobs pay an average of \$67,000 per year, well above the average Canadian wage of \$44,000\*.

**100,000 jobs**

\*Figures are based on the 2012 economic impact study.





# \$9.7 billion

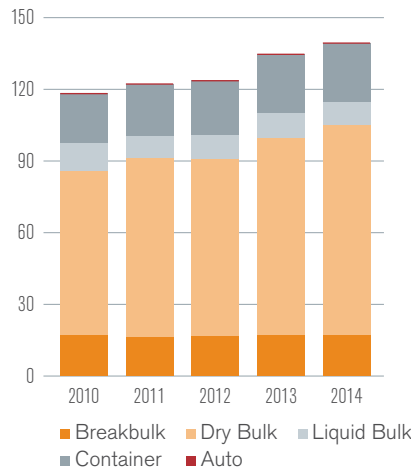
IN GROSS DOMESTIC PRODUCT  
ACROSS CANADA\*

The financial strength and stability of the port comes from the diversity of cargo traded and our geographical location, which connects Canada to global markets.

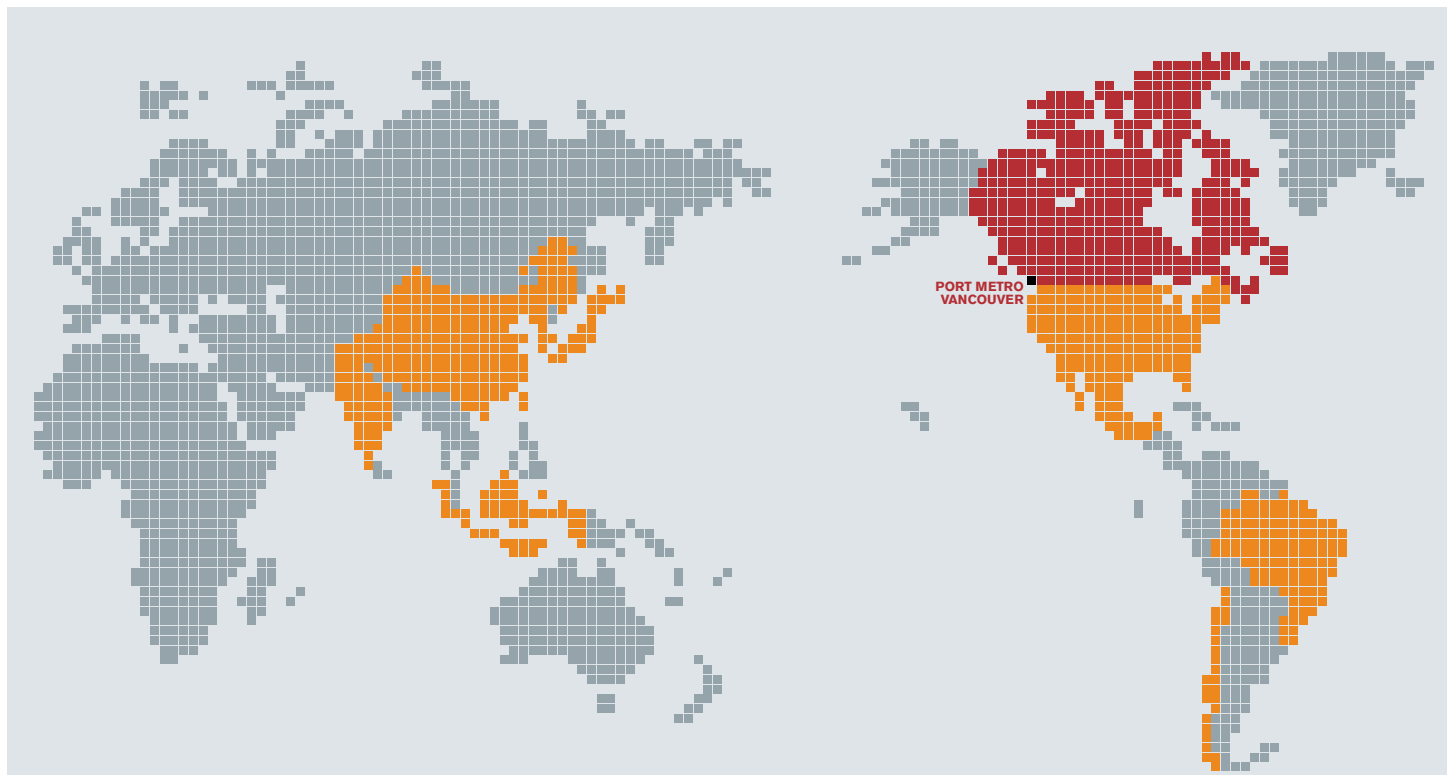
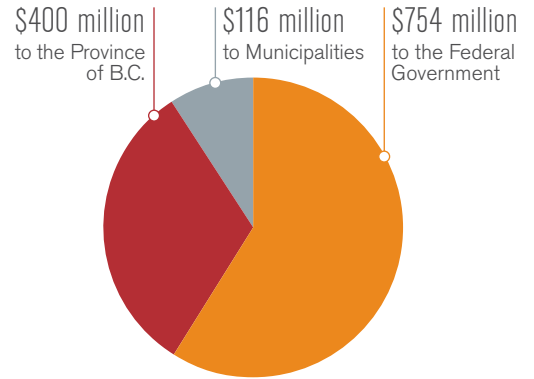
 Read more economic highlights at [portmetrovancover.com/factsandstats](http://portmetrovancover.com/factsandstats)

## CARGO VOLUMES BY SECTOR

(million metric tonnes)



## ANNUAL PORT ACTIVITY GENERATES \$1.3 BILLION IN TOTAL TAX REVENUES\*



## PRINCIPAL TRADING ECONOMIES (million metric tonnes of cargo)

**China** 31.6 **Japan** 16.5 **South Korea** 13.9 **United States** 7 **India** 5.2 **Brazil** 3.6 **Taiwan** 3.1 **Chile** 2.9 **Indonesia** 2.5 **Mexico** 1.8

## ECONOMIC PROSPERITY THROUGH TRADE

### Gateway Efficiency and Reliability



Efficiency and reliability of cargo movement is essential to the competitiveness and profitability of both the port and the businesses that depend on it. We connect Canadians with over 160 global economies, requiring close collaboration with rail, ship, truck and terminal personnel – the people who make it happen.

**KEY RISK** Supply chain imbalances and disruptions.

**SUSTAINABLE GATEWAY DEFINITION** A sustainable gateway continuously improves efficiency and reliability, providing exceptional customer service.

#### WHAT WE'VE HEARD

- Facilitate collaboration among supply chain stakeholders to ensure cargo moves efficiently and reliably.
- Lead infrastructure developments that respond to customer needs and plan for future efficiencies.
- Increase transparency of supply chain performance to help businesses make informed decisions on cargo movement.
- Keep port commercial fees and cost structures competitive.

#### OUR APPROACH

The port supply chain is a complex web of moving and interconnected parts, involving people across the globe making decisions that affect efficiency and reliability performance. A problem in one area of the supply chain can affect performance in other areas, which is why informed decisions along with coordination of information are so important.

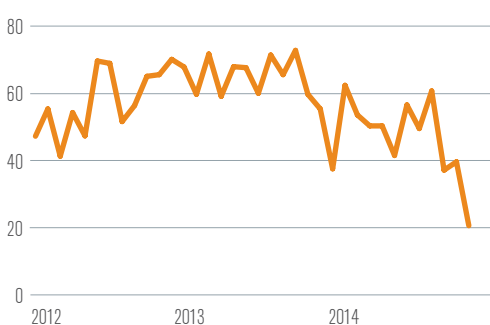
We bring people together to share knowledge and create solutions that help drive supply chain performance and enable businesses to make better, more informed decisions.



## OCEAN-GOING VESSELS

Our container vessel on-time incentive program offers ocean carriers a rebate on wharfage fees for ships arriving within eight hours of their scheduled arrival time. The on-time arrival of vessels enables increasing efficiency and reliability in terminal operations, rail and trucking sectors, and overall improvements in supply chain reliability. We post vessel on-time performance data monthly on our website to increase transparency and provide useful information for Canadian retailers.

### VESSEL ON-TIME PERFORMANCE (per cent)



Vessel on-time performance is based on the ship's arrival within eight hours of the scheduled time.

● Independently assured to a limited level

# 29%

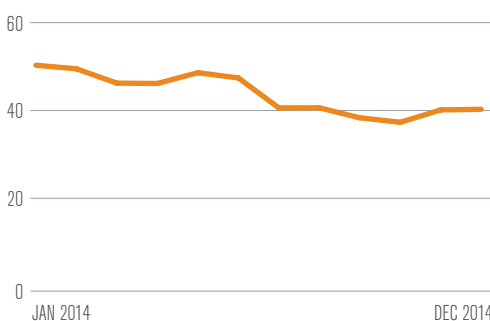
### PERFORMANCE DECREASE

Labour challenges on the U.S. west coast coupled with increased container volumes through our port led to a major decrease in the number of container vessels arriving on time in 2014. On average, the percentage of vessels arriving on-time decreased from 66 per cent in 2013 to 47 per cent in 2014.

## TRUCKING

Our Smart Fleet Trucking Strategy sets out our action plan to improve the efficiency and reliability of the container truck sector. By installing global positioning system (GPS) units on all trucks licensed to serve the port, introducing a new licensing system, and implementing a common reservation system, we plan to significantly improve supply chain efficiency, safety and environmental standards. Read more about this on page 16.

### TRUCK TURN TIME (minutes)



Turn time is measured as time spent in terminal staging lanes and time spent within the terminal footprint. Day and afternoon gates are included in this calculation.

● Independently assured to a limited level

# 20%

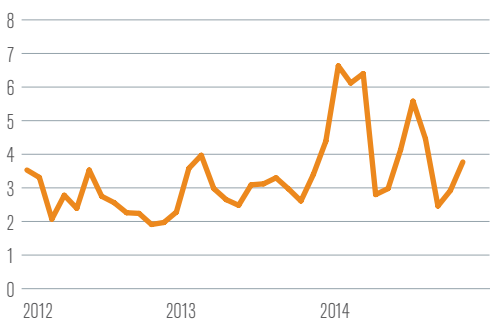
### PERFORMANCE IMPROVEMENT

During the course of 2014, truck turn times were reduced by 20 per cent through industry initiatives, including Port Metro Vancouver's Smart Fleet program.

## TERMINALS

Terminals are where the supply chain connects. We help facilitate solutions, capital investments and operational improvements to increase terminal capacity, reliability and efficiency. You can read more about this in the Infrastructure Development section on page 20.

### AVERAGE TERMINAL DWELL (days)



Dwell time is determined using a sample of import containers at the four container terminals. It is measured as the time it takes to transfer cargo from a ship to a railcar.

● Independently assured to a limited level

# 43%

### PERFORMANCE DECREASE

Dwell time was impacted heavily throughout 2014. An exceptionally cold winter resulted in delays throughout the supply chain, increasing import dwell times.

## CUSTOMER SATISFACTION SURVEY

Twenty-three key customers provided feedback through in-depth interviews and identified opportunities for improvement in efficiency and responsiveness. This aligns with our current focus on improving resources and processes to deliver enhanced customer value.

### Case Study: Trucking

Container trucking is an integral link in the port supply chain, responsible for moving about half of all container shipments to facilities across the region. Following a 28-day work stoppage by drivers in early 2014, we have made steady progress and received encouraging feedback from the industry about the way we have approached problems that have plagued the local container trucking industry for many years.

#### WHAT IS THE BACKGROUND?

In February 2014, a group of non-unionized truck operators from the United Truckers Association of BC (UTA) began a protest on port property. Shortly thereafter, unionized truck drivers, mostly represented by Unifor, joined the work action. The work stoppage stranded container cargo, causing terminal congestion and impacting shipments, drivers, terminal employees and the Canadian economy. On March 26, 2014, the Government of Canada, the Province of British Columbia and Port Metro Vancouver collectively put forward an action plan accepted by the drivers.

#### WHAT WERE THE KEY ISSUES OR CONCERNS?

Terminal wait times and rate undercutting practices were two key issues raised by truck operators. An analysis of the situation determined there were too many trucks competing for port container work, resulting in excessive wait times and rate undercutting. [G4-27](#)

#### HOW WERE THESE ISSUES ADDRESSED?

As part of the Joint Action Plan, Port Metro Vancouver accelerated the Smart Fleet initiative. This included the introduction of a newly reformed Truck Licensing System, which came into effect on February 1, 2015. The new licensing system, developed with the provincial and federal governments, is intended to stabilize the container trucking sector by ensuring the supply of container trucks is more closely aligned with port-related container trucking demand, that truckers are paid fairly and that undercutting is eliminated. Also, all licensed port trucks were outfitted with GPS technology to assist in coordinating truck activities, and work continues on the implementation of an enhanced common reservation system to further improve efficiency.

#### WHAT'S NEXT?

We continue to reform the Truck Licensing System, which includes reducing the number of local drayage companies and trucks approved. Fewer trucks combined with extended truck gate operating hours will result in less wait times for the drivers and more local container moves per driver. The Province of B.C.'s appointment of the new B.C. Container Trucking Commissioner will include an expanded audit program to monitor increased rigor around remuneration and compensation paid to drivers. The establishment of a whistleblower line, the Drayage Confidence Line, will improve the ability for the container sector to be heard and concerns addressed.

“The Province, together with our federal partners and Port Metro Vancouver, worked hard to develop a structure that provides fair wages for truckers as we ensure this vital port continues to keep British Columbians working, our economy running and goods moving across the country.”

Todd Stone  
Minister of Transportation  
and Infrastructure,  
Province of British Columbia



# 100%

PORT-APPROVED LOCAL  
DRAYAGE TRUCKS OUTFITTED  
WITH GPS TECHNOLOGY

# 3

OF THE FOUR PORT  
CONTAINER TERMINALS  
HAVE EXTENDED TRUCK  
GATE OPERATING HOURS,  
EASING CONGESTION



## ECONOMIC PROSPERITY THROUGH TRADE

### Land Use and Availability



Competition for land in the Lower Mainland is intensifying as a result of regional growth. Industrial land in particular is scarce, expensive and in high demand. We must make the most of every square metre of federal land under our management while securing more industrial land for future generations.

**KEY RISK** Limited availability of industrial land appropriate for port expansion constrains our ability to support Canadian trade.

**SUSTAINABLE GATEWAY DEFINITION** A sustainable gateway optimizes land use and delivers infrastructure to meet capacity needs.

#### WHAT WE'VE HEARD

- Identify and secure an industrial land base to reduce pressure on industrial and agricultural land, meet future demand for trade, and protect the jobs and economic activity that it enables.
- Demonstrate that existing port lands are being optimized and used efficiently before acquiring new land.
- Ensure land use and development balances economic, environmental and social objectives in a transparent way.

#### OUR APPROACH

We manage the lands and water in our jurisdiction by maintaining a Land Use Plan, conducting comprehensive reviews of all land use decisions and physical works through our Project and Environmental Review Process, and consulting extensively on significant land use changes.



### LAND USE PLAN

After a rigorous three-year consultation process involving more than 1,000 stakeholders, we finalized our new Land Use Plan in October 2014. It defines how we will manage lands in our jurisdiction over the next 15 to 20 years, in response to Canada's trade growth.

 [Read more about our Land Use Plan at portmetrovancover.com/landuseplan](http://portmetrovancover.com/landuseplan)

### PROTECTING INDUSTRIAL LANDS

In response to industrial land scarcity, we are advocating for the protection of the remaining supply of industrial land for future generations. The current inventory of industrial land is sufficient to meet demand for only about eight to 15 years. With one million more people expected in the region by 2041, we'll need a secure industrial land base to support new investments and jobs.

Learn about how we are optimizing our existing lands in the Infrastructure Development section on page 20.

APPROXIMATELY

# 200

ACRES OF PORT METRO VANCOUVER-OWNED LAND AVAILABLE FOR DEVELOPMENT, AND APPROXIMATELY 1,000 ADDITIONAL ACRES SUITABLE FOR PORT-RELATED DISTRIBUTION AND LOGISTICS WITHIN THE REGION

### LAND ACQUISITION

When appropriate, we acquire land within the region to ensure future port-related activities can be accommodated, preferring sites with ready access to shipping channels, truck routes or rail corridors, and close proximity to existing port holdings. We are committed to considering the interests of affected parties through consultation prior to making decisions about the use of newly acquired lands. This approach helps ensure clear and transparent decisions.

### FRASER RIVER HEAD LEASE

Port Metro Vancouver has managed Crown land within the lower Fraser River on behalf of the Province of B.C. for about 35 years. The head lease expired on December 31, 2014 and the B.C. Ministry of Forests, Lands and Natural Resource Operations resumed management of the land and tenures on January 1, 2015. Port Metro Vancouver retains responsibility for federal lands and for the navigational jurisdiction in the Fraser River. The Province and Port Metro Vancouver worked together to ensure a seamless and client-centred transition.

APPROXIMATELY

# 3,400

ACRES NEEDED BY 2030 FOR PORT-RELATED DISTRIBUTION AND LOGISTICS

### PROJECT AND ENVIRONMENTAL REVIEW PROCESS

Port Metro Vancouver acts in a regulatory capacity to review and approve projects within our jurisdiction that do not meet the threshold for review by the Canada Environmental Assessment Agency. In 2013, we retained independent consultants to evaluate our Project and Environmental Review Process. The consultants concluded that Port Metro Vancouver's process of issuing project permits and conducting environmental reviews results in sound, robust decisions. Areas where the process can be improved were also provided by way of 23 recommendations.

An internal project team, in collaboration with representatives from our tenants, local governments and regulatory agencies, has been working to incorporate these recommendations, with implementation targeted for 2015.

WE APPROVED

# 63

TENANT-LED PROJECTS, INCLUDING THE FRASER SURREY DOCKS DIRECT TRANSFER COAL FACILITY, A DECISION WHICH IS CURRENTLY UNDER JUDICIAL REVIEW

 [Read more about tenant-led projects at portmetrovancover.com/projects](http://portmetrovancover.com/projects)

## ECONOMIC PROSPERITY THROUGH TRADE

### Infrastructure Development



Container traffic is conservatively estimated to more than double over the next 10 to 15 years. The port has the capacity to meet this level of growth until the early 2020s. New infrastructure will be needed to meet demand for future generations of Canadians.

**KEY RISKS** Land constraints, and project costs and delays.

**SUSTAINABLE GATEWAY DEFINITION** A sustainable gateway anticipates and delivers infrastructure to meet capacity needs in a timely way.

#### WHAT WE'VE HEARD

- Consult on major infrastructure developments and conduct a thorough review of environmental and social impacts.
- Develop infrastructure to meet long-term demand for trade, especially for containerized cargoes.

#### OUR APPROACH

We work collaboratively with government and industry to fund and deliver infrastructure projects in key trade areas. Our focus is on improving rail and trucking corridors, optimizing available facilities, and building new facilities where needed to meet growing demand.





## IMPROVING RAIL AND TRUCKING CORRIDORS

### South Shore Burrard Inlet Trade Area

We delivered the South Shore Corridor Project and facilitated the Powell Street Overpass Project with the City of Vancouver. Together, these two overpasses represent a \$127 million investment, and double rail corridor capacity.

### North Shore Burrard Inlet Trade Area

Our Low Level Road Project involved elevating and realigning the existing Low Level Road, eliminating three at-grade rail crossings, improving road safety and advancing the City

of North Vancouver's Spirit Trail Master Plan. The road opened to traffic in late 2014 and was completed in early 2015.

### Roberts Bank Rail Corridor Program

Completed in 2014, this \$307 million nine-overpass program involved 12 funding partners, including local, regional, provincial and federal governments, as well as Port Metro Vancouver and private industry. The overpasses separate road and rail traffic, which improve safety, ease community connections and greatly reduce train whistling.

# \$307 million

INVESTED IN THE ROBERTS BANK RAIL CORRIDOR PROGRAM, COMPLETED IN 2014

## OPTIMIZING EXISTING FACILITIES

### Deltaport Terminal, Road and Rail Improvement Project Causeway Overpass Opens

We're working with the Province of B.C. and Deltaport terminal operator Global Container Terminals Canada to complete a series of improvements to the existing infrastructure and causeway to increase container capacity by 600,000 TEUs (twenty-foot equivalent units). We successfully finished the first project component, an overpass on the Roberts Bank causeway, in October 2014. The overpass separates road and rail traffic, improving traffic flow, reducing truck and vehicle idling, and increasing safety.

### Expansion Planning for Centerm Container Terminal

We began preliminary investigation of design options for the expansion and optimization of the Centerm container terminal located north of Vancouver's Main Street. One of three primary container terminals within the gateway, Centerm handles about one-fifth of the port's annual container cargo.

### Canada Place Cruise Optimization

We're using industry feedback to streamline cruise ship passenger flows at the Canada Place cruise terminal.

# 600,000 TEUs

IMPROVEMENTS TO THE EXISTING INFRASTRUCTURE AND CAUSEWAY ARE PROJECTED TO INCREASE CONTAINER CAPACITY AT DELTAPORT TERMINAL BY 600,000 TEUs

## BUILDING NEW CAPACITY

### Roberts Bank Terminal 2

The Roberts Bank Terminal 2 Project is a three-berth container terminal we are proposing at Roberts Bank in Delta, B.C. It is designed to add 2.4 million TEUs of annual container capacity to port infrastructure. In 2014, we continued consultation on the Preliminary Environmental Mitigation Concepts developed for the project – the fourth such round of public consultation held since 2011. The Environmental Impact Statement for the project was submitted to the Canadian Environmental Assessment Agency in March 2015.

### Gateway Transportation Collaboration Forum

We are participating in the Gateway Transportation Collaboration Forum, a multi-stakeholder cooperative initiative between government and industry to identify opportunities for the federal government's New Building Canada Plan to fund transportation infrastructure improvements that will serve future Canadian trade objectives for generations.

# 2.4 million TEUs

THE CONTAINER TERMINAL WE ARE PROPOSING AT ROBERTS BANK IN DELTA IS DESIGNED TO ADD 2.4 MILLION TEUs OF ANNUAL CONTAINER CAPACITY TO THE PORT

## HEALTHY ENVIRONMENT





---

A sustainable gateway maintains a healthy environment, focusing on:

### **HEALTHY ECOSYSTEMS**

THE GATEWAY:

- Takes a holistic approach to protecting and improving air, land and water quality to promote biodiversity and human health
- Champions coordinated management programs to protect habitats and species

### **CLIMATE ACTION**

THE GATEWAY:

- Is a leader among ports in energy conservation and alternative energy to minimize greenhouse gas emissions
- Protects its assets against potential impacts of climate change

### **RESPONSIBLE PRACTICES**

THE GATEWAY:

- Improves the environmental, social and economic performance of infrastructure through design, construction and operational practices
- Supports responsible practices throughout the global supply chain

---

READ ABOUT THE FOLLOWING TOPICS IN THIS SECTION:

- Air emissions
- Biodiversity

## HEALTHY ENVIRONMENT

### Air Emissions



Port activities generate air emissions that affect air quality and contribute to climate change. Fortunately, port-related air emissions are steadily decreasing due to technological and regulatory improvements. The only exception is greenhouse gases, which are rising due to the steady pace of growth in Canadian trade. We are working with industry and government partners to find innovative ways to power activities so the port can continue to grow to meet Canadian demand for trade while reducing its contribution to climate change.

**KEY RISKS** Environmental impacts on our neighbours and on climate change.

**SUSTAINABLE GATEWAY DEFINITION** A sustainable gateway improves air quality, advances alternative energy, and promotes energy conservation to minimize greenhouse gas emissions and protect human health.

#### WHAT WE'VE HEARD

- Provide greater transparency of port-related air emissions, especially those affecting human health or contributing to climate change.
- Accelerate the adoption of clean technology and alternative energy in port operations.

#### OUR APPROACH

Ocean-going vessels, rail locomotives, trucks and terminal operations are the primary sources of port-related air emissions. We collaborate with government and industry to develop programs that promote emissions reductions across these activities. We partner with government agencies such as Environment Canada and Metro Vancouver on air quality monitoring and other initiatives. We also report on progress toward Northwest Ports Clean Air Strategy objectives.



### NORTHWEST PORTS CLEAN AIR STRATEGY

We publish an annual report to track progress against the Northwest Ports Clean Air Strategy objectives that were developed in partnership with the Ports of Seattle and Tacoma, along with government stakeholders such as Environment Canada and Metro Vancouver.

In 2014, we partnered with Metro Vancouver to expand air quality monitoring capacity on the south shore of Burrard Inlet. This \$180,000 investment will enable better monitoring of ship emissions in the harbour. Results from these monitoring stations will be linked to Metro Vancouver's online air quality monitoring program, so stakeholders can access air quality data in real time.

# 75%

NORTHWEST PORTS CLEAN AIR STRATEGY GOAL FOR REDUCTION OF DIESEL PARTICULATE MATTER EMISSIONS PER TONNE OF CARGO BY 2015 (80 PER CENT BY 2020).

### OCEAN-GOING VESSELS

We're promoting cleaner ships through our EcoAction Program. Ship operators can obtain up to 47 per cent savings on harbour dues for meeting voluntary industry best practices such as obtaining third-party environmental designations or for using alternative fuels.

Cruise connections to shore power have grown by 73 per cent since 2010, eliminating more than 11,000 tonnes of carbon dioxide equivalent (CO<sub>2</sub>e).

### BLUE CIRCLE AWARDS

We recognize marine carriers with the highest participation rates in our EcoAction Program through our Blue Circle Award. Marine carriers that received the award in 2014 include Celebrity Cruises, CMA CGM, Disney Cruise Line, EUKOR Car Carriers, Grieg Star, Hanjin Shipping, Hapag-Lloyd AG, Holland America Line, Hyundai Merchant Marine, "K" Line, Maersk Line, Mitsui O.S.K. Lines, Mediterranean Shipping Company, Princess Cruises, Westwood Shipping Lines and Yang Ming.

# 73%

GROWTH IN CRUISE CONNECTIONS TO SHORE POWER SINCE 2010

☑ Independently assured to a limited level

### TRUCKING

Our Truck Licensing System includes environmental requirements that promote engine age restrictions and opacity limits. Newer trucks are significantly cleaner, which is why we are targeting 2007 engine emissions equivalency for particulate matter by 2017 – a target we are on track to meet.

### TERMINALS

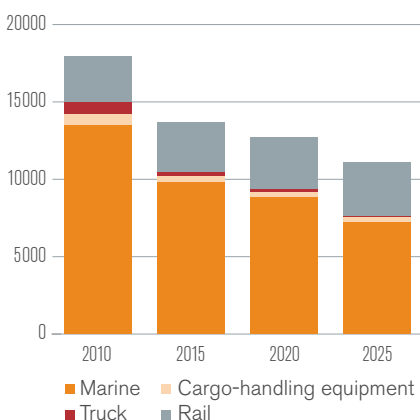
In 2015, we launched our Non-Road Diesel Emissions Program to reduce diesel particulate matter emissions associated with terminal operations. The program includes a fee applied to operation of older or dirty equipment, idle reduction policies, opacity restrictions, and labelling and auditing.

# 520

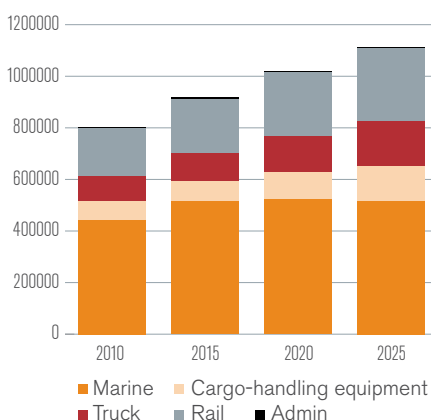
SHIP CALLS PARTICIPATED IN THE ECOACTION PROGRAM

☑ Independently assured to a limited level

### CRITERIA AIR CONTAMINANTS (tonnes)



### GREENHOUSE GASES (tCO<sub>2</sub>e)



Data is derived from Port Metro Vancouver's 2010 Landside Emissions Inventory and Environment Canada's Marine Emissions Inventory. An updated version of this inventory will be available in 2016.

### Case Study: Collaborating on Air Quality Monitoring

Protecting the air we share is an important priority for the port and local communities. That's why we partner with Metro Vancouver to improve measurement, monitoring and management of air emissions.

#### WHAT IS THE BACKGROUND?

In 2012, Metro Vancouver released the Burrard Inlet Area Local Air Quality Study, which showed elevated levels of sulphur dioxide emissions and periodically elevated levels of fine particulate matter, both likely associated with ocean-going vessels. Also in 2012, the North American Emissions Control Area came into effect, which reduces the allowable fuel sulphur content for ocean-going vessels.

Metro Vancouver is in the process of setting more aggressive objectives for sulphur dioxide levels to correspond with emerging international best practices. We want to support improved monitoring capabilities so we can better understand the effect that the Emissions Control Area and shore power have on air quality and, in particular, on sulphur dioxide and particulate matter levels.

#### HOW ARE WE RESPONDING?

In 2014, we funded the purchase and installation of several new pieces of air quality and meteorological monitoring equipment to supplement existing air quality monitoring stations operated by Metro Vancouver. The additions include two stations that continuously monitor air quality and meteorological information, and five passive (non-continuous) sites, all focused in the East Vancouver area of Burrard Inlet. The expanded air quality monitoring infrastructure will enable us to more accurately capture and record changes in air quality.

#### WHAT'S NEXT?

Metro Vancouver will operate and maintain the monitoring stations, and the data will be made available online along with data from other monitoring stations throughout the region.

In 2015, we will commence a two-year process to conduct a comprehensive inventory of port-related air emissions. These emission inventories are conducted every five years to coincide with Metro Vancouver's regional air emissions inventories, and to help us track progress and identify areas for improvement.

 You can find more about our air quality initiatives, including the 2010 inventory, at [portmetrovancover.com/environment](http://portmetrovancover.com/environment)

“If you don't measure it you can't manage it. Our collaboration on air quality monitoring at Deltaport and now in Burrard Inlet is an example of the way in which we can work together to protect and improve air quality within the region.”

Roger Quan  
Director, Air Quality and Climate Change  
Metro Vancouver



7

NEW MONITORING STATIONS  
MEASURE AIR QUALITY IN  
BURRARD INLET

98%

REDUCTION IN ALLOWABLE  
FUEL SULPHUR CONTENT  
IN 2015, COMPARED TO  
PRE-2012 LEVELS



## HEALTHY ENVIRONMENT

### Biodiversity



We operate in one of the world's most beautiful and ecologically rich regions. Keeping this ecosystem intact for future generations requires that we protect biodiversity – so that all creatures large and small can continue to call our port home.

**KEY RISK** A spill or environmental incident in the harbour.

**SUSTAINABLE GATEWAY DEFINITION** A sustainable gateway takes a holistic approach to protecting and improving air, land and water quality to promote biodiversity and human health, and champions coordinated management programs to protect habitats and species.

#### WHAT WE'VE HEARD

- Ensure port operations are conducted in a manner that protects the environment and promotes stewardship of fish and wildlife.
- Better understand and mitigate the impact of port operations on key species at risk, such as southern resident killer whales.
- Ensure infrastructure development doesn't result in a loss of habitat and impacts on birds, fish, and ecosystem health.

#### OUR APPROACH

Ecosystems are extremely complex and require collaboration with a wide variety of stakeholders, including government, specialists and scientists, environmental and conservation groups, community members, Aboriginal groups and industry, to promote stewardship. We facilitate partnerships and collaboration among these stakeholders to help advance initiatives and resolve problems.

Port-related activities such as dredging, physical works, transiting of ocean-going vessels, and spills or discharges on port lands and in waters can all impact ecosystem health and biodiversity. The following section provides an overview of some of our initiatives to promote biodiversity.





## PROJECT ENVIRONMENTAL REVIEWS

We conduct a thorough environmental review of all proposed physical works on our lands and waters. Under the *Canadian Environmental Assessment Act, 2012* we are required to conduct an environmental review before we authorize any project. Environmental conditions are included as part of the project

permit to ensure any potential impacts identified are eliminated or mitigated, and the activity will not harm fish, plants or wildlife. We cannot authorize or allow a project to proceed if it is likely to result in significant adverse environmental effects.

🔍 Independently assured to a limited level

# 265

IN 2014, WE COMPLETED 265 ENVIRONMENTAL REVIEWS IN ACCORDANCE WITH OUR ENVIRONMENT POLICY AND THE CANADIAN ENVIRONMENTAL ASSESSMENT ACT, 2012

## SPECIES AT RISK

A number of species at risk live within our jurisdiction. Under the *Species at Risk Act*, individual species at risk, and in some cases a habitat of species at risk, are legally protected on federal lands. It is essential we understand where these species at risk may be located on our land and waters, and how we can manage port-related activities to protect them.

We developed an inventory of wildlife species

at risk, identifying 32 federally-listed species at risk that are present now or predicted to appear within our jurisdiction.\* These include the Pacific water shrew, white sturgeon and red-legged frog.

Using this information, we have developed an interactive map, which provides locations of species at risk, to be used when reviewing proposed projects.\*

# 32

WE DEVELOPED A DESKTOP INVENTORY OF WILDLIFE SPECIES AT RISK, IDENTIFYING 32 FEDERALLY-LISTED SPECIES AT RISK THAT ARE PRESENT NOW OR PREDICTED TO APPEAR WITHIN OUR JURISDICTION

🔍 Independently assured to a limited level

## STEWARDSHIP OF MARINE MAMMALS

We launched the Enhancing Cetacean Habitat and Observation (ECHO) Program in late 2014, in collaboration with government agencies, shipping industries, environmental and conservation organizations, and scientists. The program is aimed at better understanding and minimizing the impact of commercial shipping activities on whales along the southern coast of B.C.

The ECHO Program will examine acoustic disturbance, physical disturbance, environmental contaminants, and reduced prey availability – the key threats identified by Fisheries and Oceans Canada in recovery strategies and/or action plans for at-risk whale species in the region.

 [Read more about the ECHO Program at portmetrovancover.com/echo](http://portmetrovancover.com/echo)

## HABITAT ENHANCEMENT

Our Land Use Plan identifies areas designated for habitat conservation and recreational use, and our Habitat Enhancement Program creates and improves fish and wildlife habitat. The program is a proactive measure intended to provide a balance between a healthy environment and future development projects that may be required for port operations.

In September 2014, we completed the Glenrose Tidal Marsh Project to improve the overall productivity of the Fraser River in North Delta, creating approximately 1.55 hectares of intertidal freshwater marsh habitat that provides high-quality rearing habitat for juvenile salmon and other fish and wildlife.

 [Read more about habitat enhancement at portmetrovancover.com/habitat](http://portmetrovancover.com/habitat)

🔍 Independently assured to a limited level

\*The study area excluded Roberts Bank, due to a separate species at risk program being conducted as part of the proposed Roberts Bank Terminal 2 Project, and areas where Port Metro Vancouver has navigational jurisdiction but does not manage the lands and waters.

# THRIVING COMMUNITIES





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A sustainable gateway enables thriving communities, focusing on:

### **GOOD NEIGHBOUR**

THE GATEWAY:

- Proactively considers effects on communities in planning and managing operations
- Identifies and responds to community interests and issues

### **COMMUNITY CONNECTIONS**

THE GATEWAY:

- Strengthens national, regional and local prosperity, delivering regional benefits
- Engages communities and inspires pride in Canada as a trading nation

### **FIRST NATIONS RELATIONSHIPS**

THE GATEWAY:

- Respects First Nations traditional territories and values traditional knowledge
- Embraces and celebrates First Nations culture and history
- Understands and considers contemporary interests and aspirations

### **SAFETY AND SECURITY**

THE GATEWAY:

- Upholds safety and security to protect port users and neighbouring communities
- Promotes a culture of emergency preparedness that supports rapid restoration of essential community services and business activities

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READ ABOUT THE FOLLOWING TOPICS IN THIS SECTION:

- Aboriginal relationships
- Impacts on neighbouring communities
- Safety and security

## THRIVING COMMUNITIES

### Aboriginal Relationships



We manage the lands and waters that intersect the asserted and established traditional territories and treaty lands of several Coast Salish First Nations. We need strong and productive relationships with Aboriginal groups to resolve issues that arise in Canada's largest port and to build opportunities to grow together.

**KEY RISKS** Loss of community acceptance and environmental impacts on neighbours.

**SUSTAINABLE GATEWAY DEFINITION** A sustainable gateway respects First Nations' traditional territories, celebrates Aboriginal culture and considers the contemporary interests of Aboriginal peoples.

#### WHAT WE'VE HEARD

- Understand and consider the social and environmental impacts of port activities on Aboriginal rights.
- Engage Aboriginal peoples to better understand their contemporary interests in the lands and waters we manage.
- Support business opportunities that facilitate the participation of Aboriginal peoples in the economic benefits of port activities.

#### OUR APPROACH

We recognize the importance of understanding the history and contemporary interests of Aboriginal peoples. We work to establish and maintain productive relationships through consultation, regular communication, and a desire to engage in mutually beneficial opportunities to enhance the gateway. In support of this, we maintain a team dedicated to supporting these relationships. We work to address both legal requirements for Aboriginal consultation and our responsibility to consider input from neighbouring communities. To do this, we focus our Aboriginal relations work on consultation and community engagement practices specific to Aboriginal interests.



## ABORIGINAL CONSULTATION

Under the *Canada Marine Act*, Port Metro Vancouver has been delegated the authority to manage federal lands. Therefore, we conduct Aboriginal consultation on behalf of Transport Canada when operations or developments have the potential to adversely impact potential or established Aboriginal or treaty rights. This means we must meet both legal

requirements for Aboriginal consultation and our social responsibility to consider input from neighbouring communities. In 2014, we consulted with Aboriginal groups on a range of activities in our jurisdiction, including the removal of piles in a sensitive area, construction of new habitat and significant terminal developments.

# 22

IN 2014, WE CREATED AN ABORIGINAL BUSINESS DIRECTORY THAT NOW HAS 22 REGISTERED BUSINESSES

## ABORIGINAL ENGAGEMENT STRATEGY

Our new Aboriginal Engagement Strategy, adopted in 2014, consists of a framework of principles, goals and activities to support the development of long-term working relationships with Aboriginal groups. The strategy will help deliver alignment with social, environmental and economic goals across four key performance areas – employment, community investment, community engagement and business development.

## ABORIGINAL BUSINESS OPPORTUNITIES

Our Aboriginal Business Directory aims to identify Aboriginal entrepreneurs and organizations interested in doing business with Port Metro Vancouver. Twenty-two Aboriginal-owned businesses have registered online for inclusion in our directory, which our procurement team can now draw upon to connect these entrepreneurs and organizations with potential port-related business opportunities.

## HABITAT CREATION

In 2014, Port Metro Vancouver completed the Glenrose Tidal Marsh Project to improve the overall productivity of the Fraser River between the Alex Fraser Bridge and Gundersen Slough. The project was undertaken to provide high-quality habitat for juvenile salmon and other fish and wildlife, as well as to address concerns raised by Aboriginal groups regarding the degradation of a site of cultural and archaeological significance. Aboriginal groups were involved in all phases of the project, from planning to construction, and participated in training and employment opportunities associated with project delivery.

## SUPPORTING ABORIGINAL INITIATIVES

In 2014, our community investment program supported a number of initiatives of importance to Aboriginal groups including the Aboriginal Speakers Series at the British Columbia Institute of Technology, which brought communities and cultures together to discuss important issues and support a campus of inclusivity by educating staff and celebrating Aboriginal culture and achievements. We supported *čəsnaʔəm*, the city before the city exhibit, an exploration of the Musqueam First Nation's ancient landscape and living culture at the Musqueam Cultural Centre, the Museum of

Anthropology and the Museum of Vancouver. The Tsleil-Waututh Nation's Indian River Watershed Habitat Restoration Project also received financial support, which helped restore year-round flow to approximately 2,500 square metres of riverside channel, enhancing natural habitat and attracting spawning salmon. Our community investment program supported the Squamish Nation's inaugural annual fundraiser for programming at the Esh7an Learning Centre and the Squamish Nation Trades Centre, organizations that offer holistic training opportunities for all Aboriginal peoples.

## THRIVING COMMUNITIES

### Impacts on Neighbouring Communities



Our port operates 24 hours a day to support Canada's trade objectives. Port operations result in increased rail and truck activity, noise and other nuisances that affect community well-being. We must work to balance trade objectives with the interests of our neighbours to enable continued growth and fulfillment of our mandate for Canadians.

**KEY RISKS** Loss of community acceptance and environmental impacts.

**SUSTAINABLE GATEWAY DEFINITION** A sustainable gateway proactively considers effects on communities and responds to community interests.

#### WHAT WE'VE HEARD

- Community values and priorities need to be considered in decision-making processes.
- Minimize nighttime noise and light from port operations, which impact the quality of life of neighbouring communities.
- Provide more information and data about port impacts on communities.

#### OUR APPROACH

We regularly engage local governments and communities to ensure we understand their interests and concerns, and then collaborate with industry to address these concerns wherever possible or develop long-term strategies as needed. For example, our three Community Liaison Committees, in East Vancouver, in Delta and on the North Shore, bring together port industry, residents, railway representatives, municipalities and First Nations to focus on improving communications and addressing issues related to port operations. Our Community Feedback Line helps us track and respond to community concerns. We follow the core values and principles of the International Association of Public Participation, and take a comprehensive approach to project-related consultation, using a variety of tools to improve accessibility and transparency, such as PortTalk ([portalk.ca](http://portalk.ca)), an online consultation tool.



## NOISE

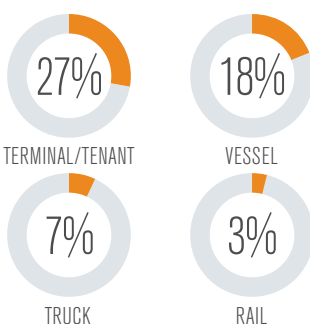
Noise is the top concern raised by neighbouring communities. In 2014, over 50 per cent of the complaints received through our community feedback line related to noise from terminals, tenants, vessels, trucks and rail movement.

We recognize how important this issue is to local residents. Unfortunately, some noises, such as ship engines or safety sirens, are difficult to resolve without compromising safety. We must therefore explore solutions and work with communities to help them understand all facets of the issue and the steps taken toward improvement.

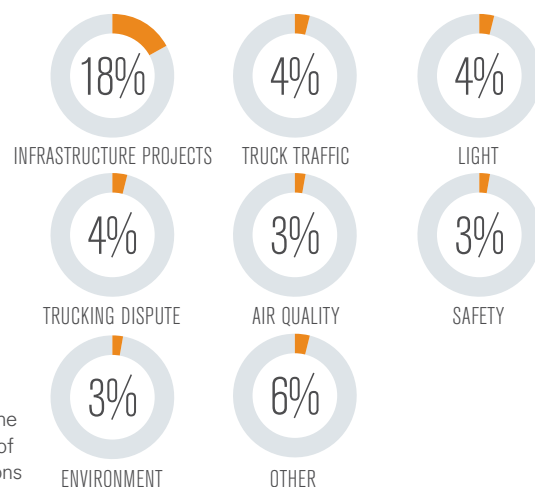
## COMMUNITY FEEDBACK

We invite feedback to help us identify opportunities for improvement. Our Community Feedback Line helps us track and respond to community concerns.

### NOISE = 55%



### OTHER = 45%



This data represents comments related to port operations and infrastructure projects received through our community feedback line and PortTalk. In 2014, we received a total of 522 complaints, 404 related to port operations and 118 related to infrastructure projects.

● Independently assured to a limited level

## COMMUNITY INVESTMENT PROGRAM

Our community investment program dedicates up to one per cent of net income to initiatives that matter for local communities and Aboriginal peoples, based on three key pillars: community enrichment, education and training, and environmental leadership. Each year, our funding is allocated across all communities in which we operate. We also ensure funds are set aside to support initiatives of importance to Aboriginal groups.

In 2014, we supported 77 community organizations, events or institutions with over \$500,000 in funding. Several new community events we helped support include the Shipyards Night Market in North Vancouver, the Vancouver Pride Parade and Festival, and the *Komagata Maru* Commemoration.

## COMMUNITY OFFICE IN DELTA

We opened a community office in Delta to provide local residents and business groups with the opportunity to meet and talk with us in person. This new office, located in Ladner, is intended to support our long-term plan to engage the community regarding port operations and future initiatives, including the proposed Roberts Bank Terminal 2 Project.

## MUNICIPAL ENGAGEMENT

We engage local governments on an ongoing basis to strengthen communications, build productive working relationships and find opportunities for collaboration. Our executive team, together with our municipal engagement team, engage staff and elected officials through working groups, liaison committees, formal consultation programs, information sessions and presentations to councils.

# 407

ENGAGEMENT EVENTS AND PUBLIC CONSULTATIONS

# \$7 million

OF FUNDING FOR LONG-TERM, COMMUNITY-BASED DREDGING PLANS, HELPING TO SUSTAIN JOBS, GROWTH AND PROSPERITY IN COMMUNITIES ALONG THE LOWER FRASER RIVER

## THRIVING COMMUNITIES

### Case Study: Managing Port Noise

Noise from horns, whistles, signals, terminal operations and the supply chain has an impact on the communities neighbouring the port. That's why we consider and build noise mitigation into port infrastructure projects and are improving noise monitoring capabilities throughout the port.

#### WHAT ARE THE KEY ISSUES OR CONCERNS?

Port operations are industrial by nature and occur on a 24/7 basis. This creates noise such as ship engines and railcar movements, as well as basic safety protocols such as safety sirens, that can affect quality of life for neighbouring communities. G4-27

#### HOW ARE WE RESPONDING?

We created a Noise Monitoring Program to help better understand the source and intensity of port-related noises, and to help us better respond to community concerns.


Noise monitoring stations were installed in locations around Burrard Inlet and Deltaport. The noise monitoring stations are fully contained, include a microphone to measure and record sound, and are connected to a secure wireless network to transmit data in real time. Some stations also capture weather data, as weather can influence how sound travels through the atmosphere. The public can access this information online through our website, 24/7.

● Independently assured to a limited level

We also incorporate noise assessments and noise mitigation into new infrastructure projects. For example, the Low Level Road Project includes a noise wall to limit sound transmission, and sloped surfaces to deflect the noise upward and away from the adjacent community.

#### WHAT'S NEXT?

The noise monitoring network should help us better identify and track noise issues raised by communities. Residents can go to our noise monitoring web page to identify monitoring stations, view sound levels and report issues. We want to better understand noise concerns and respond wherever possible. However, noise will remain a challenging issue as the port and adjacent urban areas continue to grow. This is another example of the difficult balance that comes with overseeing Canada's largest port.

 [Read more about port-related noise at portmetrovanancouver.com/noise](https://portmetrovanancouver.com/noise)

“The City appreciates the efforts taken through the project to mitigate noise levels, both through removal of the three at-grade crossings and installing noise walls and glass plates. We look forward to reviewing the noise data collected pre-construction, during construction and post-project completion.”

Peter Navratil  
Deputy City Engineer  
City of North Vancouver





# 24/7

PORT OPERATIONS ARE INDUSTRIAL BY NATURE AND OCCUR ON 24/7 BASIS

# 10

LONG-TERM NOISE MONITORING STATIONS WERE INSTALLED IN LOCATIONS ACROSS THE PORT



## THRIVING COMMUNITIES

### Safety and Security



Port operations must protect the safety and security of port users and neighbouring communities. We oversee the safety and security of activities within our jurisdiction, play a coordinating role in the case of emergency response, and help provide leadership on bigger issues affecting safety and security beyond our jurisdiction.

**KEY RISKS** An environmental spill in the harbour or river, and human injury.

**SUSTAINABLE GATEWAY DEFINITION** A sustainable gateway upholds safety and security to protect port users and neighbouring communities, and promotes a culture of emergency preparedness.

#### WHAT WE'VE HEARD

- Ensure vessels, especially tankers carrying crude oil, can travel safely through the port.
- Improve understanding of safety and security practices to help neighbouring communities feel safe and secure.
- Promote collaboration, coordination and training among responsible parties to ensure a rapid and effective response to emergencies such as a spill.

#### OUR APPROACH

We invest in and manage infrastructure and technologies connected to our centralized operations centre that enable real-time monitoring and communications throughout the port, improving our ability to identify safety and security risks and coordinate a response. We also facilitate collaboration and coordination among the many parties responsible for emergency response, such as the Canadian Coast Guard, RCMP or Western Canada Marine Response Corporation. The following provides an overview of some of our initiatives related to port safety and security.



## OPERATIONS CENTRE

The operations centre and harbour patrol work together to maintain navigational safety within the port authority's jurisdiction. In 2014, we added two new port authority vessels to improve our presence on the water and implemented a variety of safety and security improvements, including consolidating responsibility for port security passes.

## EMERGENCY RESPONSE

We have a coordinating role within our jurisdiction for emergency response, which requires collaboration with multiple first responders, communities and industry stakeholders. That's why, together with the Canadian Coast Guard, local firefighters, police departments and first aid attendants, we formed the Marine Emergency Response Coordination Committee in 2013. The committee consists of 20 agencies that

## ANCHOR MANAGEMENT INITIATIVE

We are collaborating with the City of Port Moody to establish an anchor management pilot project that will help improve harbour safety and cleanliness. It addresses ongoing concerns such as recreational vessel safety, waste disposal, noise, trespassing and abandonment.

## FRASER RIVER IMPROVEMENT INITIATIVE

We established the Fraser River Improvement Initiative in 2012. The initiative is a \$2 million five-year program focused on resolving problems associated with derelict vessels and structures. We are working collaboratively with other government agencies to establish tougher enforcement measures to prevent recurrence.

share knowledge and continuously enhance coordination of roles and responsibilities through planning and practice.

An annual port authority-led emergency response and security exercise with the Marine Emergency Response Coordination Committee partners took place in April 2014, with 120 participants from over 30 organizations.

## CONTAINER EXAMINATION FACILITY

We advanced the development of a new container examination facility to heighten safety and security at Canada's largest container terminal, Deltaport. The new facility will improve container examination practices and reduce associated truck traffic and emissions throughout the region.

# 63

63 OF THE 141 SITES IDENTIFIED THROUGH THE FRASER RIVER IMPROVEMENT INITIATIVE HAVE NOW BEEN RESOLVED

## SHIP FUEL SPILL RESPONSE IN ENGLISH BAY

Port Metro Vancouver's Operations Centre first received reports of an oily sheen on water in English Bay at about 5:00 pm on April 8, 2015, and our patrol vessel responded at the request of the Canadian Coast Guard at about 5:15 pm. We conducted our assessment of the reported area and initially observed a sheen from an unknown source. Further searching resulted in the discovery of what appeared to be an oily substance, at which point absorbent padding was laid out. At about 6:00 pm, we requested the assistance of commercial air traffic for photographs to help with the assessment, and we advised the Canadian Coast Guard that a better understanding of the size and nature of the spill was needed. The Canadian Coast Guard then took the lead, per the National Oil Spill Preparedness and Response Regime. We worked hand in hand with various agencies to minimize the impact of the spill as quickly as possible.

# CORPORATE PERFORMANCE OVERVIEW


CATEGORY	MEASURE	UNITS	2014	2013	2012
<b>OUR PEOPLE</b>					
<b>Employees</b>	Total number of employees <sup>1</sup>	#	321	293	291
	- Permanent employees	#	272	253	248
	- Term employees	#	49	40	43
	- Full time	#	314	284	279
	- Part time	#	7	9	12
	Employee turnover rate <sup>2</sup>	%	6	8	5
	Employees covered by collective bargaining agreements	%	72	71	72
	Average training per employee	\$	2,163	2,055	2,070 <sup>3</sup>
<b>OUR ENVIRONMENTAL FOOTPRINT</b>					
<b>Energy Use</b>	Direct energy use	GJ	7,131	6,956	6,620
	Indirect energy use	GJ	16,928	16,750	17,245
<b>Greenhouse gas emissions<sup>4</sup></b>	Scope 1 emissions – from direct fuel consumption	tCO <sub>2</sub> e	495 ●+	473	449
	Scope 2 emissions – from indirect fuel consumption	tCO <sub>2</sub> e	302 ●+	378	362
	Scope 3 emissions - from business travel, employee commuting, paper and waste	tCO <sub>2</sub> e	622 ●+	500	458
	Total greenhouse gas emissions	tCO <sub>2</sub> e	1,419 ●+	1,351	1,269
	Greenhouse gas emissions offset	%	100 ●+	100	100
<b>Sustainable commuting</b>	Employees participating in Commuter Challenge	%	52	60	49
<b>Waste</b>	Composted	kg	6,895	6,500	8,090
	Recycled	kg	13,803	14,308	Not Available
	Landfill	kg	6,330	5,627	5,950
	Waste diversion rate	%	77	79	Not Available
<b>Environmental compliance</b>	Fines	\$	0	0	0
	Non-monetary sanctions	#	0	0	0
<b>OUR FINANCIAL RESULTS</b>					
<b>Financial results<sup>5</sup></b>	Total value generated (thousands)	\$	222,539 ●	210,901	188,598
	Total value distributed (thousands)	\$	125,971 ●	116,508	93,471
	- Operating costs	\$	71,372	65,889	63,067
	- Employee wages and benefits	\$	35,255	34,110	30,631
	- Payments to government – Stipend <sup>6</sup>	\$	6,453	6,208	5,772
	- Payments to providers of capital	\$	5,240	5,232	5,155
	- Payments to government – Payments in lieu of taxes <sup>7</sup>	\$	6,774	4,442	5,994
	- Community investments <sup>8</sup>	\$	977	728	3,691
	- Other expenses (income)	\$	(100)	(101)	(20,839)
	Economic value retained (thousands)	\$	96,569 ●	94,393	95,127
<b>COMMUNITY ENGAGEMENT</b>					
<b>Engagement</b>	Engagement events and public consultation	#	407	524	600
	Community events attended	#	91	58	48

● Independently assured to a limited level ●+ Independently assured to reasonable level

# ABOUT THIS REPORT

## REPORT SCOPE AND BOUNDARY

Our annual sustainability report provides information about Port Metro Vancouver and Canada Place Corporation, a subsidiary of Port Metro Vancouver. We have excluded our other five subsidiaries – with the exception of our corporate financial results, which are based on consolidated financial data from our audited financial statements – due to the relatively limited scope of environmental and social impacts associated with these entities. **G4-17**



 For information on these subsidiaries, please see our annual [Financial Report at portmetrovancover.com/accountability](http://portmetrovancover.com/accountability)

The most material topics identified through our materiality process are described on pages 8–9. We recognize that the most significant impacts relating to these topics are outside of our direct operational control. We have, therefore, chosen to report using a broader port-wide boundary and have aligned our performance indicators with these topics. Data relating to issues within our direct operational control is detailed within the corporate performance table on page 40. **G4-18, G4-20, G4-21**

## REPORT GUIDELINES AND DATA


We prepared this report in accordance with the Global Reporting Initiative's new G4 Sustainability Reporting Guidelines, Core. These guidelines provide a globally recognized framework for reporting on economic, social and environmental performance. As part of this process, we submitted our report for review by GRI's Materiality Disclosures Service. This service verifies that the standard disclosures G4-17 to G4-27 are correctly located in the GRI Content Index, as well as within the text of the report, where they are identified by **G4**. The GRI content index can be found on pages 44–45. The report discloses data for the calendar year ending December 31, 2014. Material information up to report publication on June 2, 2015 is also included. Historical data is provided, where available, for comparative purposes and to demonstrate data trends.

## INDEPENDENT ASSURANCE

Ernst & Young LLP has provided third-party assurance of selected performance indicators within our report. Indicators which have received a limited level of assurance are identified by  and those which have received a reasonable level of assurance are identified by +. Ernst & Young's independent assurance statement is on pages 42–43.

## SEND US YOUR FEEDBACK

We welcome and value your feedback about this sustainability report.

 Please send comments or questions to [sustainability@portmetrovancover.com](mailto:sustainability@portmetrovancover.com)

1. As of December 31, 2014, there were 319 employees based in Vancouver and two representatives working out of our office in Beijing, China. Of these 321 employees, 159 were male (139 permanent and 20 term) and 162 were female (133 permanent and 29 term). All of these employees worked full time, with the exception of 7 females who worked part time. During the year, we also employed 9 post-secondary school students to support our community outreach, and a number of casual staff who were called on as needed throughout the year.
2. Calculation of turnover rate applies to permanent employees only.
3. Forty employees joined Port Metro Vancouver from Canada Place Corporation on December 1, 2012. The training undertaken by these employees was not included in the average training per employee in 2012.
4. Our greenhouse gas emissions were calculated in accordance with ISO 14064—Part 1, using the control approach for establishing operational boundaries. Annual activity has been captured through the use of direct invoice data, internal data tracking and human resources information (i.e. postal codes, shift schedules and work locations) and car counts for commuting. Emission factors were referenced from the 2014 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions, Ministry of Environment, November 2014, and Environment Canada's National Inventory Report, GHG Sources and Sinks in Canada, UN Framework Convention, Parts 1, 2, and 3, 1990–2011. Our greenhouse gas emissions data includes a biogenic emission component (BioCO<sub>2</sub>), as defined in the 2014 B.C. Best Practices Methodology, which accounts for the Renewable and Low Carbon Fuel Requirements Regulation. These biogenic emissions represent around 2 per cent of our total emissions. The greenhouse gas emission factor intensity for electricity decreased from 25 tCO<sub>2</sub>e/GWh in 2012, to 14 tCO<sub>2</sub>e/GWh in 2013, and to 10 tCO<sub>2</sub>e/GWh in 2014. Applying the lower electricity emission factors results in a reduction in our total emissions of around 2 per cent in 2013 and had a negligible impact on 2014 emissions. Air travel booked through our corporate travel agent, booked using flight passes and air travel purchased on corporate credit cards have been included. Flights booked directly by employees on personal credit cards have not been captured. Data on our composted waste, recycled plastics, glass and metals, and landfill waste is provided by our waste service provider on a monthly basis. An estimate of our confidential waste paper recycling was supplied by our confidential waste service provider at the end of 2014, based on the number of waste collections and the volume of the confidential waste bin. To calculate the amount of other waste paper recycled we carried out a two-week internal waste paper audit in October 2014, and extrapolated this data for the full year. The methodology for calculating greenhouse gas emissions from commuting was updated in 2014, resulting in approximately a 60 tCO<sub>2</sub>e increase in our total emissions as compared to the 2014 tCO<sub>2</sub>e calculated using the prior year's methodology. The methodology for calculating greenhouse gas emissions from natural gas allocated from the use of hot water was updated in 2014 due to better information being available, resulting in a 54 tCO<sub>2</sub>e reduction in our total emissions as compared to the 2014 tCO<sub>2</sub>e calculated using the prior year's methodology.
5. Our audited financial statements and the summary of direct economic value generated and distributed are prepared in accordance with International Financial Reporting Standards (IFRS). Within this table, investment income, gain on disposal of structures and equipment, and gain (loss) from investment in joint ventures are included within Other expenses (income). The financial results for 2012 were restated in our 2013 sustainability report due to the adoption of amendments to the International Accounting Standard 19—Employee Benefits, in particular the requirement to use the same discount rate when computing the interest cost on liabilities and the expected return on plan assets.
6. Under the *Canada Marine Act*, Port Metro Vancouver is obligated to pay an annual stipend to the Minister of Transport to maintain its Letters Patent in good standing.
7. Under the *Payment in Lieu of Taxes Act (PILT)*, Port Metro Vancouver is obligated to make payments in lieu of municipal taxes on its unleased properties.
8. Community investments includes investments made through our Community Investment Program and contributions through our local channel dredging program.

# INDEPENDENT ASSURANCE STATEMENT

To the Board Members and Management of Port Metro Vancouver,

## OUR RESPONSIBILITIES

Our assurance engagement has been planned and performed in accordance with the International Standard on Assurance Engagements 3000 *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information*, the Canadian Professional Accountants Handbook Section 5025 *Standards for Assurance Engagements Other than Audits of Financial Statements and Other Historical Financial Information*, the *Canadian Standard on Assurance Engagements on Greenhouse Gas Statements 3410*, and ISO 14064 – Part 3: *Specification with guidance for the validation and verification of greenhouse gas assertions*.

## SCOPE OF OUR WORK

We have carried out a combined 'reasonable' and 'limited' assurance engagement over specified performance information appearing in Port Metro Vancouver's 2014 Sustainability Report (the "Report") for the period January 1, 2014 to December 31, 2014. The scope of our engagement, as agreed with management, is as follows:

- **Subject matter 1:** To obtain a limited level of assurance on the fair presentation, in all material respects, of the specified performance information, as identified by the '●' symbol in the GRI Content Index within the Report (the "Specified Performance Information") and to express a conclusion thereon.
- **Subject matter 2:** To obtain a reasonable level of assurance on the fair presentation, in all material respects, of Port Metro Vancouver's aggregate 2014 greenhouse gas ("GHG") assertion as identified by the symbol '●+' in the GRI Content Index within the Report and to express an opinion thereon:
  - EN15: Direct GHG emissions (Scope 1)
  - EN16: Energy indirect GHG emissions (Scope 2)
  - EN17: Other indirect GHG emissions (Scope 3) (together, the "Greenhouse Gas Assertions")
- **Subject matter 3:** To obtain a reasonable level of assurance on the fair presentation, in all material respects, of Port Metro Vancouver's assertion that the Scope 1, 2 and 3 GHG emissions reported for indicators EN15, EN16, and EN17 have been neutralized with carbon offsets as presented in the Report (the "Carbon Neutral Assertion") and to express an opinion thereon.
- **Subject matter 4:** To obtain a limited level of assurance on the fair presentation, in all material respects, of the vessel on-time performance data, average container dwell time, and average truck turn time ("Gateway Efficiency Assertions") presented in the Report.
- **Subject matter 5:** To obtain a limited level of assurance that Port Metro Vancouver's Report includes, in all material respects,

the 'GRI G4 core' requirements of the 'GRI G4 General Standard Disclosures and Specific Standard Disclosures: Performance Indicators' ("GRI G4 Disclosure Guidelines") and to express a conclusion thereon.

## LEVEL OF ASSURANCE (LIMITED VS. REASONABLE)

- A limited assurance engagement is comprised primarily of inquiries and analytical procedures and the work is substantially less than that undertaken for a reasonable assurance engagement. In a limited assurance engagement, the level of assurance is lower than would be obtained in a reasonable assurance engagement.

## CRITERIA

There are currently no prescribed requirements relating to the preparation, publication and assurance of sustainability information. The following criteria were used in our assurance engagement:

- **Subject matter 1:** GRI G4 Sustainability Reporting Guidelines ("GRI G4 Guidelines").
- **Subject matter 2:** GRI G4 Guidelines, ISO 14064 – Part 1: *Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals* and criteria internally developed by Management.
- **Subject matter 3:** ISO 14064 – Part 1 and criteria internally developed by Management.
- **Subject matter 4:** Criteria internally developed by Management.
- **Subject matter 5:** GRI G4 Disclosure Guidelines.

## PORT METRO VANCOUVER'S BOARD AND MANAGEMENT RESPONSIBILITIES

The Report was prepared by management of Port Metro Vancouver, who is responsible for the collation and presentation of the Specified Performance Information, Greenhouse Gas Assertions, Carbon Neutral Assertion, and Gateway Efficiency Assertions, and other statements, claims and assertions in the Report. Management is also responsible for the criteria used in determining that the information is appropriate for the purpose of disclosure in the Report. In addition, management is responsible for the identification of stakeholders and identification and prioritization of material issues.

Management is also responsible for maintaining adequate records and internal controls that are designed to support the reporting process.

Management is responsible for the integrity of the Report, and for reviewing and approving the Report.

The Community and Corporate Social Responsibility Committee of the Board is responsible for reviewing the Report, providing advice to management and making recommendations, as appropriate, to the Board.

## WORK WE PERFORMED

Our assurance procedures for the Subject Matters included but were not limited to:

- Interviewing selected personnel to understand the reporting process and organizational boundary.
- Interviewing selected personnel responsible for the Specified Performance Information, the Greenhouse Gas Assertions, the Carbon Neutral Assertion, and the Gateway Efficiency Assertions to understand the collation and reporting processes.
- Where relevant, performing walkthroughs of systems and processes for data aggregation and reporting.
- Assessing the accuracy of calculations performed, on a sample basis.
- Assessing whether data and statements had been correctly transcribed from corporate systems and/or supporting evidence into the Report.
- Assessing key assumptions and the evidence to support the assumptions.
- Examination, on a sample basis, of evidence supporting the Greenhouse Gas and Carbon Neutral Assertions.

## LIMITATIONS

Our scope of work did not include providing conclusions in relation to:

- The completeness or accuracy of information relating to areas other than the subject matters.
- Information reported by Port Metro Vancouver other than in its Report, such as information contained on its website, except for the following Specified Performance Information reported under EN13 'Habitats Protected or Restored' located in the Habitat Enhancement section of its website:
  - Size and location of all habitat protected areas or restored areas, and any approval of the protection/restoration by independent external professionals
  - Any partnerships with third parties to protect or restore habitat areas distinct from where Port Metro Vancouver has overseen and implemented restoration/protection measures
  - Status of each area
  - Any standards, methodologies, assumptions used
- Management's forward-looking statements.
- Any comparisons made by Port Metro Vancouver against historical data.
- The appropriateness of definitions for internally developed criteria applied to the Greenhouse Gas Assertions, Carbon Neutral Assertion and the Gateway Efficiency Assertions.

## OUR CONCLUSIONS

Subject to the section on Limitations noted above and on the basis of our procedures for this assurance engagement, we provide the following conclusions:

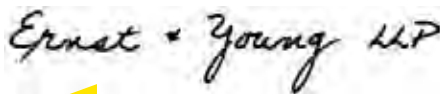
**Subject matter 1:** Nothing has come to our attention that causes us to believe that the Specified Performance Information is not, in all material respects, presented in accordance with the GRI G4 Guidelines.

**Subject matter 2 – Greenhouse Gas Assertions:** In our opinion, the Report presents fairly, in all material respects, the Greenhouse Gas Assertions for the year ended December 31, 2014 in accordance with ISO 14064 – Part 1 and GRI G4 Guidelines.

**Subject matter 3 – Carbon Neutral Assertion:** In our opinion, the Report presents fairly, in all material respects, the Carbon Neutral Assertion for the year ended December 31, 2014 in accordance with ISO 14064 – Part 1 and criteria internally developed by management.

**Subject matter 4 – Gateway Efficiency Assertions:** In our opinion, the Report presents fairly, in all material respects, the percentage of vessels on time, and average dwell time for the years ended December 31, 2012, December 31, 2013 and December 31, 2014, and the average truck time for the year ended December 31, 2014, in accordance with criteria internally developed by management.

**Subject matter 5:** Nothing has come to our attention that causes us to believe that the Report does not include, in all material respects, the 'GRI G4 core' requirements of the G4 Disclosure Guidelines.



Chartered Accountants  
Vancouver, Canada  
13 May, 2015

# GLOBAL REPORTING INITIATIVE G4 CONTENT INDEX



- Independently assured to a limited level
- + Independently assured to a reasonable level

All other GRI disclosures within the table have not been independently assured.

For more information, please see Ernst and Young LLP's independent assurance statement on pages 42–43.

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GRI STANDARD DISCLOSURES		PAGE	EXTERNAL ASSURANCE
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G4-EN12	Description of significant impacts of activities, products and services on biodiversity in protected areas and areas of high biodiversity value <sup>6</sup>	28–29	✔
G4-EN13	Habitats protected or restored	28–29	✔
G4-EN14	Total number of IUCN Red List species and national conservation list species with habitats in areas affected by operations	28–29	✔
G4-EN15	Direct greenhouse gas emissions (Scope 1)	40	✔+
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1. There were no significant changes in size, structure or ownership of the organization, or its supply chain, during the reporting period.

2. We are members of a number of associations, including the Aboriginal Skills Group, the American Association of Port Authorities, the Association of Canadian Port Authorities, the Business Council of British Columbia, Business for Social Responsibility, the Canadian Chamber of Commerce, the Canadian Council for Aboriginal Business, the Chamber of Shipping of BC, the Cruise Industry Association of B.C., Green Marine, the Industry Council for Aboriginal Business, the International Association for Public Participation, the International Association of Business Communicators, the Vancouver Board of Trade, and the Vancouver Maritime Museum.

3. No information has been restated from our previous 2013 sustainability report. **G4–22**

4. There were no significant changes from previous reporting periods in scope and aspect boundaries. **G4–23**

5. Our jurisdiction is located within an ecologically rich region. We take a holistic approach to managing biodiversity, which reflects the high biodiversity value of the lands and waters that we manage. Our jurisdiction lies within designated critical habitat for southern resident killer whales and borders the Alaksen National Wildlife Area and the Roberts Bank Wildlife Management Area. We take these protected areas into consideration as part of our project environmental reviews process.

6. For indicator EN12, we report on the port-related activities that can have an impact on ecosystem health and biodiversity. We do not currently report on the significant direct and indirect impacts of these activities in relation to the species affected, extent of areas impacted, and duration and reversibility of impacts.

7. We have not included an indigenous rights indicator as we are currently exploring the most appropriate way to measure performance in this area within our organization. We aim to report this information in our future sustainability reports.

8. We conduct project environmental reviews and engage with communities across our entire jurisdiction.

## OUR MISSION

To lead the growth of Canada's Pacific Gateway in a manner that enhances the well-being of Canadians and inspires national pride.

## OUR VISION

To be recognized as a world-class gateway by efficiently and sustainably connecting Canada with the global economy, inspiring support from our customers and from communities locally and across the nation.

## OUR VALUES

### COLLABORATION AND TEAMWORK

We work together to achieve our greatest potential. We communicate openly and treat each other with trust and respect.

### CUSTOMER RESPONSIVENESS

We strive to understand our customers' needs and to proactively provide them with distinctive value.

### INNOVATION

We seek new ideas and creative solutions.

### LEADERSHIP AND ACCOUNTABILITY

We lead by example, act with integrity and are accountable for our actions.

### OUR PEOPLE

We are committed to continuous learning, diversity and balance.

### SUSTAINABILITY

We think long term, considering social, environmental and financial matters.

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