



PORT METRO
vancouver



NOWHERE TO LAND

Industrial land for port operations is disappearing fast. By 2025, there will be no room to grow.

Find out what we are doing about it.

GROWING A SUSTAINABLE PORT

Leading the growth of Canada's Pacific Gateway requires a careful balance of national, regional and local interests, and economic, social and environmental performance. This complex role comes with its challenges. Within this report, you can read about five key challenges and what we're doing to address them.

23



Industrial Land Shortage

The industrial land base in Metro Vancouver is shrinking, while demand for trade is increasing. Find out what we're doing to protect the industrial land base, and the jobs and economic growth that result from industrial activity.

33



Trucking

Trucking is critical to the movement of container goods throughout the Vancouver Gateway and across Canada. Read about what we are doing to improve the efficiency and sustainability of truck movement through the port.

37



Tanker Safety

Communities are concerned about the risk of an oil spill. Learn about tanker safety practices in our port and the collaborative approach we're taking with industry and government to position Canada as a global leader in spill prevention, preparedness and response.



45



Coal

Coal is an important part of global electricity production and steelmaking, and demand for it continues to grow. However, coal contributes to climate change and can create dust in our communities. Find out more about this important issue and the need for meaningful dialogue about how to balance Canadian trade objectives with concerns for the environment.

51



Noise

As Canada's busiest port, we operate around the clock. Increasing industrial activity, together with the growing proximity of residential areas to port lands, means that noise can be problematic for local communities. Learn more about how we're working to better understand and manage noise issues.

CONTENTS

GROWING A SUSTAINABLE PORT

- 2 Message from the Chair
- 3 Message from the President and Chief Executive Officer
- 4 About This Report

OUR BUSINESS

- 8 Trade Through Our Port
- 10 The Vancouver Gateway
- 12 Who We Are and What We Do

OUR CONTRIBUTION TO THE GATEWAY

- 22 Port Growth and Land Use
- 30 Reliability and Competitiveness
- 36 Safety and Security
- 42 Environment
- 48 First Nations, Government and Community Relations

ACCOUNTABILITY OVERVIEW

- 56 Corporate Performance Overview
- 58 Independent Assurance Statement
- 60 Global Reporting Initiative Index



**CRAIG NEESER, CHAIR,
BOARD OF DIRECTORS**

“Our Port is improving the well-being and quality of life of Canadians across the nation by supporting their businesses and jobs while being a good neighbour to the communities in which we operate daily.”

Canada is a fortunate and prosperous country – a trading nation rich in natural resources. Port Metro Vancouver is Canada’s port, the most diversified and largest export port on the continent. We’re proud to serve Canadians by facilitating trade with more than 160 economies worldwide in a safe and secure, efficient and environmentally responsible manner.

The port is vital to Canada’s economy, enabling close to 20 per cent of Canada’s entire trade in goods and adding \$9.7 billion to the Gross Domestic Product (GDP). We’re the hub of one of North America’s most important economic corridors, generating 98,800 jobs for Canadians, including 57,000 jobs in Metro Vancouver and 38,000 direct jobs in the rest of British Columbia. Port jobs offer wages well above the national average.

Trade through the Vancouver Gateway is projected to grow as both global demand for Canadian resources and Canadian demand for import goods increases. We’re positioned to meet this challenge. Our port is helping to improve the well-being and quality of life of Canadians by enabling the trade that supports their families and businesses.

We’re collaborating with our stakeholders and local communities to address local challenges such as dust and noise from port-related operations, and the efficiency of truck traffic through the port. We’re seeking their input to help us make decisions about major issues, such as our updated Land Use Plan. We’re contributing to communities by building new infrastructure, enhancing the environment, and supporting local initiatives and events.

In our fourth annual sustainability report, we discuss our social, environmental and economic performance in 2013. The process of reporting on our sustainability performance has given us important perspective and helped us initiate meaningful dialogue on sustainability topics, such as the movement of coal and oil through the port. I hope you’ll find the report useful in learning about our operations and exploring the sustainability topics that interest you.

Thank you to Port Metro Vancouver’s Board of Directors for their continued leadership. Under their direction, we’ve completed another record-setting year of growth and success. I’d like to extend a special thank you to the Community and Corporate Social Responsibility Committee for their contribution to sustainability across the Gateway in 2013. I’d also like to acknowledge our outstanding executive leadership team, our President and Chief Executive Officer, Robin Silvester, and Port Metro Vancouver employees, who help keep Canada’s goods moving.

A handwritten signature in black ink that reads "C. Neeser". The signature is fluid and cursive, written on a light-colored background.

Craig Neeser Chair, Board of Directors

Canada's natural resources are in demand around the world. These resources assist over 160 global trading economies with the ability to provide necessities for their citizens, including electricity, housing and food. To meet growing demand for trade, Port Metro Vancouver, government and industry partners are collectively investing \$9 billion in infrastructure improvements in the Vancouver Gateway.

Increasing demand for trade can create significant challenges for the Port, local governments and residents, including managing truck traffic, noise, tanker safety, the movement of coal through the Port and the shortage of industrial land. It is imperative we engage with First Nations, local communities and stakeholders to have constructive dialogue, protect the environment and foster Canadian trade. In 2013, we participated in 524 community events and public consultations where we facilitated productive conversation and identified opportunities where we can improve.

The *Canada Marine Act* outlines a clear requirement for Canadian port authorities to contribute to our country's economy in a way that balances demand for trade with the health of the environment and the needs of the communities in which we live and operate. We are committed to achieving this mandate, and are proud of the world-class network of supply chain services and infrastructure that make up the Vancouver Gateway.

The Port's international reputation for reliability and competitiveness is fundamental to our success. Increasing costs and labour disruptions, such as those experienced in the rail and trucking sectors in 2013 and early 2014, can affect our customers' view of our port. If shippers and marine carriers choose to move their cargo through other ports, it would significantly affect the local and national economy. Therefore, we are working hard to keep our port dependable, competitive and efficient so Canadians can continue to enjoy the benefits and quality of life that come from international trade.

Our view is long term; we remain committed to facilitating Canada's trade, growing a sustainable port and enhancing the well-being of all Canadians.

I would like to thank the Board of Directors for their support and guidance, and extend my sincere gratitude to Port Metro Vancouver employees for their continued dedication and integrity in helping the port succeed and grow, for today and tomorrow.



Robin Silvester President and Chief Executive Officer



ROBIN SILVESTER,
PRESIDENT AND CHIEF
EXECUTIVE OFFICER

“We’ve been working hard to keep our Port reliable, competitive and efficient so Canadians can continue to enjoy the benefits of international trade.”

ABOUT THIS REPORT

Our annual Sustainability Report serves as an assessment of our sustainability performance. We offer it as a basis for continued dialogue and collaboration with our customers, supply chain partners, communities, governments and First Nations.

This report provides information on the sustainability topics of greatest significance to Port Metro Vancouver and our stakeholders. It's designed to provide greater transparency and accountability in how we conduct our business, and to offer a platform for sharing our performance and receiving feedback.

MATERIAL TOPICS

We follow globally accepted best practices and seek input from our stakeholders to identify material topics. Understanding what is material helps us prioritize what we manage and report. To date, we have convened two external report review panels to identify material topics and provide recommendations. You'll see their feedback reflected in this report. The summary reports from these panels can be viewed at portmetrovanancouver.com/accountability. We will be convening a third report review panel in 2014 to provide further feedback on our sustainability reporting and performance.

The report review panels were clear that it is the matters outside our direct operational control that are of greatest interest to our stakeholders. We have dedicated the majority of this report to discussing these topics: port growth and land use, reliability and competitiveness, safety and security, environment and community.

REPORT REVIEW PANEL PRIORITIZATION OF MATERIAL TOPICS

HIGH MATERIALITY

These aspects were identified as high priority by our report review panels and are central themes in our report:

- Port growth and land use
- Port safety and security
- Port impacts on the environment
- Port reliability and competitiveness
- Port impacts on the community
- Stewardship of fish and wildlife habitat
- First Nations relations
- Government relations
- Port economic impacts and value

LOW MATERIALITY

These aspects were given lower priority by our report review panels:

- Our governance
 - Our people
 - Our corporate environmental footprint
 - Our financial performance
 - Community investment
-



SCOPE OF REPORT

This report provides information about Port Metro Vancouver and Canada Place Corporation, a subsidiary of Port Metro Vancouver. On December 1, 2012, Port Metro Vancouver entered into a management agreement to provide services to Canada Place Corporation, and all Canada Place Corporation employees joined Port Metro Vancouver. Information about activities at Canada Place can be found on page 55.

Major capital projects that Port Metro Vancouver is leading or is a project partner for, are discussed within this report, but are not included in our performance indicator data. We track performance data for these projects wherever possible and will continue to explore ways to include performance reporting for major capital projects in future reports.

We have excluded our other five subsidiaries from this report, 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. These subsidiaries are: Marine Safety Holdings Ltd., Port Metro Vancouver Ventures Inc., Port Metro Vancouver Enterprises Inc., Port Metro Vancouver Holdings Inc. and North Fraser Terminals Inc.

GUIDELINES

This report is prepared in accordance with the Global Reporting Initiative (GRI), G3.1, Sustainability Reporting Guidelines. These guidelines provide a globally recognized framework for reporting on economic, social and environmental performance.

This report meets the requirements of GRI's B+ Application Level. The GRI content index can be found on pages 60–61.

DATA

This report discloses data for the year ending December 31, 2013. Historical data is included, where available, to provide comparative information and demonstrate data trends. For our performance indicators, we've followed the protocols contained within the GRI guidelines, unless otherwise stated.

INDEPENDENT ASSURANCE

Consistent with our previous sustainability reports, Ernst & Young LLP has provided third-party assurance of selected performance indicators (identified by ☉) contained within our report, and has reviewed the application of the GRI 3.1 guidelines to confirm that our report is consistent with the GRI B+ Application Level. Ernst & Young's Independent Assurance Statement can be found on pages 58–59.

SEND US YOUR FEEDBACK

We'd like to hear your feedback about this Sustainability Report. Please send comments or questions to:

Duncan Wilson
 Vice President, Corporate Social Responsibility
 Port Metro Vancouver
 100 The Pointe, 999 Canada Place
 Vancouver, B.C. V6C 3T4
 t: 1.604.665.9000
 f: 1.866.284.4271
 e: sustainability@portmetrovancover.com



For more information on the Global Reporting Initiative visit globalreporting.org

OUR BUSINESS

Port Metro Vancouver is Canada's largest and North America's most diversified port. The industries, services and infrastructure that make up the Vancouver Gateway, combined with our proximity to Asian markets, enable us to connect Canadians with more than 160 global economies and contribute \$9.7 billion annually to Canada's Gross Domestic Product (GDP).



AUTOMOBILES

1% ↓

More automobiles arrive through Port Metro Vancouver than any other port in Canada, including almost 100 per cent of all Asian-manufactured autos.



BREAKBULK

2% ↑

Breakbulk vessels carry large pieces of cargo that need to be lifted on and off by crane. Examples include steel, pulp, lumber and specialized project cargo.

Percentages refer to changes in tonnage and cruise passenger numbers.
For more information, see our Statistics Overview at portmetrovancover.com/factsandstats



BULK

11% ↑

Dry or liquid cargo that is poured into a ship's hold is called bulk cargo. Principal cargoes include grain, coal, potash, sulphur and crude oil.



CONTAINER

8% ↑

Import containers carry items such as tropical fruit, electronics, clothes and toys. After a container is unloaded, it is refilled with items for export like specialty grains, pulp or lumber.



CRUISE

22% ↑

We are the home port for Vancouver-Alaska cruises, generating an average of \$2 million in revenue for the regional economy per vessel call.

WE ARE CANADA'S PORT, FACILITATING ONE-FIFTH OF OUR NATION'S TRADE

EXAMPLES OF CANADA'S IMPORTS

Furniture →

China, Vietnam, Hong Kong, Malaysia, Taiwan, South Korea



Automobiles →

Japan, South Korea



Clothing →

China, Hong Kong, Vietnam, South Korea, Cambodia



Electronics →

China, South Korea, Hong Kong, Japan, Malaysia



Steel →

China, South Korea, Japan, Taiwan



135 million

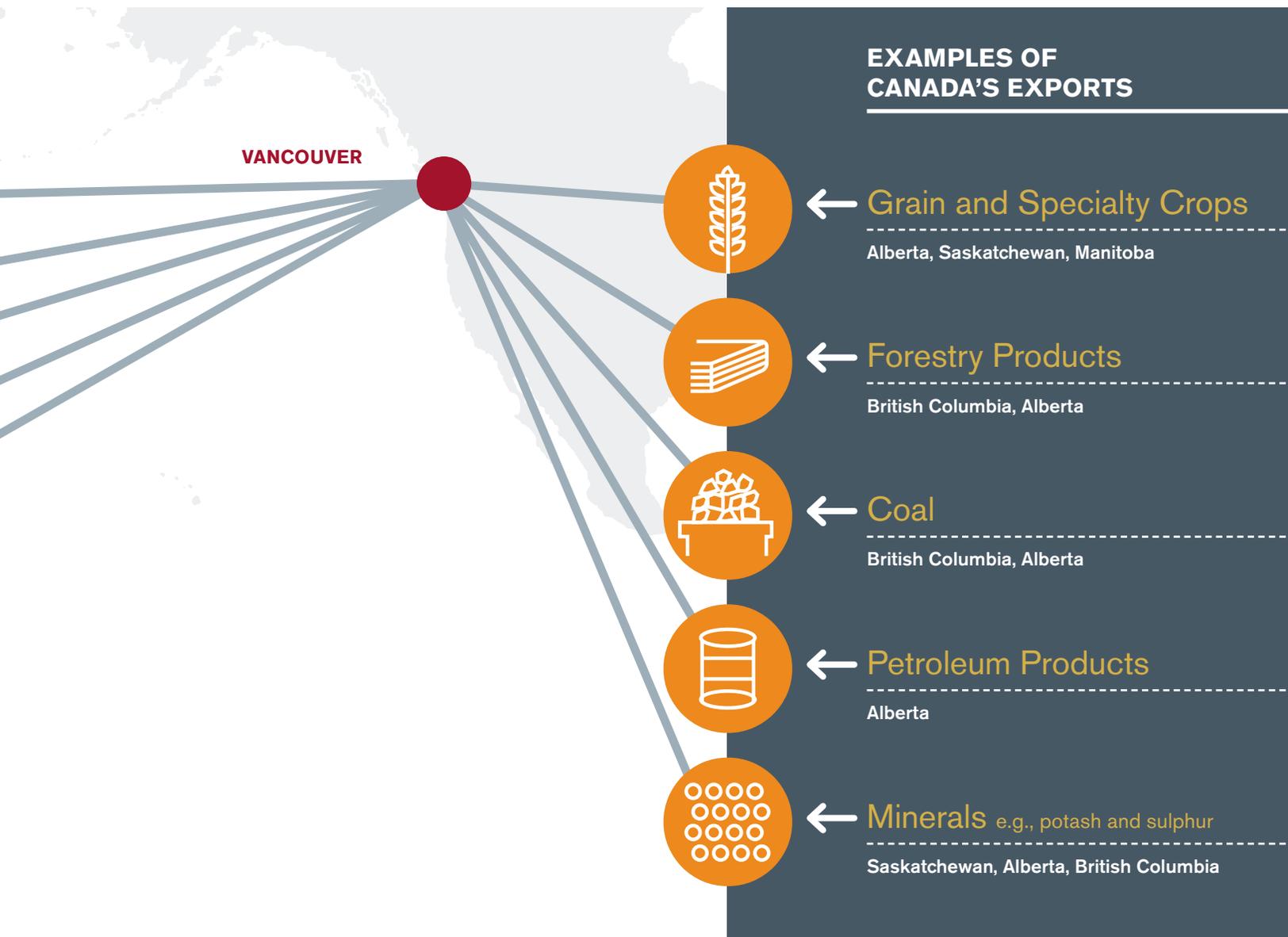
tonnes of goods moved

3,166

foreign vessel calls

160

global trading economies



19%
of Canada's
total trade

\$9.7 billion
in Gross Domestic
Product

98,800
jobs generated
across Canada

THE VANCOUVER GATEWAY

A Gateway is a point acting as an entrance between two networks. When we refer to the Vancouver Gateway, we're referring to the network of trade-related services and infrastructure in the Metro Vancouver area that connects Canadians to more than 160 global economies. The Vancouver Gateway includes marine terminals, rail and trucking services and intermodal logistics hubs, as well as stevedores, longshore labour, freight forwarders, ship chandlers and shipping agents.

28
terminals

680 km
of rail lines

1,560 km
of major truck routes

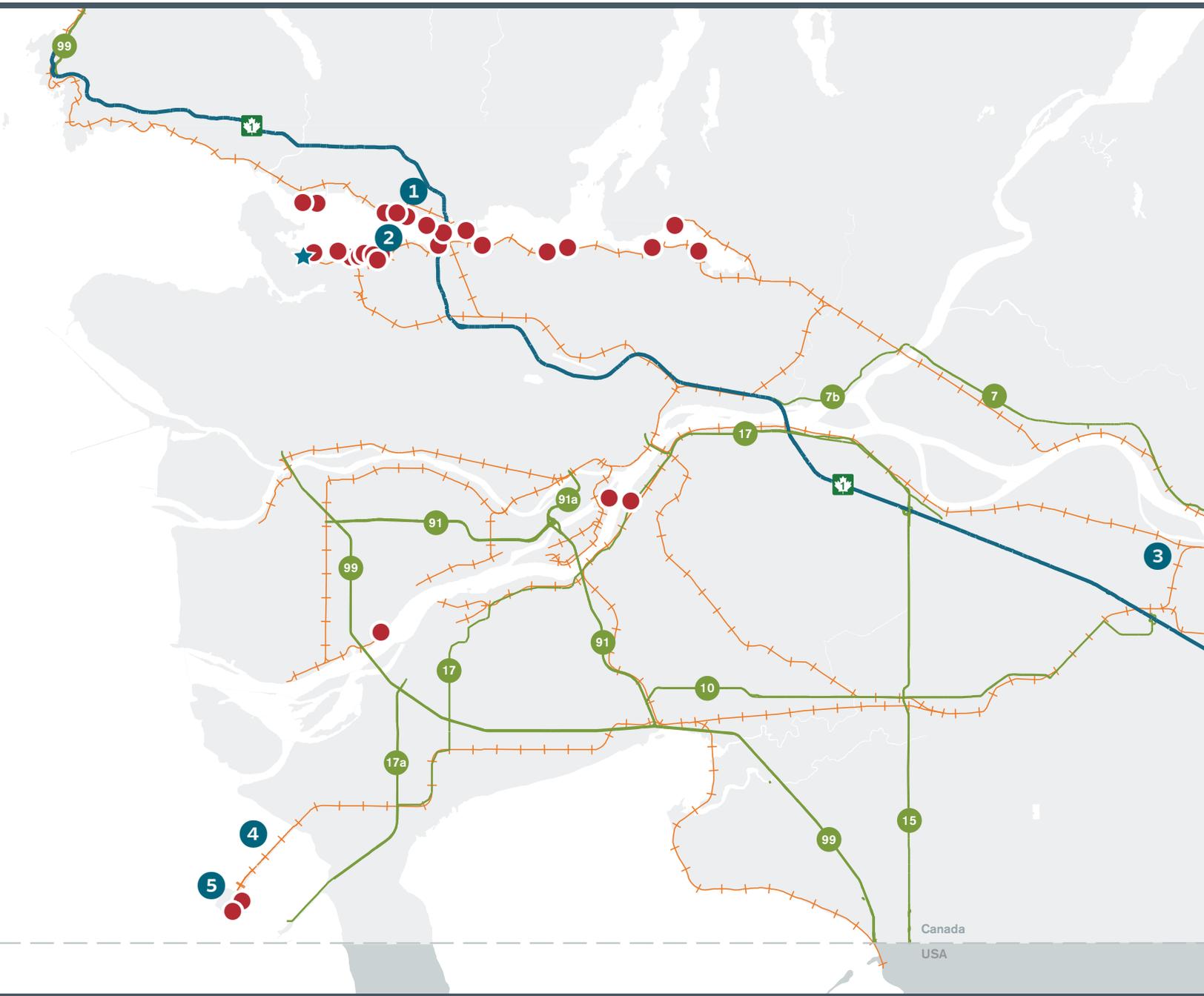
57,000
jobs in the Lower
Mainland

\$9 billion

being invested
in infrastructure
improvements by
government, industry
and Port Metro
Vancouver

PORT METRO VANCOUVER-LED INFRASTRUCTURE PROJECTS

- 1 LOW LEVEL ROAD PROJECT
See page 26
- 2 SOUTH SHORE
CORRIDOR PROJECT
See page 28
- 3 232ND STREET
OVERPASS PROJECT
See page 26
- 4 DELTAPORT TERMINAL,
ROAD AND RAIL
IMPROVEMENT PROJECT
See page 24
- 5 PROPOSED ROBERTS BANK
TERMINAL 2 PROJECT
See page 25



- ★ Port Metro Vancouver's head office
- Marine terminals
- ✚ Rail network
- Major roads
- Trans Canada highway

WHO WE ARE AND WHAT WE DO

Port Metro Vancouver is responsible for managing more than 16,000 hectares of water, over 1,000 hectares of land, and assets along 640 kilometres of shoreline. Our jurisdiction borders 16 Metro Vancouver municipalities and one treaty First Nation, and intersects the traditional territories of several First Nations.

The Vancouver Fraser Port Authority, doing business as Port Metro Vancouver, is a non-shareholder, financially self-sufficient corporation established by the Government of Canada in January 2008 pursuant to the *Canada Marine Act*. Port Metro Vancouver is accountable to the federal Minister of Transport.

The *Canada Marine Act* outlines the federal mandate for Canadian port authorities. It makes it clear that, as we grow to facilitate increases in trade, we must continue to protect the environment and take into account input from port users and communities.

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 represents members from industry and various levels of government. Port Metro Vancouver’s Board of Directors comprises 11 members:

- One federal appointee
- Seven federal appointees recommended by port users
- One local municipal appointee
- One B.C. provincial appointee
- One appointee for the Prairie provinces of Alberta, Saskatchewan and Manitoba

Standing committees receive input from employees and management on a variety of topics and make recommendations to the Board of Directors. The following standing committees oversee matters critical to the organization:

- Audit
- Community and Corporate Social Responsibility
- Governance and Conduct
- Human Resources and Compensation
- Major Capital Projects



Read more about governance at portmetrovancover.com/corporate

MANAGEMENT STRUCTURE

PRESIDENT AND CHIEF EXECUTIVE OFFICER

CHIEF FINANCIAL OFFICER	VICE PRESIDENT Corporate Social Responsibility	VICE PRESIDENT Human Resources	VICE PRESIDENT Infrastructure Delivery	VICE PRESIDENT Planning and Operations	VICE PRESIDENT Real Estate
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THE CANADA MARINE ACT

In recognition of the significance of marine transportation to Canada and its contribution to the Canadian economy, the Canada Marine Act was passed in 1998 to modernize major trading ports and to ensure competitive, efficient and commercially oriented operations. The purpose of this Act is to:

- (a) implement marine policies that provide Canada with the marine infrastructure that it needs and that offer effective support for the achievement of national, regional and local social and economic objectives and will promote and safeguard Canada's competitiveness and trade objectives;
- (a.1) promote the success of ports for the purpose of contributing to the competitiveness, growth and prosperity of the Canadian economy;
- (b) base the marine infrastructure and services on international practices and approaches that are consistent with those of Canada's major trading partners in order to foster harmonization of standards among jurisdictions;
- (c) ensure that marine transportation services are organized to satisfy the needs of users and are available at a reasonable cost to the users;
- (d) provide for a high level of safety and environmental protection;
- (e) provide a high degree of autonomy for local or regional management of components of the system of services and facilities and be responsive to local needs and priorities;
- (f) manage the marine infrastructure and services in a commercial manner that encourages, and takes into account, input from users and the community in which a port or harbour is located;
- (g) provide for the disposition, by transfer or otherwise, of certain ports and port facilities; and
- (h) promote coordination and integration of marine activities with surface and air transportation systems.

1998, c. 10, s. 4; 2008, c. 21, s. 3.

WE MUST COLLABORATE TO BE SUCCESSFUL

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 many different groups. By better understanding interests and working together, we learn how we can best achieve mutual goals and resolve shared challenges.

TERMINAL OPERATORS

We lease land and water assets to 28 marine terminals, which handle cargo across our five business sectors. We work with them to increase trade, promote continuous environmental improvement and manage impacts on communities.

TENANTS

We lease land and water assets to companies and organizations and work with them to manage the environmental and social impacts of their operations.

MAJOR SHIPPERS

We work with major importers and exporters who move goods through the port to understand their business and supply chain needs, ensure their cargo is handled reliably and efficiently, and plan future Gateway development.

MARINE CARRIERS

We work with marine carriers to optimize vessel arrivals and to ensure the Vancouver Gateway is safe, reliable and efficient.

SERVICE PROVIDERS

To enable fluid cargo movement through the port, we collaborate with rail and marine service providers, trucking companies and labour, promoting efficient and reliable service and solving supply chain challenges of Canada's largest port.

FIRST NATIONS

Engaging with First Nations helps us develop a better understanding of their diverse interests and concerns. We have identified opportunities to improve communication and increase collaboration, and believe that the success of the Vancouver Gateway requires their support and participation.

COMMUNITIES

We engage with port communities to better understand their concerns and aspirations, and build strong relationships through liaison groups, community events and our community investment program.

FEDERAL AND PROVINCIAL GOVERNMENTS

We collaborate with provincial and federal governments and agencies to ensure port activities are conducted in a safe and environmentally responsible manner and support the well-being of Canadians.

LOCAL AND REGIONAL GOVERNMENTS

We engage local and regional governments through our municipal outreach program to facilitate open communication, share ideas, resolve issues and build productive, long term relationships.

OUR APPROACH TO SUSTAINABILITY

As Canada’s largest port, we have a responsibility to be leaders in the sustainable development of port operations. Our vision is 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.

In 2010, we embarked on a scenario planning process called Port 2050. We engaged leaders across the Gateway to develop a shared perspective of our anticipated future, which was ultimately defined by two of the four possible scenarios: Rising Tide and The Great Transition. This scenario planning process highlighted the role we can play in helping the Vancouver Gateway prepare for the Great Transition—a global social, environmental and economic transition to a sustainable Gateway.

To support continued Gateway success and prepare for the Great Transition, we revised our vision and mission and embarked on a number of initiatives, including updating our Land Use Plan. In 2013, we started developing Early Warning Indicators to provide information about which scenario we are heading towards. Information from these indicators will inform our annual strategic planning process and help us identify priorities to focus on in the upcoming year.

In 2013, we launched an initiative to define what a sustainable Gateway looks like. We started by reviewing consultation feedback received through our Land Use Plan update and other project consultation. We engaged our employees, managers and executive leaders to identify the components of a sustainable Gateway. An external Advisory Panel, comprising customers, supply chain stakeholders, industry associations, government, First Nations, communities, non-government organizations and academic institutions, helped us incorporate these components into a draft Sustainable Gateway Definition.

In 2014, we’re embarking on a second phase of engagement with our employees and management team, customers, supply chain stakeholders, government, communities and First Nations to share our draft Sustainable Gateway Definition. We want to raise awareness about our Sustainable Gateway Definition, and better understand other stakeholder views and interests. We’ll be developing a plan to integrate the Sustainable Gateway Definition into our planning and operations and will use the definition to help us structure and report on our sustainability performance in the future. See porttalk.ca for more information.

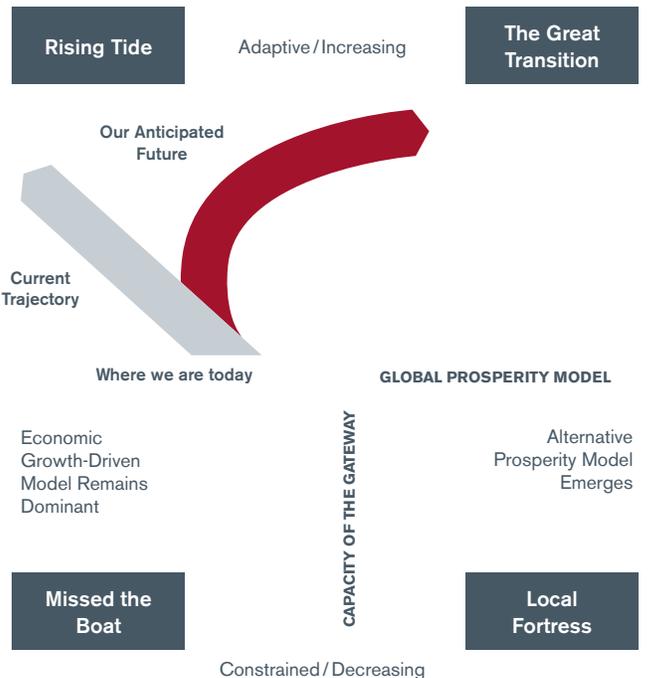
PORT 2050 FUTURE SCENARIOS

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.

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 with supply chain issues, poor coordination, lack of community buy-in and diminishing industry support.

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



Read more about Port 2050 at portmetrovancover.com/port2050

STRATEGIC PLANNING

The business of the Port requires careful planning. We balance our mandate under the *Canada Marine Act* with multiple and sometimes competing interests, ranging from national trade objectives and regional development plans to the day-to-day needs of commercial port users and local communities.

Each year, we start our business planning process by reviewing and validating our mission, vision and corporate values. We then conduct an internal and external

environmental scan of competitiveness and risk to inform the development of critical business issues. Next, we formulate strategic priorities, medium-term goals, to respond to each critical business issue. For each strategic priority, we develop supporting strategic initiatives that outline short-term actions and resourcing plans. We incorporate key components of the strategic initiatives into a corporate balanced scorecard that we track on a monthly basis, and that informs employees' annual incentive plans.

OUR STRATEGIC PRIORITIES

HOW WE DELIVERED ON OUR PRIORITIES IN 2013

Plan and facilitate bulk capacity expansion, and address cruise capacity	We continued planning for future capacity increases in a variety of bulk commodities and have identified a strategy to meet future cruise capacity needs. See page 35.
Expand container terminal capacity	We continued the Container Capacity Improvement Program to increase efficiency and land utilization while planning for long-term growth. See pages 24–25.
Accelerate operational and energy efficiency to deliver increasing and adaptive capacity and customer value enhancement	We invested in infrastructure improvements and engaged industry to improve reliability and advance energy efficiency across the port. See pages 30–33 and 44.
Achieve government and political support for growth in port capacity, with enhanced focus on local government	We implemented measures to strengthen government relationships at all levels and raised awareness of port operations and future needs. We have developed a new municipal engagement strategy to improve communication and grow our relationship with local communities. See page 49.
Build and sustain broad support for Gateway growth through Corporate Social Responsibility programs and enhanced communication and leadership	We launched an initiative to define what a sustainable Gateway means and are advancing a suite of other initiatives to reduce air emissions, improve management processes and raise awareness of the port within the community. See pages 42–52.
Expand and optimize land inventory to sustainably support the growing and evolving Gateway supply chain	We continued to update our Land Use Plan, advocated for the protection of industrial lands, and optimized land use through leasing and acquisition strategies. See page 24.
Deliver high customer service and stakeholder value by creating organizational excellence through the alignment of people, processes and technology	We continued to enhance our approach to customer service by focusing on customer needs, developing our people and improving our corporate intelligence through data management systems. See pages 18–19 and 31.
Understand, anticipate and prepare the Gateway for social, economic and environmental transition	We monitored key indicators and trends to track progress toward and prepare the Gateway for the Great Transition. See page 15.



Our Financial Report contains more information on our strategic planning process, critical business issues and strategic priorities at portmetrovanancouver.com/accountability

MANAGING RISK

Our approach to Enterprise Risk Management increases the likelihood that our goals will be achieved. Led by the Enterprise Risk Management Committee, which reports to the Audit Committee of the Board, we assess enterprise risks and associated risk controls throughout the year and document them in a corporate risk register. Risks are assessed on their expected likelihood and consequences to determine an overall risk rating, and mitigation plans are developed to manage these risks.

As of December 31, 2013, we have documented around 100 risks, of which the committee and management team have identified the 10 most important. Listed below, in no particular order, are these 10 risks:

- Supply chain capacity imbalances
- Inadequate project cost estimates
- Loss of community acceptance
- Environmental impact on neighbours
- Land not available to purchase
- Environmental spill in harbour or river
- Public liability – death/injury to members of the public
- Ineffective business planning
- Social media negatively impacts Port Metro Vancouver
- Project delays due to third parties

FINANCIAL RESULTS

We're committed to financial self-sufficiency to enable long-term sustainability of the Gateway. Unlike many ports throughout the world, we do not receive tax dollars. We earn revenue through rents and fees, and we reinvest profits to maintain and improve infrastructure and services for port users, to create benefits for communities and to protect the environment.

Port Metro Vancouver continues to be a financially sound entity with a strong credit profile and cash position. In 2013, we demonstrated financial strength through an increase in the economic value generated. Our strength and stability comes from the diversity of cargo we trade and our geographical location, which connects Canada to Asia-Pacific markets. We also saw continued growth of cargo volumes passing through the port, posting a record 135 million tonnes of cargo. The 9 per cent overall increase in volumes through the port contributed to a 12 per cent increase in consolidated revenues and an 18 per cent increase in earnings before interest, taxes, depreciation and amortization (EBITDA) from 2012.

In 2013, we maintained our Standard and Poor's AA credit rating, supporting our ongoing stable and consistent financial position.



See our 2013 Financial Report for a full financial review at portmetrovancouver.com/accountability

DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED¹

(in thousands of dollars)	2013	2012	2011
Operating revenues	210,901	188,598	182,449
DIRECT ECONOMIC VALUE GENERATED	210,901	188,598	182,449
Operating costs	65,889	63,067	62,727
Employee wages and benefits ²	34,110	30,631	29,554
Payments to government – Stipend ³	6,208	5,772	5,665
Payments to providers of capital	5,232	5,155	5,163
Payments to government – Payments In Lieu of Taxes ⁴	4,442	5,994	6,449
Community investments ⁵	728	3,691	1,466
Other expenses (income)	(101)	(20,839)	(560)
ECONOMIC VALUE DISTRIBUTED	116,508	93,471	110,464
ECONOMIC VALUE RETAINED (NET INCOME)	94,393	95,127	71,985

FOOTNOTES

1 Our audited financial statements and the summary of direct economic value generated and distributed are prepared in accordance with the 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).

2 Employee wages and benefits for 2011 and 2012 were restated 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.

3 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.

4 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. PILT was lower in 2013 due to a revised valuation methodology for vacant water lots and leasing of land assets that were previously vacant.

5 Community investments were higher in 2012 due to contributions made through the local channel dredging program.



OUR PEOPLE

Our successes and strengths are a direct result of our talented and dedicated employees. We're committed to continuous learning, diversity and balance, which are reflected in our corporate values. We aim to provide our people with a challenging and enjoyable work environment, competitive salaries and a comprehensive benefits package.

Port Metro Vancouver is a unionized workplace, with 173 of our employees represented by the International Longshore and Warehouse Union, Local 517. We have a long history of collaborative labour relations and work jointly to administer the collective agreement and explore matters of concern to union members. In 2012, we negotiated a new collective agreement that expires in December 2016. This agreement includes an individual incentive bonus program for union employees, which came into effect in 2013.

At the end of 2013, there were 291 employees based in Vancouver, plus two representatives working out of an office in Beijing, China. During the year, we also employed six post-secondary school students to support our community outreach program, and a number of casual employees who were called on as needed.

In 2013, we conducted a values survey, measuring the extent to which employees see our stated values as "the way things are done." The survey found that four of our six values are reflected in the current culture, highlighting opportunity for improvement, and reaffirming support for these values to be fully realized in the workplace. Based on our survey results, collaboration and teamwork will be a key focus for 2014.

About 46 per cent of our employees have been with Port Metro Vancouver for less than three years. With so many new faces, it is important for us to share information about our business and to create opportunities for relationship building internally. In 2014, we will be developing an internal communication plan and a series of activities to promote knowledge transfer and team building that will ultimately increase our ability to better respond to customers.

NATALIE ANDERSON

PORT METRO VANCOUVER'S
ASSISTANT HARBOUR MASTER

Our people are dedicated to the success of the Port and the well-being of Canadians. We caught up with Natalie to find out more about her experience working at the Port.

Can you please tell us about your experience and milestones while working at the Port?

I joined the Port as Port Operations Specialist. After three years, I moved into the Marine Operations Specialist role, and became Assistant Harbour Master in December 2013. My top achievements include working with the Vancouver Olympic Committee to organize the security needs for the Main Press Centre at Canada Place, and acting as a Port liaison for the Olympic Maritime Operations Centre. Another milestone includes engaging in negotiations with the City of Port Moody on formulating a pilot program to introduce a designated anchorage area. Through this, I collaborated with external stakeholders to establish a licensing framework and coordinated the program rollout.

Can you please share your experience in marine safety and how it benefits your work at the Port?

I joined the Royal Canadian Navy as a Reserve 25 years ago. Over 17 years of full-time experience, I held the following positions: Senior Instructor Basic Officer Training, Maritime Forces Pacific Naval Liaison, and Chief Boatswain's Mate on board the Kingston Class maritime coastal defence vessels. My Navy experience has offered me the skill set and knowledge I need to help ensure the Port is safe.

What about your job is important to you?

My colleagues. A strong, united team is vital to building the cohesiveness required to maintain flow within daily operations.

What about the future of Canadian trade excites you, and how does it impact the future well-being of Canadians?

Canadian trade excites me because we are lucky to have a home so rich in natural resources. I feel the benefits that these bring to Canadians are often undervalued. Working for an organization that promotes trade has offered me perspective into how goods move through our Gateway. As a member of the Operations and Security Department, I feel proud to be a part of this.

We encourage our employees to undertake continuous education, training and professional development and to include these goals in their annual development plans. Completion of training identified in these development plans was a component of our corporate balanced scorecard and a factor in the annual performance award for employees. We're aligning training with development planning, including developing our leaders for future roles. In 2013, we invested more than \$600,000 in employee training and development and conducted organization-wide training on change management, which was completed by 96 per cent of employees. We require new employees to acknowledge our Code of Ethical Conduct and Harassment and Discrimination policies, complete online harassment awareness training and undergo corporate social responsibility training.

IN 2013, WE WERE NAMED IN AON HEWITT'S GREEN 30 FOR THE SECOND CONSECUTIVE YEAR

This award recognizes the top 30 Canadian organizations whose employees are most positive about their environmental stewardship and efforts to consider long-term social, environmental and economic impacts when making decisions. We also received an honourable mention for our work in sustainability, ethics and environmental governance at the Canadian Society of Corporate Secretaries first annual Excellence in Governance Awards.

OUR ENVIRONMENTAL FOOTPRINT

We're committed to reducing our corporate environmental footprint by continually improving our environmental practices. We measure our performance on electricity consumption, waste management and employee commuting through our corporate balanced scorecard, which contributes to the annual performance award for employees.

ELECTRICITY CONSUMPTION

In 2013, electricity consumption at our office facilities increased by 30 per cent as a result of the first full operating year of our new 16,000-square-foot office expansion at Canada Place, as well as some associated challenges with optimizing the heating, ventilation and air conditioning system, which have now been addressed.

We're undertaking a space-planning exercise to optimize our office layout and systems furniture, and will be planning further energy conservation measures as part of this assessment.

WASTE MANAGEMENT

Our comprehensive waste management program includes organic waste composting and recycling of paper, glass, metals, plastics, cardboard, film and foil plastics. Since 2010, we have reduced our landfill waste per employee by 48 per cent. In 2013, we measured our waste diversion rate and achieved nearly 80 per cent diversion.

EMPLOYEE COMMUTING

We encourage our employees to commute sustainably and provide services to support this, including secure bike storage and shower facilities. In 2013, 60 per cent of employees took part in the BEST Commuter Challenge, a 11 per cent increase over the previous year.

GREENHOUSE GAS EMISSIONS

We measure our corporate greenhouse gas emissions annually in accordance with ISO14064 – part 1. In 2013, our operations were carbon neutral for a fourth consecutive year through the purchase of carbon offsets.

For more information on our environmental footprint see our Corporate Performance Overview on page 56.

OUR CONTRIBUTION TO THE GATEWAY

Port Metro Vancouver handled a record 135 million tonnes of cargo in 2013. We're increasing the efficiency and capacity of the Vancouver Gateway to support increased demand for Canadian trade. And we're collaborating with our partners to ensure we remain competitive and reliable.

IMPORTS



HOUSEHOLD GOODS

5% ↑

Imports of household goods grew in 2013, suggesting improved consumer spending. Examples of household goods include furniture, bedding, appliances and clothing.



TEXTILES

16% ↑

Textile imports, including wool, cotton and linen, were up in 2013, indicating strong demand from Canadian manufacturers of clothing and related products.



ELECTRONICS

16% ↑

Imports of electronics were up in 2013, including electrical equipment, televisions, mobile phones, cameras, stereos and computers.

Figures represent growth in tonnage.

EXPORTS



COAL

17% ↑

Coal exports continued to grow, with 68 per cent of total volumes attributed to metallurgical coal used in steelmaking. Global demand for steel used in manufacturing and infrastructure developments, along with Asian reliance on thermal coal for electricity, continue to be major factors driving growth in this sector.



WHEAT

26% ↑

Wheat exports increased significantly due to a strong harvest, increased global demand and production challenges in competing countries.



FOREST PRODUCTS

2% ↑

Growth, due in part to increased Asian demand for wood-frame construction, made 2013 a record-breaking year for forest products.

PORT GROWTH AND LAND USE

We're growing our port to deliver economic prosperity through trade. In 2013, we saw record levels of cargo come through the port and collaborated on major projects that will increase capacity in the Vancouver Gateway for generations.

WHY IT'S IMPORTANT

We exist to help Canada import and export goods internationally. Canada's trade is growing, and to continue to support our economy and remain competitive, we must grow too. But we can't just grow in any way we choose; we must grow responsibly, making the best use of limited industrial land and respecting our communities and the environment. This means we must be innovative, efficient and collaborative, and we must find creative ways to overcome challenges and improve infrastructure for future generations.

WHAT WE'VE HEARD

- Build capacity through efficiency and maximizing existing assets.
- Increase transparency around cargo forecasts that underpin the need for growth.
- Question the commodities that are traded through the Gateway – in particular, coal and its contribution to climate change.
- Engage in dialogue on concerns about climate change, human health, safe vessel movement and the risk of bulk liquid spills – especially oil.
- Don't expand onto agricultural land.
- Minimize the impacts of port growth on habitat and biodiversity, air quality and human health.
- Mitigate port-related noise (terminal, vessel and rail), truck traffic and light pollution.

2013 HIGHLIGHTS

- Submitted a Project Description for Roberts Bank Terminal 2, a proposed new three-berth marine container terminal.
- Started construction and made significant progress on the 232nd Street Overpass, Low Level Road and South Shore Corridor projects.
- Opened the elevated roadway on the South Shore Corridor.
- Completed a full draft of our updated Land Use Plan to guide port growth, including goals, objectives and policy directions, land use designations and proposed implementation measures.
- Retained external consultants to review our Project Review Process against best practices and make recommendations for improvement.

2014 FOCUS

- Complete construction of the Low Level Road, South Shore Corridor and 232nd Street Overpass projects by the end of 2014.
- Draft the Environmental Impact Statement for the Roberts Bank Terminal 2 Project for submission in early 2015.
- Continue implementing the Habitat Enhancement Program, including projects to restore areas of tidal and salt marsh.
- Complete consultation for the draft Land Use Plan and adopt the final plan.
- Initiate the recommended improvements to the Project Review Process.

INDUSTRIAL LAND SHORTAGE

Demand for trade through the Vancouver Gateway is increasing, which means Port Metro Vancouver and other industries will require more industrial land.

Industrial land enables trade, creates jobs and provides tax revenue every year to municipalities. But the industrial land base in Metro Vancouver has been shrinking over the last 30 years. Industrial land has been lost to the competing priorities of residential and commercial development. That's why Port Metro Vancouver is seeking to protect industrial land through an Industrial Land Reserve.

An Industrial Land Reserve would have clear rules to protect the industrial land base and the jobs and economic growth that are generated by industrial activity. Clear rules are the foundation of economic stability and have helped the province overcome land constraints in the past, such as the loss of agricultural land.

Port Metro Vancouver owns approximately 3,600 acres of land, most of which is occupied. We have only 200 acres of land remaining for future industrial development. Recent studies indicate that the Vancouver Gateway will need approximately 2,300 additional acres by 2025 to meet increasing cargo demand. We're already increasing our operational efficiency and improving our existing infrastructure so that we can handle more cargo using the land we already have (for instance, read about our Deltaport Terminal, Road and Rail Improvement Project on page 24). But we'll need more land to meet future demand for Canadian trade.

Without a long-term solution to competing land use demands in Metro Vancouver, development pressures will continue to conflict, increasing pressure on important economic activity, jobs and tax revenue. An Industrial Land Reserve would protect existing industrial lands, help balance land use decisions and explore innovative ways to establish new lands for growing industries. In 2014, we'll continue to promote the concept of an Industrial Land Reserve to help educate people on the significance and importance of industrial land. We want to engage the region in a constructive and meaningful dialogue to find solutions to our shared challenges.



LAND USE PLAN

The *Canada Marine Act* requires every Canadian port authority to have a land use plan that outlines how it will develop the property it manages. Our current Land Use Plan is a combination of three separate plans from each of the three former port authorities that came together in 2008 to form Port Metro Vancouver.

In January 2012, we began the process of creating a single comprehensive Land Use Plan that will guide the way in which we develop our land and water over the next 15 to 20 years. We've been talking to the public and our stakeholders about it since 2012, and have held 12 workshops, six open houses, three First Nations workshops, and numerous meetings with individual agencies and First Nations. We've received feedback from the public, which has helped us develop our goals, objectives and policy directions, land use designations and implementation measures.

Our development and consultation process has exceeded the *Canada Marine Act* requirements, and is intended to:

- Reflect port planning best practices.
- Be aligned with our mission and vision, and the *Canada Marine Act*.
- Incorporate social, environmental and economic values critical to successful planning.

We completed the draft Land Use Plan at the end of 2013. It contains land and water designations that reflect the current and intended use for each site we manage. We're proposing a number of changes to land use designations, many to preserve conservation areas. We've also identified six special study areas requiring additional consultation to determine their future use:

- Central Waterfront in Vancouver
- Maplewood site in North Vancouver
- Roberts Bank
- Three agricultural sites in Richmond

The final phase of consultation ended in April 2014, with the final plan due to be adopted by the end of 2014. For more information, visit portmetrovanancouver.com/landuseplan.

In January 2012, we began the process of creating a single comprehensive Land Use Plan that will guide the way in which we develop our land and water over the next 15 to 20 years.

2.4 million

additional twenty-foot equivalent units of capacity would be provided by the proposed Roberts Bank Terminal 2 Project.

CONTAINER CAPACITY IMPROVEMENT PROGRAM

Container traffic through the Vancouver Gateway is projected to more than double over the next 10 to 15 years. We must plan to meet future demand, which is why we've created the Container Capacity Improvement Program (CCIP). This program is focused on delivering required capacity through expansions and improved efficiencies at existing container terminals, as well as developing new sites as needed.

DELTAPORT TERMINAL, ROAD AND RAIL IMPROVEMENT PROJECT

As part of CCIP, we're working with the Province of British Columbia and TSI Terminal Systems Inc. (the operator of Deltaport) to deliver the Deltaport Terminal, Road and Rail Improvement Project (DTRRIP). DTRRIP will provide an efficient and cost-effective increase in container capacity through improvements to existing port infrastructure at Roberts Bank. This project is expected to be complete in 2016, and will increase capacity by 600,000 twenty-foot equivalent units (TEUs), providing Deltaport with a total capacity of 2.4 million TEUs. A TEU is a unit of measure based on the volume of a 20-foot-long container, or standard-sized metal box, which carries various commodities between different modes of transportation, such as ships, trains and trucks.

ROBERTS BANK TERMINAL 2 PROJECT

We're the proponent of the Roberts Bank Terminal 2 Project, which we're proposing to meet the demand for increased Canadian trade. A second terminal at Roberts Bank will give us the capacity to handle an additional 2.4 million TEUs each year and meet forecast demand for container cargo in the coming decade.

The project is in the planning phase. In 2013, we submitted a Project Description to the Canadian Environmental Assessment Agency (CEA Agency) and the B.C. Environmental Assessment Office. Pre-design consultation with communities, stakeholders and the public ran from October 7 to November 12, 2013. We ran five open houses, held numerous stakeholder meetings and ran 30 newspaper advertisements, and our outreach team met with local governments and organizations. We heard concerns about increased road and rail traffic, about the scope and nature of the environmental assessment, and about the environmental impacts on biofilm, shorebirds, fish and southern resident killer whales. There were also some questions about the project justification and rationale, in terms of growth forecasts.

In fall 2013, CEA Agency determined that the Roberts Bank Terminal 2 Project is a reviewable project and issued draft Environmental Impact Statement guidelines, on which the public was invited to comment. In January 2014, the federal Minister of Environment determined that the project will undergo an environmental assessment by an independent review panel and CEA Agency issued final Environmental Impact Statement guidelines.

TECHNICAL ADVISORY GROUPS

As part of the work for the Project Description for the Roberts Bank Terminal 2 Project, we convened four technical advisory group meetings with scientists, regulators and non-governmental organizations. Their focus was on biofilm and shorebirds, coastal geomorphology, productive capacity and southern resident killer whales. In each of these areas, the groups considered ongoing productivity or productive capacity, and the mechanisms by which we can determine the productive capacity of the environment that would be affected by the Project. These groups have helped define our methodologies, increase knowledge of key concerns and develop science around these important topics. Read these reports at robertsbankterminal2.com/information-centre/project-documents.

At the end of this process, we believe we'll have some of the most robust science on biofilm in North America. Biofilm is a nutrient-rich film that grows on the tidal mudflats and is an important food source for migratory birds.

In 2014, we'll be holding working group meetings to discuss and identify concerns from regulators and local municipalities, in an effort to help us address these concerns as we develop the Environmental Impact Statement.



TRADE AREAS INFRASTRUCTURE PROGRAM

Our Trade Areas Infrastructure Program falls under the Government of Canada's Asia-Pacific Gateway and Corridor Initiative, which improves the safety and efficiency of the supply chain and supports port growth. The Program includes a suite of capital and infrastructure projects that will expand capacity in the Vancouver Gateway. We're leading, funding or contributing expertise to 17 major infrastructure improvement projects in three areas designated by Transport Canada as key areas for our nation's economic trade: the North Shore Trade Area, South Shore Trade Area and Roberts Bank Rail Corridor. We're leading three major projects in this Program: 232nd Street Overpass in the Township of Langley, South Shore Corridor in the City of Vancouver and Low Level Road in the City of North Vancouver.

ROBERTS BANK RAIL CORRIDOR PROGRAM

The 70-kilometre Roberts Bank Rail Corridor south of Vancouver connects Canada's largest container facility and a major coal terminal at Roberts Bank with the North American rail network. Within this corridor, road and rail improvement projects are being funded collaboratively by 12 partners representing private industry and all levels of government. Two projects are already complete, and eight projects in Delta, Surrey and the City and Township of Langley will be delivered in 2014, including six overpass projects, one railway siding project and one rail crossing information system project. These at-grade road and rail separation projects will enhance rail operations, accommodate growth in both road and rail traffic, and improve safety and efficiency. In other words, these projects will make it easier for trains, trucks and other vehicles to move around without getting in each other's way and causing congestion.

232ND STREET OVERPASS PROJECT

The 232nd Street Overpass Project in the Township of Langley is a two-lane overpass that replaces the street-level rail crossing between 75th Avenue and 76A Avenue. This new overpass connects communities north of Highway 1, including the eastern sections of Walnut Grove and Fort Langley, with the rest of Langley, and it eliminates delays for drivers, cyclists and pedestrians. It also allows for the possible future westward extension of the Rawlison rail siding. Construction began in fall 2012 and was completed in April 2014. Residents in the surrounding community were provided with regular updates during construction.

NORTH SHORE TRADE AREA

The North Shore Trade Area includes port terminals and industrial activities critical to the Asia-Pacific Gateway. Port Metro Vancouver is partnering with federal, provincial and municipal governments and various industry stakeholders to improve the capacity and efficiency of port operations on the North Shore. Investments totalling \$283 million will increase rail corridor capacity, help reduce noise from train whistling in local communities, and improve safety and reliability along roadways that port traffic shares with local residents and businesses. Key projects that advanced in 2013 and will continue in 2014 include the Low Level Road Project, which Port Metro Vancouver is leading, and the Philip Avenue Overpass Project, which is being led by the District of North Vancouver. Both of these projects will reduce the need for train whistles at grade crossings by providing alternative access for vehicle traffic.

LOW LEVEL ROAD PROJECT

The Low Level Road Project is a \$100 million project that will provide space for two additional rail tracks on the North Shore and includes elevating and realigning the new Low Level Road to the north of the existing roadway. This will help the North Shore Trade Area remain competitive by improving capacity and efficiency while addressing long-standing City of North Vancouver community interests. This



Project addresses slope stability issues in the Moodyville area of North Vancouver. It eliminates three at-grade rail crossings and the accompanying train whistles, improves road safety and accelerates the City's Spirit Trail Master Plan. The Project is 75 per cent complete and is set to open in late fall 2014.

The Project realigns and elevates Low Level Road between Cotton Road and East 3rd Street, and Esplanade and St. Georges Avenue. We're constructing three signalized intersections and proper drainage for the slope to improve road safety. An overpass at Neptune-Cargill Terminal and dedicated turning lanes to improve traffic safety and reduce congestion are also part of this Project. By closing three at-grade crossings, this Project has also significantly reduced the need for trains to whistle.

As part of this project, we are constructing a 2.6-kilometre segment of the City's Spirit Trail, representing a \$6 million benefit to the community. This segment of the Spirit Trail will incorporate a pedestrian overpass at East 3rd Street, a timber bridge and 60-metre-long suspension bridge within Moodyville Park. The Low Level Road Project will also be delivering a host of community amenities, including three independent art features, the largest being a 130-metre-long by 3-metre-high public art wall along the new Low Level Road. An additional benefit is that the City of North Vancouver was able to remove long-term slope stability concerns in the area from their risk register as a result of this Project.

We're communicating with local residents throughout the Project. We responded to approximately 170 inquiries and complaints during 2013, mostly about night work, power line relocation and general construction challenges with dust and noise. We've responded to these concerns where possible by adapting the project and we continue to monitor feedback. In 2013, we held meetings with local residents and businesses, and participated in two meetings with the City of North Vancouver's Low Level Road and Port Area Community Liaison Committee. We've provided regular construction updates through mail drops, email updates, website updates, newspaper advertisements and tweets, and we'll continue to do so throughout construction.

CHRISTINE BANHAM

NORTH SHORE WATERFRONT LIAISON COMMITTEE

We seek community input through established liaison committees. We caught up with Christine Banham, past Chair of the North Shore Waterfront Liaison Committee (NSWLC) 2013.

What made you want to join the NSWLC?

I saw it as a forum for fostering dialogue about port/waterfront issues among North Shore community groups. The NSWLC structure is reflective of the community; it brings together decision-makers and skill sets to further understanding, and to develop workable ideas to address residents' concerns as well as better integrate port and rail industries into our communities. Dialogue means a two-way flow of information; through dialogue we develop understanding and respectful relationships.

The Port and NSWLC have aligned objectives with respect to improving integration with communities. Why is ongoing collaboration important between committee members?

By collaborating, we learn and develop better understanding and acceptance. Key achievements include the Rail Steering committee, where we examined what was technically and financially viable to reduce rail noise on the North Shore, and an NSWLC-hosted open house at the Seaspan Shipyards, which provided an opportunity for residents to see what goes on in the shipyard and an opportunity for workers who live on the North Shore to showcase their workplace.

We understand that noise is a challenge for communities and that this concern was taken into account in the development of infrastructure projects like Low Level Road. Can you comment on this?

It's important to distinguish between disruption during construction and ongoing noise disruption. Ongoing noise from rail and port operations is a concern for nearby residents, with rail noise (whistling/shunting) often being more sudden and noticeable. Low Level Road includes closing three rail crossings which has significantly reduced noise from train whistling at the now-closed St. Patricks and St. Andrews rail crossings (Neptune/Cargill crossing to be closed soon). The reconfiguration of the rail tracks that is possible with the Low Level Road project will also reduce noise from shunting. Noise does not stay within municipal boundaries, and can travel far from the original source. This is where the cross-municipality structure of the NSWLC is helpful. Through the work of the Rail Steering committee, we identified some additional North Shore rail crossings where whistling could be reduced through the addition of safety controls or crossing closures. Three rail crossings were identified for upgrades (Chesterfield, Forbes and Mosquito Creek) and the local community is already benefitting from the reduced train whistling.

SOUTH SHORE TRADE AREA

The South Shore Trade Area supports the import and export of a wide range of cargoes, including containers and bulk. These activities are a major economic driver, both in the region and throughout the country, supporting employment in the marine, rail, trucking and resource commodity sectors. Port Metro Vancouver, together with the Government of Canada, the City of Vancouver, Canadian National Railway and Canadian Pacific Railway, are investing \$125 million in infrastructure to improve access, traffic flows, safety and rail corridor capacity, which will help reduce community impacts like noise and truck traffic on local streets. Key projects that advanced in 2013 and will continue in 2014 include the \$50 million Powell Street Overpass project, which is being led by the City of Vancouver, with project management oversight from Port Metro Vancouver, and the \$75 million South Shore Corridor Project, which is being led by Port Metro Vancouver.

SOUTH SHORE CORRIDOR PROJECT

The South Shore Corridor Project is a project that allows for future rail capacity expansion to improve the safety and efficiency of the supply chain. The Project, located on the south shore of Burrard Inlet, includes improvements along Stewart and Commissioner Streets, bounded by Heatley Avenue and McGill Street.

In late 2012 and early 2013, the 2901 Commissioner Street truck staging area was completed and work began on the truck staging area opposite Terminal Dock. Major construction on the South Shore Corridor Project continued in 2013 with relocation of the Commissioner Street roadway northward, enabling future additional rail capacity.

The second major component of the project was a new two-lane elevated roadway over Stewart Street, which separates 10 at-grade railway crossings. In the past, trucks could be stopped for up to 20 minutes in this area when rail switching occurred. Construction on the elevated roadway began in January 2013 and the roadway went into service in December 2013. We received and responded to concerns about construction, specifically about working hours, lighting, cameras, privacy and noise.

The benefits of this Project were realized immediately, with improved passage along the corridor for trucks. The Project has reduced idling and traffic backups onto residential streets and other highway corridors, and has greatly improved efficiency in the South Shore Trade Area.

Also in 2013, we upgraded camera and security systems and the vehicle access control gate system. We installed dynamic message signs on the corridor and in 2014 we'll also install these signs on some city streets to manage port truck traffic in the region and help with operational flexibility. Systems upgrades for this project will be completed in 2014.

The final phase of the South Shore Corridor Project is the Victoria Drive pedestrian overpass, which will be completed in fall 2014. The new pedestrian overpass will improve rail efficiency in the corridor, as trains will not have to be broken apart to leave the intersection clear.

PROJECT REVIEW PROCESS

Our tenants and project proponents are seeking clarity around what we expect of them in our Project and Environmental Review processes. Since 2012, substantive changes to environmental legislation, such as the introduction of the *Canadian Environmental Assessment Act, 2012* and the new *Fisheries Act*, along with the closing of the Burrard Inlet Environmental Action Program and the Fraser River Estuary Management Program, have placed pressure on various agencies and decision-makers to coordinate project review processes and outcomes. Also, we're seeing increasing public interest and expectations regarding the rigour and transparency of these processes.

In anticipation of continued port growth, we hired consultants to assess our Project and Environmental Review processes against best practices and recommend enhancements. Their findings show that our Project and Environmental Review processes are sound. They offered 23 recommendations for improvement, and in 2014 we'll publish their findings and implement many of their recommendations. We'll continue to report on this process in future sustainability reports.

TENANT-LED PROJECTS

In 2013, we saw significant activity from terminal operators and other tenants interested in developing on Port lands. Many terminal operators came forward with development proposals that will increase throughput in various commodity sectors. In 2013, we approved 36 project applications. We currently have approximately 75 applications under review.

Some of the major tenant-led projects reviewed and approved in 2013 and early 2014 were:

- **Neptune Terminal Upgrades, Coal Handling Expansion**
 Permit issued in January 2013. The project includes a second railcar dumper, a conveyor to transport the steelmaking coal from the new dumper to the storage area and the replacement of a quadrant shiploader. North Vancouver.
- **Cargill Noise Mitigation Project**
 Permit issued in February 2013. The proposed works include the installation of sound-absorbing barriers and silencers along the north side of the facility to reduce noise levels at the nearest sensitive residence by five decibels. North Vancouver.
- **Beebie Transload Warehouse Development – Phase 1 Project**
 Permit issued in February 2013. Development of a 43,000-square-foot transload building in Queensborough. New Westminster.
- **Richardson International Grain Storage Capacity Project**
 Permit issued in April 2013. Construction of two 40,000-metric-tonne concrete storage annexes. North Vancouver.
- **Westshore Terminals Equipment Replacement and Upgrade**
 Permit issued in February 2014. Replacement of the existing office and administration buildings and yard equipment. Delta.
- **Pacific Coast Terminals Canola-Handling Facility**
 Permit issued in February 2014. Development of a canola-handling facility at the terminal, including modifications to existing infrastructure and new equipment. Port Moody.
- **Pacific Coast Terminals Wastewater Treatment Facility Project**
 Permit issued in April 2014. Construction of water treatment facility including a clarifier, associated piping, a building and related pump stations. Port Moody.

Some of the major tenant-led projects currently under review are:

- **Fraser Surrey Docks, Direct Transfer Coal Facility**
 Environmental Impact Assessment submitted in November 2013; additional health effects work underway. Development of a direct transfer coal facility at the southwest end of the existing terminal to handle up to 4 million metric tonnes of coal per year. Surrey.
- **Lehigh Hanson South Richmond Terminal Project**
 Construction of an aggregate-processing terminal, including a wash plant, aggregate material stockpiles, a reclaimer, a rail unloading facility and two marine berths for loading and unloading aggregate barges. Richmond.

Projects located within Port Metro Vancouver's jurisdiction which require a formal Environmental Assessment under the *Canadian Environmental Assessment Act* are:

- **Vancouver Airport Fuel Delivery Project**
 Port Metro Vancouver was the federal lead for the harmonized federal/provincial Environmental Assessment Review. The project proposes a marine terminal on the south arm of the Fraser River, an adjacent fuel storage facility and a 15-kilometre pipeline to Vancouver International Airport to meet future demand for fuel. We concluded our review in December 2013, determining that as long as mitigation measures are incorporated and 64 environmental conditions are applied, the project is not likely to cause significant adverse environmental effects. This determination was consistent with the provincial decision.
- **Kinder Morgan Trans Mountain Pipeline Expansion Project**
 In December 2013, Kinder Morgan filed a proposal with the National Energy Board (NEB) to expand the existing Trans Mountain pipeline system between Edmonton, Alberta and Burnaby. This project involves constructing three new berths at Westridge Marine Terminal in Burnaby, which presently handles around five tankers per month. Should the proposed expansion be approved, the number of tankers loaded at the Westridge Marine Terminal could increase to approximately 34 per month. On April 2, 2014, the NEB issued a Hearing Order confirming they had accepted Kinder Morgan's application. The project will undergo a panel environmental assessment, led by the NEB, with the hearing process due to conclude on July 2, 2015. Port Metro Vancouver's application for intervenor status in this hearing process has been approved, allowing us to ask questions and request further information as part of the review process.



For more information about tenant-led projects, visit portmetrovancover.com/tenantledprojects

RELIABILITY AND COMPETITIVENESS

We want to be the Gateway of choice for our customers. We're improving the efficiency and reliability of port operations to stay competitive.

WHY IT'S IMPORTANT

We handle almost 20 per cent of Canada's trade and compete with other ports to support the international shipping community. Maintaining reliability and fluidity in the supply chain is essential to upholding our position and reputation. This means collaborating with customers, government and supply chain partners, including vessels, terminals, railways, the trucking sector and labour, to ensure that our Gateway can be counted on to move cargo to its destination on time.

WHAT WE'VE HEARD

- Be reliable and consistent; it's more important than being fast.
- Find solutions to trucking challenges, including improving wait times for trucks accessing Port terminals to pick up and drop off containers, and enforcing truck hauling rates.
- Continue with infrastructure projects and ensure they're delivered on time.

2013 HIGHLIGHTS

- Welcomed 3,166 vessels and moved a record 135 million tonnes of cargo.
- Outfitted more than 1,000 trucks, representing 53 per cent of the fleet, with GPS units to provide more accurate, real-time data and give greater insight into routing and congestion issues.
- Developed the Container Vessel On-Time Incentive Program that spurred a 12 per cent improvement in container vessels arriving in port on time.
- B.C. Maritime Employers Association, terminal operators and longshore labour came to an agreement on safe processes for loading grain in the rain; 70 per cent of grain-carrying vessels are now able to load in inclement weather.

2014 FOCUS

- Install GPS units in 1,000 more trucks to cover the whole fleet and help us track truck movements through the Vancouver Gateway, and manage congestion at terminals and access gates.
- Implement a restructured Truck Licensing System, through consultation with trucking industry stakeholders, to create a more stable trucking industry.
- Develop an enhanced common reservation system for the truck sector, in consultation with terminals and trucking stakeholders, for implementation in January 2015.
- Implement an extended hours pilot project for the truck sector that will be responsive to volume forecasts.

IMPROVING RELIABILITY

We're working with customers and stakeholders to improve the reliability of our operations. Four key aspects of the supply chain must be aligned for us to be successful: terminal operations, trucking, rail, and ocean-going vessels. If these four pieces are coordinated, the port will function at optimum capacity. When one aspect fails, the others also fail, which can have a dramatic effect on Canadian consumers and businesses. Alignment among these sectors requires 24/7 global coordination.

In February 2012, the BC Maritime Employers Association and the International Longshore and Warehouse Union Locals 514 and 500 ratified an extension of their collective agreements to March 2018. In late 2013, a labour stoppage in the rail sector temporarily impeded cargo traffic within the port. In early 2014, truck operators, both unionized and non-unionized labour, went on strike to protest wait times and undercutting practices within the sector that affect their income. Port Metro Vancouver worked with the federal and provincial governments and other stakeholders to end the strike and return the port to full operation. A Joint Action Plan, put forward by the federal and provincial governments with Port Metro Vancouver, was accepted by drivers on March 26, 2014.

UNDERSTANDING OUR CUSTOMERS' NEEDS

In 2013, we continued our efforts to better understand our customers' needs by surveying 35 customer organizations through a combination of individual in-depth interviews and online surveys. We asked questions about our business relationships, our engagement activities and the quality, value and delivery of our services.

Our customers said they're feeling more engaged and able to discuss important issues; they appreciate the frequency and intensity of our communication, and recognize our expertise in community outreach and promoting the Gateway. They want us to continue our efforts to improve communication with them.

In terms of satisfaction with our services, our customers told us that our employees are both competent and knowledgeable, but suggested that we could further improve our efficiency and responsiveness.

In 2014, we'll continue to refine our approach to customer engagement, focusing on better aligning services with customer needs, and streamline internal resources to improve customer engagement and satisfaction.

CONTAINER VESSEL ON-TIME INCENTIVE PROGRAM

In 2013, in an effort to support reliability in the marine shipping sector, we implemented the Container Vessel On-Time Incentive Program, which is unique in the world. To improve performance we offered ocean carriers a rebate on wharfage fees, based on how well they performed in terms of on-time arrivals, within an hour of the vessel's scheduled arrival time. Improvements to reliability and efficiency in the container vessel sector create improvements in the terminal, rail and trucking sectors, which is critical to overall supply chain reliability.

We report vessel on-time performance through regular updates to portmetrovanancouver.com/vessels. This supports transparency and is helpful information for Canadian retailers. We set a target of 5 per cent improvement in on-time arrivals in 2013, but the program was even more successful than anticipated, with a 12 per cent improvement in vessels arriving on time. Several shipping companies, including Maersk Line, CMA CGM Group and Mitsu O.S.K. Lines (MOL), achieved greater than 90 per cent on-time performance.

12%

increase in container vessels arriving on time due to our on-time incentive program.



GRAIN LOADING IN THE RAIN

We operate in a rainy region. Rain can impede the loading of grain because of safety issues and the sensitivity of grain to moisture. To address this matter, the B.C. Maritime Employers Association, several grain terminal operators and longshore labour came to an agreement and certified two methods for loading grain in the rain: feeder-hole loading and tarping. These methods increase worker safety and ensure that cargo can be loaded in dry, quality-controlled conditions. In 2012, prior to these practices, there was almost no grain loading in rainy weather, but by the end of 2013, approximately 70 per cent of grain-carrying vessels were able to load grain in the rain, reducing the number of lost productive hours due to inclement weather.

WEATHER AND RELIABLE RAIL SERVICE

Moving cargo by rail is critical to Canada's trade, with the majority of exports moved to our Port by rail. Inclement weather can be challenging for the rail sector. Cold temperatures affected many North American cities in 2013 and into early 2014, and these temperatures affected rail service by interfering with the air brakes on trains. When temperatures dropped below -30°C , trains had to be reduced in length so they could stop safely. Shorter trains resulted in a loss of capacity on the supply chain. This meant cargo was arriving in Vancouver by ship and then sitting at the terminal, and bulk vessels were waiting for export cargo to arrive.

70%

of grain-carrying vessels are able to load grain in the rain, reducing the number of lost productive hours due to inclement weather.

TRUCKING

Trucking is critical to the movement of container goods throughout the Vancouver Gateway and across Canada.

Trucks are a key part of the goods supply chain, moving about \$885 million worth of container cargo through the Port every week. Port Metro Vancouver's collaboration with government, shippers, terminals and trucking companies has been a priority in recent years as we collectively find ways to improve truck efficiency.

In 2013, after extensive industry and stakeholder engagement, we introduced our Smart Fleet Trucking Strategy. In collaboration with our supply chain partners, this three-year action plan is focused on technology-based solutions to improve sustainability and coordinate truck movement throughout the port for greater efficiency. Specifically, we created a forum for terminal operators and industry leaders to work openly on container trucking challenges. We introduced an incentive program to encourage container vessel operators to arrive on schedule and contribute to overall supply

chain consistency. We began a review of our Truck Licensing System to enhance performance, safety and environmental standards. And we outfitted more than 1,000 trucks, about half the fleet, with global positioning system (GPS) units, which allow us to track truck movements and better manage congestion at terminals and on local streets near our access gates. The data collected is posted to our website in real time, helping truckers better plan their operations.

In early 2014, a group of unionized and non-unionized truck operators staged a work stoppage to protest terminal wait times and undercutting practices that affect their income. The strike had a huge impact on truckers, their families and the economy, leaving hundreds of million dollars worth of cargo stranded at container terminals. Port Metro Vancouver worked with the federal and provincial governments and other

stakeholders to end the strike and return the port to full operation.

A Joint Action Plan, put forward by the federal and provincial governments with Port Metro Vancouver, was accepted by drivers on March 26, 2014. As part of the action plan, we are accelerating our Smart Fleet action plan, including implementing an extended-hours pilot project for container terminals, speeding up the process of fitting all trucks with GPS technology, and introducing an enhanced common reservation system. We began consultation on reforms to the Truck Licensing System with the intent to create greater stability and sustainability in the container trucking sector by ensuring that truckers are paid fairly, undercutting is eliminated and the supply of trucks better supports the demand for trucking services.





ZACHARY SEMENIUK

OWNER OF WILD OCEAN FISH

Canadian seafood is coveted around the world. Meet Zachary Semeniuk, owner of WILD Ocean Fish.

Please tell us about B.C.'s fishing industry and why international markets demand Canadian seafood.

Canada has high environmental standards for maintaining water quality; therefore, we boast some of the cleanest oceans and lakes in the world. With that comes abundant seafood, one of Canada's greatest gifts. International markets are interested in high-quality products.

Do you participate in sustainable fishing practices?

Supporting sustainable fishing practices through a stringent procurement policy is the keystone of our business. We have partnered with the Vancouver Aquarium's Ocean Wise Program and the Marine Stewardship Council (MSC) in order to provide high-quality, traceable and sustainably harvested seafood. We choose to not purchase or sell fish unless the fishery is MSC-certified or Ocean Wise recommended. Our products are procured directly from fishermen participating in selective, sustainable fisheries that use eco-friendly methods such as hook and line, and trap. The notion of sustainability and minimizing environmental impacts doesn't stop at our seafood; we use Forest Stewardship Council-certified paper and cardboard, and carbon-neutral printing. By reducing waste and maximizing efficiency, we're planning for tomorrow.

Why is a competitive and reliable Port important to WILD?

I believe it would be unlikely that WILD would be in business today if the Port didn't exist. Seafood as a foreign investment helps the local economy grow and shares the best of B.C. with the world. From sablefish to salmon, tuna and spot prawns—we sustain a healthy workforce due to the demand provided by overseas markets and trade through the Port. The whole process contributes to our quality of life.

What role do you think fisheries will play in future generations?

The broad scope of fish harvesting and fisheries management will become increasingly important in the Pacific Northwest for future generations. Seafood caught and processed in this region is one of the few wild, non-cultured sources of protein that can be found in the retail and food service markets. Wild-harvested fish and other seafood are a renewable resource, and these products are sought-after all over the world. By supporting sustainable fisheries in B.C., we are doing our part to help ensure that wild-harvested seafood in this region is available to domestic and international users for generations to come. By choosing sustainable products, we're saying that we're concerned about our future.



In 2013, Vancouver was named the Best North American Homeport in the Cruise Critic's Editors' Picks Awards, and we were awarded Best Turnaround Port Operations and Most Efficient Terminal Operations by *Cruise Insight* magazine.

CRUISE CAPACITY

The cruise sector is an important contributor to the region's tourism economy, stimulating an average of \$2 million in economic activity for every cruise ship call in Vancouver. A majority of Vancouver's cruise business is accommodated at the Canada Place cruise terminal, and a second terminal at Ballantyne Pier has been used for overflow volumes on peak days.

A 2012 cruise market assessment indicated that we could expect continued growth in this sector, suggesting additional capacity may be needed in the future. We also know that Ballantyne terminal is nearing the end of its serviceable life, so in 2013 we talked with cruise lines, industry stakeholders and municipal, provincial and federal agencies to help us identify a path forward.

The decision was made to consolidate cruise operations at Canada Place beginning in 2015. To ensure that all vessels can be handled there comfortably, we're embarking on a series of projects to optimize the capacity of the terminal. In 2014, we're working toward installing automated passport kiosks in the terminal. On the busiest days, these kiosks will shave 19 minutes off the processing of each passenger through security and passport control. For 2015 and beyond, we're looking at a range of infrastructure upgrades that can be made to Canada Place to improve passenger flows through the terminal.

SAFETY AND SECURITY

We're proud of our excellent reputation for safety and security and believe that, as the largest port in Canada, we should be leaders in this area.

WHY IT'S IMPORTANT

We facilitate one of the largest critical infrastructure networks in the country. Port operations must be safe and secure to enable international trade, to ensure the well-being of neighbouring communities and to protect our reputation as a safe, efficient and reliable place to do business. We provide leadership and work closely with our customers, supply chain partners, first responders and other stakeholders to keep people and cargo safe and secure.

WHAT WE'VE HEARD

- Make sure vessels, especially tankers carrying crude oil, can travel safely through the port.
- Be ready to respond quickly and effectively in the event of a spill.
- Support security by administering the Port Pass program effectively.
- Improve visibility of risk management and reporting processes.
- Improve capacity to proactively manage and respond to security risks.

2013 HIGHLIGHTS

- Collaboratively established a Centre of Excellence for marine transportation of bulk liquids, to position Canada as a leader in tanker safety.
- Supported the federal Tanker Safety Expert Panel's review of Canada's Ship-source Oil Spill Preparedness and Response Regime.
- Created a Marine Emergency Response Coordination Committee, bringing together first responders from various sectors, including the Canadian Coast Guard, local firefighters, police departments and paramedics.
- Removed several derelict structures and vessels from waterways as part of the Fraser River Improvement Initiative.
- Completed a review of port security practices and identified areas for improvement.

2014 FOCUS

- Conduct a port-focused emergency response and security exercise with partners from the Marine Emergency Response Coordination Committee.
- Implement the Anchor Management Pilot Project, designating an area where recreational boaters can safely and respectfully anchor their vessels.
- Advance a new container examination facility at Roberts Bank, to reduce processing times and save money for Canadian businesses while protecting the health, safety and security of Canadians.
- Implement security improvements identified through the security review.

TANKER SAFETY

We're committed to continuously improving oil tanker safety, and have been collaborating with industry and government to position Canada as a global leader in spill preparedness and response.

British Columbians are concerned about the risk of an oil spill – an understandable concern, given the unique beauty and biodiversity of our coastal waters. It's a concern we share because we live here too, and take pride in the role we play in protecting these waters. Canadians produce, consume and trade petroleum products. Port Metro Vancouver facilitates Canadian trade of petroleum products and has served as Canada's Pacific Gateway for bulk oil for more than 100 years without navigational incident.

Tanker safety through the Vancouver Gateway is enabled by the collaboration of industry and government, and includes a variety of controls to manage the risk of an oil spill. Transport Canada requires that tankers calling at our port be double-hulled. The *Canadian Pilotage Act* requires all vessels over 350 gross tonnes, including oil tankers, to be piloted by a Canadian marine pilot. At Port Metro Vancouver, vessels are piloted by BC Coast Pilots, who are professionally trained and committed to the safety and protection of the environment. Tankers are escorted by tethered high-powered tugs, with senior

captains, in good visibility and with slack tide. Read more about our transit procedures at portmetrovancover.com/transitprocedures.

Terminals thoroughly inspect every ship before permitting access to their facilities. Deficient ships are not permitted to gain access until deficiencies are corrected, and this information is shared internationally under the Port State Control Program. Safety procedures and emergency preparedness are constantly tested. Simulations are conducted to test procedures and coordination among various parties. Live testing using tugboats and a loaded tanker ensures practices are coordinated and effective.

Coastal traffic is monitored by the Canadian Coast Guard 24 hours a day, 365 days a year. In the event of an oil spill, the Coast Guard is the first point of contact followed by the Western Canada Marine Response Corporation, which is certified by Transport Canada to respond to an oil spill anywhere on the B.C. coast, and is capable of responding to a spill of up to 26,000 tonnes.

In 2013, we endorsed all the recommendations arising from the federal Tanker Safety Expert Panel's review of Canada's spill preparedness and response regime; read our response at portmetrovancover.com/tankersafety.

In 2013, along with industry and government, we established an independent not-for-profit Centre of Excellence designed to be the world's leading source of information on best practices for marine transportation of oil and liquefied natural gas (LNG) products.

The Centre of Excellence was funded by an initial contribution from government and industry, and will eventually be sustained through a cargo throughput fee paid by industry. It will be led and informed by leading experts from around the world to promote and facilitate research on regulatory frameworks and industry practices that deliver the highest standards in tanker safety. The first meeting of the Centre of Excellence took place in early 2014.



NEW PATROL VESSELS

Our Harbour Patrol vessels are our eyes and ears on the water. In 2013, we ordered two new patrol vessels for delivery in summer 2014 to help modernize our fleet. The new vessels are being purpose-built in Campbell River, B.C. They will be stationed in Burrard Inlet and on the Fraser River, replacing two aging vessels in the existing fleet. The new vessels will be able to connect directly with our operations centre, and have an advanced combustion system, which includes the capability to run biodiesel in an effort to minimize particulate and greenhouse gas emissions.

The main role of the patrol vessels is to help ensure the safe transport of cargo through Port Metro Vancouver's jurisdiction and to improve incident-response times to minimize any potential negative impact on neighbouring communities or the environment. Our presence on the water and our enforcement efforts reflect our role and commitment to continuous marine surveillance, early incident detection and activity tracking.

120

**participants from over
30 organizations took part in a
Port-led emergency response and
security exercise.**

MARINE EMERGENCY RESPONSE COORDINATION COMMITTEE

Port Metro Vancouver, together with first responders from various sectors, including the Canadian Coast Guard, local firefighters, police departments and first aid attendants, make up the Marine Emergency Response Coordination Committee. The group was formed in 2013 after an exercise in 2012 identified gaps in communication and coordination between agencies on land and on water. Port Metro Vancouver was a catalyst in creating the Committee in an effort to start a focused discussion about marine emergency response preparedness. The Committee, consisting of 20 agencies, has been meeting quarterly since January 2013 to share knowledge of assets and capabilities and to improve coordination of roles and responsibilities.

The Committee looks for opportunities to train together and shape protocols. The Canada Day fireworks at Canada Place marked the first test of the land-marine event coordination process developed in the first half of the year. Representatives from Port Metro Vancouver and the Canadian Coast Guard were stationed at the City of Vancouver's operations centre and maintained communications with marine traffic to provide situational awareness to the Incident Commander. The Committee will continue to assist with safety planning for events in 2014. A Port-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.

ANCHOR MANAGEMENT PILOT PROJECT

The Anchor Management Pilot Project is a partnership between Port Metro Vancouver and Port Moody to address nuisances that affect municipal waterfronts when recreational boaters drop anchor for extended periods of time without approval or appropriate marine services. This Project will help reduce noise from unauthorized private vessels and address concerns about improper waste disposal. The Anchor Management Pilot Project, the first of its kind in B.C., designates an area where, for a fee, boaters can safely and respectfully anchor their vessels. The program is expected to be in place for the start of the 2014 boating season.

MARINE CONTAINER EXAMINATION FACILITIES

The Government of Canada is contributing almost \$50 million towards new marine container examination facilities to meet the anticipated growth in container volume. The Beyond the Border Action Plan will provide \$46.6 million to staff, equip and outfit facilities, including detection technology tools. An additional \$3.3 million will be provided as part of the Asia-Pacific Gateway and Trade Corridor Initiative for the Roberts Bank Container Examination Facility construction. Port Metro Vancouver will build and maintain the facilities, an estimated investment of \$56 million.

Once operational, the Roberts Bank facility will reduce travel time and related greenhouse gas emissions tenfold for containers arriving from Deltaport. It will improve the capacity to detect and remove potentially dangerous cargo from the road network, including municipalities, bridges and tunnels.

These projects are an integral part of the container logistics flow in the Vancouver Gateway and the investments are examples of the Government of Canada and Port Metro Vancouver working together to enhance security, improve port efficiency, and ensure that commercial traffic moves in an efficient and effective manner.

SECURITY REVIEW

World events and related regulatory and government policy changes over the last 15 years, combined with evolving port geography and business interests, have led to an increase in our security responsibilities. We're continuously improving security measures and in 2012, we launched a multi-year initiative to review our Security Strategy, including an evaluation of all security-related processes, documentation and technology. Input from external stakeholders, regulatory agencies, independent external reviews and internal discussions were a vital part of the review process. The review found that we continue to meet or exceed regulatory requirements, but it identified areas, such as supporting technology systems, that would benefit from being updated. Starting in 2014, we'll work to implement these improvements to maintain our reputation as a leader in port security and as a safe place to do business.

OPERATIONS CENTRE

Port Metro Vancouver's Operations Centre is the centralized hub managing operational activities and coordinating security incidents, marine safety, environmental protection and emergency responses.

For marine, land, rail or security matters, contact:
t. 1.604.665.9086
e. harbour_master@portmetrovancover.com



\$2 million

Port Metro Vancouver launched the Fraser River Improvement Initiative, a \$2 million, five-year program aimed at resolving problems of derelict vessels and structures on the Fraser River.

FRASER RIVER IMPROVEMENT INITIATIVE

Derelict structures and vessels are a growing concern along the Fraser River for Port Metro Vancouver, our tenants and the local community. These structures or vessels have been abandoned by negligent owners and left to decay. They pose a risk to public safety by impeding safe navigation and port activities, and negatively impact the environment.

We do not have responsibility for these vessels and are often placed in a difficult situation when attempting to make improvements. Our primary concerns are unsound structures or vessels leaking fuel or contaminants and at risk of sinking. They can harm the aquatic environment with toxic chemicals like fuel, oil and paint, and may destroy environmentally sensitive areas, including fish habitat.

In 2012, Port Metro Vancouver launched the Fraser River Improvement Initiative, a \$2 million, five-year program aimed at resolving problems of derelict vessels and structures on the Fraser River and establishing more rigorous enforcement to prevent problems from recurring. We are working in partnership with the Canadian Coast Guard and, where possible, the owners of the abandoned structures or vessels, to ensure appropriate removal and disposal. We are committed to working with regulatory agencies, local communities and port users to ensure continuous stewardship of the Fraser River.

NAVIGATIONAL DREDGING

Providing vessels with safe and unimpeded access to port terminals is a cornerstone of our mandate. The Fraser River deposits approximately 3.5 million cubic metres of sand and silt each year when the snowpack melts, enough to fill Vancouver's Rogers Arena. Without dredging, large commercial ships would not be able to navigate the river and safely access port facilities.

We have a multi-year contract with Fraser River Pile & Dredge Inc. for annual maintenance dredging along the navigational channel of the South Arm of the Fraser River. This dredging program is designed to maintain the shape of the riverbed by balancing the amount of sediment removed with the annual infill.

To ensure dredging activities in the Fraser River don't impact southern resident killer whales, there is a trained marine mammal observer on board each dredging vessel. If a killer whale is detected within 1,000 metres of the dredging or disposal site, all operations cease until 30 minutes after the whale has left the area. Observation logs are kept, documenting all stoppages, and this information is reported annually to Fisheries and Oceans Canada and to Environment Canada. In 2013, monitoring was carried out for more than 1,778 hours. During this time, four work stoppages occurred due to killer whale sightings.

Independently assured by Ernst & Young LLP



KAREN PALFREY

FACILITIES AND PROGRAMS MANAGER AT THE UBC BOATHOUSE

The Fraser River Improvement Initiative is a five-year plan to remove derelict structures from the Fraser River. We caught up with Karen to find out more about the UBC Boathouse and some of the impacts of this project.

Can you please tell us about the benefits the UBC Boathouse brings to the community?

Located on the Fraser River, the UBC Boathouse is also known as the Richmond Rowing and Paddling Centre, and is home to UBC's varsity rowing team, among other community teams. Our programs offer local residents the opportunity to become involved in a great sport. Programs have doubled over the past two years, and we're excited to have the ability to accommodate the increased participation and to contribute to our community.

The community teams use the UBC Boathouse as home base to practice along the Fraser River. What does the Fraser River mean to them?

The river is integral to them, as it provides the opportunity to learn a new sport and prepare for participation in regional and broader competitions. Without the river practice course, these teams would not have the space to learn and excel.

We understand the team was facing challenges around safety in their practice areas along the Fraser River. Can you elaborate?

The teams face challenges with derelict structures that are located along the river, which cause the course to narrow. As programs grow, following a safe flow pattern is important and the removal of these structures means that crews can more safely navigate the water.

The Port has completed work to remove the derelict structures. How does this impact the teams who use the Fraser River to practise?

They are overjoyed at the completed work. It's opened up the water so that teams can safely utilize a proper flow pattern, and the UBC Boathouse can now accommodate increasing participation in important community programs.

ENVIRONMENT

We've created a suite of industry-leading programs and initiatives to minimize the environmental impact of port operations and to grow a sustainable Gateway.

WHY IT'S IMPORTANT

Our Port operates in a beautiful environment that is rich in biodiversity and integral to quality of life within our region. Port activities can affect the environment, including air, land and water quality. We're committed to sustaining the long-term future of the port, which requires maintaining a healthy environment. We're continuously improving environmental performance of the Vancouver Gateway through leadership and collaboration with various government and industry partners.

WHAT WE'VE HEARD

- Safeguard the environmental sustainability of the Gateway.
- Demonstrate that the port operates in an environmentally responsible way.
- Tell us how you measure cumulative effects of port development.
- Provide leadership in the area of corporate social responsibility.
- Coordinate efforts with the province, health authorities and municipalities.
- Don't ship coal and oil, which could harm the environment.
- Tell us how you assess, approve and prioritize the commodities you manage.
- Clarify your role as a decision-maker when conducting environmental reviews of tenant-led projects, and describe how this role applies when you are the project proponent.
- Tell us more about how you conduct an environmental assessment.

2013 HIGHLIGHTS

- Studied the container vessel fleet's capacity to connect to shore power.
- Launched the Sustainable Gateway Initiative to define what a sustainable Gateway looks like and integrate this definition into our business.
- Updated the Northwest Ports Clean Air Strategy, working with the Ports of Seattle and Tacoma and government agencies to set air quality goals for 2015 and 2020.
- Launched the Energy Action Initiative, in partnership with BC Hydro, to advance energy conservation across the port.
- Completed 198 environmental reviews on proposed projects and activities within our jurisdiction to identify and mitigate effects on land, air and water.
- Launched the Non-Road Diesel Emissions Initiative to establish an ongoing program that will reduce emissions from cargo-handling equipment.
- Collaborated on a feasibility study of liquefied natural gas for marine transportation.

2014 FOCUS

- Continue consultation on and refinement of the Non-Road Diesel Emissions Program, which will become operational in 2015.
- Continue to drive energy conservation across the port, emphasizing energy management information systems and LED lighting technologies.
- Consult on and finalize our Sustainable Gateway Definition and integrate this into our business planning and activities.
- Advance the container sector shore power initiative.
- Develop and implement a Marine Mammal Monitoring Program.

NORTHWEST PORTS CLEAN AIR STRATEGY

Though marine and rail are among the most energy-efficient modes of transportation, greenhouse gases continue to be a challenge for ports. Technology developments in terms of energy efficiency have not kept pace with economic growth, meaning that as more cargo is moved, greenhouse gases have increased.

We're working with the Ports of Seattle and Tacoma, and with government agencies such as Environment Canada, to set shared objectives for air quality and greenhouse gas reductions. The Northwest Ports Clean Air Strategy (NWPCAS) was released in 2007, and the five-year update to the strategy was completed in 2013. We publish an annual report that tracks progress against the goals of the strategy.

The 2013 NWPCAS goals include:

- 75 per cent reduction in diesel particulate matter per tonne of cargo by 2015, and 80 per cent by 2020.
- 10 per cent reduction in greenhouse gases per tonne of cargo by 2015, and 15 per cent by 2020.

ECOACTION PROGRAM FOR SHIPS

Our EcoAction Program promotes emission reductions for ocean-going vessels by providing discounted harbour due rates. In 2013, we launched our updated EcoAction Program, promoting emission reduction measures that exceed the North American Emission Control Area requirements adopted under the International Maritime Organization, and added new compliance options such as the Environmental Ship Index, RightShip and Green Marine. We set a target to increase participation in this program by 5 per cent, but achieved an increase of 12 per cent, with 521 participating calls.

12%

increase in participation in our EcoAction Program.

BLUE CIRCLE AWARDS

We recognize marine carriers with highest participation in the EcoAction program through our Blue Circle Award.



2013 AWARD RECIPIENTS

APL (Canada)
 CMA CGM (Canada) Inc.
 COSCO Container Lines Americas, Inc.
 Disney Cruise Line
 EUKOR Car Carriers Inc.
 Grieg Star Shipping (Canada) Ltd.
 Hapag-Lloyd (Canada) Inc.
 Holland America Line

Hyundai Merchant Marine Co., Ltd.
 "K" Line
 Maersk Line
 Mediterranean Shipping Company (Canada) Inc.
 Mitsui O.S.K. Lines, Ltd.
 Orient Overseas Container Line Ltd.
 Princess Cruises
 Westwood Shipping Lines



To learn more about the Blue Circle Awards, visit portmetrovancover.com/bluecircleawards

SHORE POWER INITIATIVE

In 2009, the Canada Place Cruise Ship Terminal became the first in Canada to have shore power facilities for cruise ships. This enables cruise ships to shut off their diesel-powered engines and connect to the land-based hydroelectrical grid while docked, thereby reducing noise and improving air quality. In 2013, we increased the shore power capacity at Canada Place by installing an additional connection point, which contributed to a 37 per cent increase in successful connections over 2012. Since its inception, the shore power installation at Canada Place has reduced greenhouse gas emissions by more than 8,400 tonnes.

SHORE POWER CONNECTIONS

ITEM	2013	2012	2011
Successful connections	82 ✓	60	35
Calls capable of connecting	106 ✓	74	58
Fuel savings (tonnes)	978 ✓	725	424
Net greenhouse gas emission reductions (tCO ₂ e)	3,092 ✓	2,266	1,318
Criteria air contaminants reduced (tonnes)	91 ✓	80	47

✓ Independently assured by Ernst & Young LLP

Cruise ships typically use intermediate fuel oil (IFO) within our port when not connected to shore power. As there are no emission factors available for IFO, emission factors for heavy fuel oil have been used in these calculations, with changes made to the SO_x and PM emission factors to take account of the fuel sulphur content.

We've been working to expand shore power to other ship sectors, particularly container ships. We completed a study in 2013 to better understand the capacity of the container vessel fleet to use shore power. Currently, most container ships are unable to connect to shore power and require substantial retrofits to become ready. The study estimates that an increasing number of container ships will be able to use shore power by 2020, so we're exploring funding options and working with BC Hydro with the aim of implementing shore power in the container sector by 2015.

NON-ROAD DIESEL EMISSIONS INITIATIVE

We're committed to improving air quality and protecting human health by implementing emission-reduction initiatives for port activities. We're establishing the Non-Road Diesel Emissions Initiative to reduce diesel particulate matter emissions from cargo-handling equipment. Non-road diesel equipment refers to land-based, diesel-powered equipment that isn't used for on-road transportation. Examples include top picks, forklifts, cranes, yard trucks and construction equipment. By phasing out older, high-emitting equipment, advancing idle reduction and promoting innovative clean technologies, we will reduce diesel particulate matter emissions and improve air quality for port users and local communities. Consultation with industry and government started in 2013 and will run through 2014, with the program becoming effective in 2015.

FUGITIVE DUST

Several terminals in the port handle dry bulk goods such as grain, wood fibre or coal, which create dust that can be picked up by wind and transported into nearby communities. Terminal operators have a long history of handling these products and actively managing dust events, but a combination of weather conditions, loading issues and certain product types can result in temporary fugitive dust emissions that affect local air quality. We monitor fugitive dust incidents through our Operations Centre and our Community Feedback Line and are committed to managing its impact on communities. Terminal operators can make operational adjustments and implement technology solutions to mitigate dust events. We require dry bulk terminals to develop dust management plans and track and report dust levels. In 2014, we'll continue to advance activities aimed at strengthening our understanding of dust emissions and our capacity to respond to and mitigate incidents.

ENERGY ACTION INITIATIVE

In 2013, we teamed up with BC Hydro to launch an Energy Action Initiative that advances electrical energy conservation across the port. We hired an industrial energy specialist dedicated to working with port tenants on electrical energy conservation, developed a Strategic Energy Management Plan and performed 16 energy assessments. Through this work we identified opportunities to increase awareness and support energy management by expanding metering and installing energy management information systems. We're also advancing LED lighting projects and plan to test new technologies in some of the toughest industrial applications. In 2014, we'll work with port tenants to promote the installation of energy management information systems, with the aim of reducing energy usage and increasing energy conservation awareness.

COAL

In 2013, we received both expressions of concern and support for the movement of coal through the port. How can we balance Canadian trade interests with concerns for the environment?

Canadians and our Asian trade partners rely on coal for electricity, and to build schools, hospitals, and transportation infrastructure. Coal is responsible for 41 per cent of global electricity production.

Coal, which has been mined in B.C. for more than a century, is responsible for 26,000 jobs in the province. Canada is the third-largest exporter of steelmaking coal behind Australia and the United States, with 89 per cent of steelmaking coal coming from B.C.

Steelmaking coal plays an important role in the production of clean technologies and sustainable transportation infrastructure. Unfortunately, coal is also a major source of greenhouse gas emissions that contribute to climate change. In addition, the movement of coal through communities raises concerns about the potential impacts of fugitive dust on human health. These two important issues were raised in 2013.

Port Metro Vancouver's mandate under the *Canada Marine Act* is to facilitate Canada's trade in a

safe and secure manner, not to determine what goods can be traded. We're one link in the coal supply chain, starting with global demand for steel and energy, running through to national and provincial decisions to develop natural resources.

Ultimately, it is up to the federal government and all Canadians to determine the goods that are traded and how to balance trade interests with environmental priorities. Port Metro Vancouver's job is to support Canada's decisions by moving goods in an efficient and responsible way.

In keeping with our mandate, we are committed to engaging on matters of interest and we are participating in dialogue about coal movement through the Vancouver Gateway. We initiated Port 2050 (see page 15) to raise conversation on what good growth looks like, and we are working together with industry and government on a wide variety of environmental initiatives, including greenhouse gas reductions and climate change mitigation and adaptation.

On the matter of fugitive dust, we're collaborating with government and local communities to monitor coal dust levels and develop solutions to identified issues. We require dry bulk cargo terminals to monitor and report on dust levels. We've also funded air quality monitoring initiatives for several years, with new monitoring stations planned for 2014. Our 24/7 Community Feedback Line helps us track dust events and improve response time.

The issues raised around coal in 2013 highlight the importance of meaningful dialogue on sustainability within and beyond the Gateway. These topics are complex, requiring collaboration among a very broad array of participants. We look forward to continued engagement with industry, local communities, First Nations, government and Canadians on coal and other important topics.

ENVIRONMENTAL REVIEWS

Under the *Canadian Environmental Assessment Act, 2012*, we are required to conduct an environmental review before we make a project authorization, to determine that the activity will not result in significant adverse environmental effects. Our Environment Policy requires us to conduct reviews of all proposed projects, physical works and activities within the Port's jurisdiction that could have an adverse environmental effect on land, air or water. We take a precautionary approach and uphold a high level of environmental protection within our jurisdiction. The scope and duration of environmental reviews can vary, depending on the specifics of the existing environment or community and the scope of the proposed initiative. Typically, we assess fish and fish habitat, aquatic species, migratory birds, air quality, health and socio-economic conditions, physical and cultural heritage, and the current use of lands and resources for traditional purposes. In 2013, we completed 198 environmental reviews[●] in accordance with our Environment Policy and the *Canadian Environmental Assessment Act, 2012*.

Where possible, we partner with agencies to deliver a coordinated approach to environmental management. As a partner of the former Burrard Inlet Environmental Action Program and Fraser River Estuary Management Program (BIEAP-FREMP), we continue to use the tools developed by this unique intergovernmental partnership. BIEAP and FREMP coordinated the development of several important Geographic Information System tools, including mapping shoreline types according to their habitat features, which inform our review of shoreline projects and land use planning. In 2014, Port Metro Vancouver will assist in sunseting BIEAP and FREMP to ensure the important publications and tools developed through this program remain publicly available to inform the environmental management of Burrard Inlet and the Fraser River. We also call on the inter-agency relationships built over the 28-year history of these programs during our review of port projects and other matters pertaining to environmental management in the Port's jurisdiction.

● Independently assured by Ernst & Young LLP

MARINE MAMMAL MONITORING PROGRAM

The southern coast of B.C. is a dynamic and growing Gateway for international trade, and is also a rich and productive coastal ecosystem, sustaining populations of whales, porpoises and dolphins. Many vessels calling at our port travel through areas designated as critical habitat for B.C.'s endangered southern resident killer whale population and threatened humpback whales. Areas in the region may in future be designated as critical habitat for endangered fin, blue and sei whales. In keeping with our mandate to facilitate trade and protect the environment, we must ensure that port operations are undertaken in a way that mitigates threats to these animals.

The *Species at Risk Act* imposes certain legal obligations in relation to new development proposals such as Roberts Bank Terminal 2. In addition, there is a strong rationale, both socially and ecologically, for measures to safeguard whale populations. Orcas, humpbacks and other whales are important umbrella species, which means that measures to ensure their well-being will help to secure the health of the broader coastal and marine environment. These animals are highly valued by British Columbians; concerns about the potential impacts of Port expansion on these iconic animals are at the heart of much opposition to new development proposals. Meaningful and demonstrably effective measures to address threats to these animals will be an important contributor to meeting our environmental mandate and securing our ongoing social licence.

For all of these reasons, we've initiated a coordinated management program to help protect these marine mammals and their habitat. Program development and implementation is underway in 2014, and includes projects to understand the impacts of underwater noise from vessels on southern resident killer whales, as well as vessel strike risk to large whales.

HABITAT ENHANCEMENT PROGRAM

Our Habitat Enhancement Program is focused on creating, restoring and enhancing 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.

Fisheries and Oceans Canada is the primary regulator overseeing habitat projects through the *Fisheries Act* and the Policy for the Management of Fish Habitat. We consult with all levels of government, regulators, First Nations and adjacent communities, as appropriate, to determine current uses for proposed habitat sites and to coordinate potential opportunities.

In 2014, we'll continue to work on habitat enhancement projects with a focus on restoring tidal marsh habitat. More than 70 per cent of tidal marsh habitat has been lost in the Fraser River estuary over the past century due to human development activities such as diking and filling. Tidal marshes play a wide range of important ecological roles within estuarine and marine foreshore areas, including supporting critical fish and wildlife functions, nutrient recycling and assisting with the absorption of carbon dioxide from the atmosphere.



More information about the Habitat Enhancement Program and proposed projects is available at porttalk.ca/habitatenhancement



COUNCILLOR WENDY GRANT-JOHN

MUSQUEAM INDIAN BAND

The Port is more than cranes, cargo, terminals, ships and international trade. We're recognized globally for our innovative environmental leadership. We caught up with Councillor Wendy Grant-John of the Musqueam Indian Band to tell us more about Musqueam's work with the Port on the Habitat Enhancement Program.

The Musqueam people have been present in what is now Greater Vancouver for several thousands of years. Although a metropolitan city has developed in the heart of Musqueam territory, our community maintains strong cultural and traditional beliefs. Current Musqueam values and teachings are based on our traditional culture. The name Musqueam relates back to the River Grass. Our people moved throughout our traditional Coast Salish territory using the resources the land provided for fishing, hunting, trapping and gathering, to maintain our livelihood. Our community educators teach and pass on our history to our people, which has kept our culture and traditions strong. musqueam.bc.ca

Musqueam's knowledge of the river, species and the environment has contributed significantly to the planning and design of various Port environmental projects. Please tell us about the importance of Musqueam's involvement in habitat enhancement projects in Musqueam's traditional territory.

With our fishing rights, comes responsibility and we must look at the whole river, not just in front of our reserve. Degradation of the river itself is a real concern for us and our responsibility goes beyond the mouth of the river. As stewards of the river it's important that we work with the Port to identify potential habitat enhancement areas, to support our environment, Musqueam, other First Nations, the city and the port's developments that rely on the river.

Musqueam has been working with the Port on a series of habitat enhancement projects in the North Arm of the Fraser River including McDonald Tidal Marsh, Point Grey Tidal Marsh, Musqueam Foreshore Restoration, and Glenrose Tidal Marsh Project. While the Musqueam Foreshore Restoration Project will result in the creation of a tidal marsh for the benefit of fish, it also involves cleaning up debris along the Musqueam foreshore so that a safe space can be created for the community to enjoy. Can you comment on the value of this work?

One of the most important things that the community has said is that we need to retain the heart of the community. The heart of community has always been, from the time that I can

remember and from listening to our ancestors, the elders, is the access to the water and the ability not only to use it as a resource but to enjoy it. Currently there is no way we can enjoy that water, other than minimally with the boat ramp, and the community really wants to bring back and retain, through the consultation we had on the comprehensive community plan, the heart of the community. If you take time to really understand Musqueam and most coastal communities, that relationship to the water is so strong and we are really being disconnected from that now and the community has very strongly said they want that back as a community gathering place to start having different kinds of interactions. We used to have games, we used to have all kinds of things happening along the waterfront. It's very much a part of the vision of where we want to go, as we go forward and develop our economy which includes the fish resource, we want to retain and enhance the cultural value of the community, the heart of the community, the traditional teachings - it's all tied in to our place with the water, and that includes the beachfront and how important it is for the community. We are working to get this important area back to its original state. We want it to be a place that is sustainable for fish species, and a place for fishing, culture and community.

Why are environment programs such as this important for future Musqueam generations?

It comes back to responsibility. With fishing rights comes responsibility and we are stewards of the river. People think that as the fishing industry dies, so do our people. It's the one thing we have to hold on to now that all other resources are gone. You go to other communities in the Province and they are able to access wildlife and plants and still sustain their community in that way, but that is gone for us and the only thing we have left is the fish resource. So it's an integral part of Musqueam's continued growth and identification - it identifies us as who we are as Musqueam people.

FIRST NATIONS, GOVERNMENT AND COMMUNITY RELATIONS

We engage and collaborate with First Nations, governments, and communities to minimize port impacts and enhance well-being.

WHY IT'S IMPORTANT

Our port operates 24 hours a day to facilitate international trade and support Canadians across the country. This trade provides many economic benefits, including jobs, both locally and across the country, however port operations can impact neighbouring communities. This means we must engage in meaningful dialogue and be responsive to concerns and challenges that arise so that we can grow trade for Canadians and enable local communities to thrive.

WHAT WE'VE HEARD

- Reduce or eliminate noise, dust and light impacts on local neighbourhoods.
- Reduce the number of trucks and their noise on residential streets.
- Provide public access to waterfront areas.
- Increase awareness and understanding of the Port.
- Tell us how increased traffic on the Fraser River will affect the environment and community.
- Reduce or mitigate noise from rail operations.
- Safeguard against tanker spills.
- Don't export coal.

2013 HIGHLIGHTS

- Installed noise-monitoring stations in the North and South Shore Trade Areas.
- Participated in 524 engagement events and public consultations, and funded 55 community initiatives in almost 90 per cent of the communities we border.
- Continued to expand the PortTalk website as a public information and consultation portal, and added a Facebook page and a Twitter feed to provide new opportunities for input and dialogue.
- Implemented a new municipal engagement strategy and established closer contact with councils, with our executives taking a leading role in establishing relationships.

2014 FOCUS

- Install noise-monitoring stations in Delta.
- Complete consultation on the Land Use Plan.
- Continue consultation on Roberts Bank Terminal 2 Project and the Habitat Enhancement Program.
- Continue ongoing communication regarding construction of Low Level Road, the 232nd Street Overpass and South Shore Corridor Projects.
- Launch Aboriginal Business Directory to better engage First Nations in Port-related business opportunities.
- Launch renewed Community Investment Program, including the new online grant management program.
- Open a community office in Delta to enable the community to engage directly with us.
- Implement Port Metro Vancouver's responsibilities within the Joint Action Plan to stabilize the container trucking sector.

FIRST NATIONS RELATIONS

B.C.'s Lower Mainland is home to a number of First Nations whose traditional territories intersect the land and water managed by Port Metro Vancouver. There are many areas of common interest between the Port and First Nations, ranging from environmental stewardship to economic development.

To build on our shared interests, we actively engage with First Nations to better understand their interests and concerns, to include their perspectives in our long-term planning and to seek their involvement in the growth, operation and stewardship of the Vancouver Gateway.

We have much to learn and gain from the diverse cultures of First Nations communities in the Lower Mainland, and we continue to provide our employees with cross-cultural training and educational workshops in an effort to enhance their understanding and awareness of First Nations history, culture and rights. We recognize that the future success of the Vancouver Gateway requires the support and participation of First Nations.

We continue to support First Nations through our Community Investment Program. This Program provides the opportunity for the Port to support important events and for Port employees to participate in ways that enhance meaningful dialogue and communication with First Nations. In 2013, 10 per cent of the Community Investment Program funds went to local First Nations events and initiatives. We were proud to sponsor Reconciliation Canada's Walk for Reconciliation, in which 30 Port Metro Vancouver employees participated to help raise funds and awareness of this important initiative. We supported and participated in the Urban Aboriginal Bright New Day Reconciliation Circles and the Young Entrepreneurs' Symposium.

We continue to refine our First Nations consultation practices and processes, and identified a number of challenges we're committed to resolving. In 2013, we secured additional resources for the Aboriginal Affairs team to assist with the administrative work required to manage and track our First Nations consultation activities. This work is essential to ensure we adequately fulfill our duty to consult. We recognize that the number of referrals and project review timelines present a challenge to First Nations and their available resources, so we strive for flexibility and collaboration, and provide participation funding where possible.

In an effort to better engage First Nations in Port-related business opportunities, we developed our Aboriginal Business Directory and invited Aboriginal entrepreneurs and businesses to register their organizations in early 2014. The objective is to establish a list of Aboriginal entrepreneurs or businesses that seek to do business with the Port and link them to potential Port business opportunities.

GOVERNMENT RELATIONS

Port Metro Vancouver's approach to government relations is, in one word, collaboration. After all, it has to be. Collaboration is critical to the success of the Gateway and central to our responsibility as port authority, managing lands that border 16 municipalities, one treaty First Nation and provincial lands along 640 kilometres of coastline.

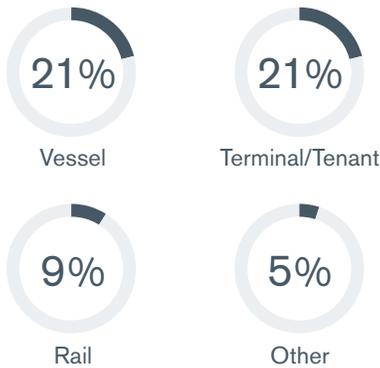
It is important to understand the context in which Port Metro Vancouver executes its mandate through collaboration. Unlike neighbouring ports in the United States, where ports are governed by local municipal authorities and politically appointed commissioners or executive directors, Canadian ports are federal entities. While the U.S. model may have the potential for more direct local input, the electoral cycles and localized issues or pressures tend to impede the long-term planning, investments and collaboration necessary to serve domestic and international trade priorities. As a nation built on trade supply chains, Canada has taken a different approach and mandated port authorities on a national level through the introduction of the *Canada Marine Act* in 1998. As such, Port Metro Vancouver works closely with the federal and provincial governments to plan and deliver capacity to meet trade demands of Canadians while working with municipal government to address the needs of local communities.

The 2013 highlights of outreach and collaboration with government include:

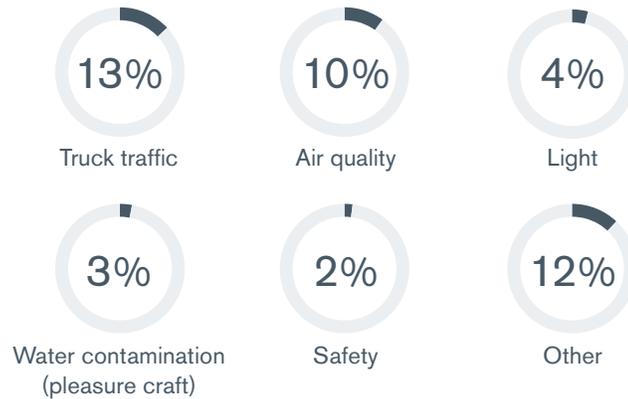
- Active participation in the Pacific Gateway Alliance.
- Chairing the Greater Vancouver Gateway Council.
- Participating at the Transportation Committee of the Canadian Chamber of Commerce.
- Participating or assisting with a number of provincial and federal trade missions, in particular with markets where Port Metro Vancouver has an established presence.
- Presenting to the Standing Senate Committee on Energy, Environment and Natural Resources and the House of Commons Select Standing Committees on Transportation, International Trade and Agriculture, thus providing input into formation of trade and transportation-related legislation.
- Presenting to the federal Tanker Safety Panel, providing feedback on its report, and working with the provinces of B.C. and Alberta, the federal government and industry on advancing the Centre of Excellence for marine transportation of bulk liquids.
- Collaborating or jointly funding initiatives such as the Local Channel Dredging Program, the Fraser River Improvement Initiative, Metro Vancouver air quality monitoring stations and the Smart Fleet Strategy implementation of GPS tracking of container trucks.
- Working on the Joint Action Plan with federal and provincial governments to resume container drayage service to Port Metro Vancouver terminals.
- Implementing a program of municipal outreach and community and business engagement to increase mutual understanding of issues and opportunities regarding port operations.

COMMUNITY FEEDBACK LINE

56%
about noise



44%
about other issues



This data represents 370 general complaints relating to port operations received through our Community Feedback Line and PortTalk. Concerns that relate to specific projects are discussed within the Port Growth and Land Use section on pages 22–29.

Independently assured by Ernst & Young LLP

COMMUNITY ENGAGEMENT

We believe that growing the Port means we need to engage the communities in which we operate. By engaging in ongoing dialogue with residents and community stakeholders, we better understand local concerns and aspirations and can help neighbouring communities thrive.

We engage in a variety of ways, including through three community liaison groups: East Vancouver Port Lands Liaison Group, North Shore Waterfront Liaison Committee and the Port Community Liaison Committee in Delta. We follow the core values and principles of the International Association of Public Participation (IAP2), and connect with communities on specific Port-led initiatives to incorporate their feedback and concerns.

We're engaging with local communities using new technologies and social media tools to provide opportunities for input and dialogue. In 2013, we improved our social media presence to provide more ways for people to connect with us, and for us to connect with them. We continued to expand PortTalk (porttalk.ca) as a public information and consultation portal, and added a Facebook page and a Twitter feed to our media streams.



Connect with us:

t: 1.604.665.9000

e: information@portmetrovan.com



twitter.com/portmetrovan



facebook.com/portmetrovan

w: portmetrovan.com or porttalk.ca

NOISE

The increasing density and proximity of residential areas to port lands, together with growing industrial activity, means that port noise can be problematic for local communities.

We are Canada's largest port, operating on a 24-hour basis. Our operations generate noise that can affect neighbouring communities.

We're working to better understand and manage noise issues. Our 24/7 Community Feedback Line provides a point of contact for the community, and enables us to track issues and communicate them to the parties responsible for noise. Over half of the community complaints we received in 2013 were related to noise from port activities, particularly from vessels, terminals, tenants and rail movement.

We heard that generator noise from ships visiting Roberts Bank is a concern for some residents in Delta. When we receive a complaint of this nature, port

operations employees contact the ship's agent to advise them of the noise complaint and request mitigation.

Vancouver residents living close to South Shore terminals have raised concerns about the increasing number of container trucks at the Port, which we are addressing through our Smart Fleet Trucking Strategy (see page 33).

Rail noise is a key concern on the North Shore, but many of the infrastructure projects we have underway will address this issue. For example, construction of the Low Level Road Project will remove three at-grade rail crossings at St. Andrews, St. Patricks and Neptune-Cargill, and will include noise walls along much of the new road.

In 2013, we implemented our Noise Monitoring Program to enable real-time monitoring of acoustic levels at select stations situated throughout port lands. We worked with noise experts and considered community feedback to identify the best locations for the noise-monitoring stations. Four noise monitors have been installed on the shores of Burrard Inlet, and three will be installed in Delta in 2014. Monitoring noise levels will improve our capacity to track and identify issues, respond to community concerns and identify if operational improvements can reduce noise. Monitoring stations stream data 24/7, and we plan to make this information available on our website, portmetrovancover.com.

\$180k

raised at our 14th annual Port Fundraising Gala.

COMMUNITY INVESTMENT

We contribute up to 1 per cent of our net income to initiatives that matter to local communities. We base these contributions on three key pillars: community enrichment, education and training, and environmental leadership. In 2013, we funded 55 community initiatives across almost all of the communities we border.

Recipients of community investment funding included:

- Backyard Cooperative Project Pickle Hort in the Hood
- Crab Water for Life Society Children's Christmas Party
- Delta Museum and Archives
- Fraser River Discovery Centre in New Westminster
- Heart of the City Festival at the Carnegie Centre in Vancouver
- Hwlitsum First Nation Elders Oral History Project Fundraiser
- Hyde Creek Salmon Festival in Port Coquitlam
- Rotary Club's Goal of Zero Waste at the Canada Day Parade on the North Shore
- Tsawwassen Sun Festival
- Urban Aboriginal Bright New Day Reconciliation Circles at the Musqueam First Nation
- Vancouver Aquarium's Marine Mammal Rescue Centre
- YWCA Women of Distinction Awards

We raise funds and awareness for our neighbours at our annual Port fundraising gala. In 2013, members of the port industry raised \$180,000 at the 14th annual event. Beneficiaries included Mission Possible in Vancouver, Harvest Project in North Vancouver, and REACH Child and Youth Development Society in Delta. The Port gala has raised nearly \$1.3 million over the past 13 years for local charities that contribute to improving the quality of life in their communities.

We support educational programs through our Partners in Education scholarships and our Leadership Program, offered to secondary and post-secondary students in communities in which we operate. We've supported 119 students through the Leadership Program since its inception in 2004.



Learn more about our approach to community engagement, events and investment at portmetrovancover.com/community

COMMUNITY EVENTS

Being a good neighbour is important to us. In 2013, our Community Relations Team, along with our mascot, Salty, participated in 58 events within the Metro Vancouver area. Our participation in local events increased 20 per cent over 2012 and included:

- Canada Day at Canada Place
- Fingerling Festival in Port Moody
- Free Gate Admission Day at the Pacific National Exhibition
- Hats Off Day in Burnaby
- Ladner Pioneer May Days
- Party at the Pier in North Vancouver
- Point Grey Fiesta in Vancouver
- Richmond Maritime Festival
- Riverfest in New Westminster
- Surrey International Children's Festival



LINDSAYE AKHURST

THE VANCOUVER AQUARIUM MARINE MAMMAL RESCUE CENTRE (VAMMRC)

We contribute up to 1 per cent of our net income to initiatives that matter to us and local communities. Meet Lindsay Akhurst, Manager of the VAMMRC.

Can you please tell us about the VAMMRC?

It is a hospital for ill, injured or orphaned marine mammals. Each year, the VAMMRC rescues 100+ marine mammals and rehabilitates them for release back into their natural habitat. We've been in operation since the 1960s; since then, we have saved the lives of 2,500+ marine mammals.

We know that marine habitat health is important to the VAMMRC, the Port and Metro Vancouver communities. Can you please tell us about the relationship between the three in regards to marine habitat health?

The primary goal of the VAMMRC is to provide housing and care for ill, injured or abandoned marine mammals and to rehabilitate them for release back into their natural

habitat. With support from the Port and Metro Vancouver communities, we're able to achieve our goal and go above and beyond the call of duty. We're able to perform a public service to assist marine mammals that may be in peril, due to habitat destruction or environmental damage caused by humans.

Can you please tell us about a program the Port and the VAMMRC are working on together to improve the condition of marine habitat health?

The Port has been a part of the VAMMRC Celebration for several years, an event that is geared towards educating our supporters about the rehabilitation process of different rescued marine mammals. The Port also plays an integral role in the release of many of our seals by assisting in their transportation back to the ocean.



ANAR POPATIA

CANADA DAY AT CANADA PLACE

Canada Day at Canada Place provides an excellent opportunity for Port Metro Vancouver to connect with local communities. We caught up with Anar Popatia, President of the Canadian Club of Vancouver, to talk about her experience with Canada Day at Canada Place, and the pride and connection she feels it brings to Metro Vancouver communities.

Can you please tell us about your experience with Canada Place and its marquee event, Canada Day at Canada Place?

Canada Place is an iconic venue producing world-class events and providing inspirational Canadian experiences. Since Expo 86, Canada Place has been a place of celebration and community, specifically through Canada Day at Canada Place, our nation's second-largest Canada Day event. The event has a remarkable reputation in the community and includes a free waterfront party, parade and fireworks show every July 1. Recently, with the integration of Canada Place and Port Metro Vancouver, Canada Place now also acts as a vehicle to engage with our beautiful and thriving port city through interactive activities and experiences.

We understand you have had the opportunity to share your story at Canada Day at Canada Place. Can you please elaborate?

Nearly 22 years ago, I received my citizenship at Canada Day at Canada Place. This country has been my home for more than 25 years. As a young international university student, I was struck by the kindness and generosity of fellow Canadians. I immediately felt at home. As I journeyed

through my education, career and business ventures, the support I received sustained me. Canada paved a way for learning and growth, offered opportunities to give back and provided a space to appreciate my own heritage. Every year that I attend Canada Day at Canada Place, I feel the same spirit as the first day I became a Canadian citizen. In recent years, I've had the opportunity to be a guest speaker at the special citizenship ceremony alongside representatives from local, provincial and federal government, members of the Port's leadership team, and other speakers. I've had the opportunity to share my passion and love for this great country with new and existing Canadian citizens, and to encourage them to serve their communities and give back.

Can you please share with us why you think Canada Day at Canada Place benefits our communities?

Canada Place is a canvas that shares the Canadian story and the Port story with locals and visitors. One example of this is the Canada Day at Canada Place event, among the many other experiences and community events offered there. Whether celebrating quality of life, maritime history, citizenship, national pride, peacekeeping efforts, sport, tradition, or arts and culture, you feel a sense of national pride when you visit Canada Place. The many volunteer and student internship opportunities at Canada Place enable community groups and citizens to give back and get involved in events, charitable giving and more.

CANADA PLACE

Canada Place is an iconic Vancouver venue, famous for its white sails and inspirationally Canadian experiences. A dynamic facility, it is home to Vancouver's newest attraction, FlyOver Canada, as well as the Vancouver Convention Centre East Facility, the Pan Pacific Hotel Vancouver, Port Metro Vancouver's corporate office, the Canada Place Cruise Ship Terminal and the World Trade Centre Office Complex. Canada Place hosts world-class events, including National Aboriginal Day, the international award-winning Canada Day at Canada Place and Christmas at Canada Place.

Canada Day at Canada Place has been taking place for 27 years and welcomes over 900,000 people annually to celebrate our great nation in the heart of Vancouver's waterfront. It is a free community event offering a full day of activities, including a daytime waterfront party, evening parade and multi-community fireworks show. The event includes a wide variety of Canadian performers on three stages, roaming entertainment, an interactive zone commemorating our Canadian Forces, a Port zone, a kids' zone, a wide array of food and much more.

Christmas at Canada Place has also been taking place for 27 years and welcomes over 50,000 people annually

to celebrate the holidays in the Canada Place Cruise Ship Terminal. It is a free community event that includes seasonal activities, festive decor and lights, holiday music and more. In 2013, the event offered an outdoor covered skating rink, a mini-train, a curling rink, arts and crafts, the historic Woodward's Windows displays, a variety of performers, visits and pictures with Santa, and several charitable giving components for organizations such as the Strathcona Community Centre's Food Security for Children program and the Greater Vancouver Food Bank.

National Aboriginal Day has been taking place for the past four years and welcomes over 7,000 people to Canada Place to enjoy a free community event celebrating Aboriginal art, song and dance, tradition, food and more.

In December 2012, Port Metro Vancouver entered into a management agreement to provide services to Canada Place Corporation, a subsidiary of Port Metro Vancouver. 2013 marked the first full year for this new integrated organizational structure. We will continue to bring together the two organizations through events, programming and facility management.

CORPORATE PERFORMANCE OVERVIEW

CATEGORY	MEASURE	UNITS	2013		2012	2011
OUR PEOPLE						
Employees	Total number of employees	#	293	✓	291	226
	Employees joining	#	35	✓	83	46
	Employees leaving	#	31	✓	18	26
	Employee turnover rate	%	8	✓	5	9
Training and development	Investment in training and development ¹	\$	602,163	✓	515,525	365,323
	Average training per employee	\$	2,055	✓	2,070	1,631
	Employees completing harassment awareness training ²	#	62	✓	26	42
OUR ENVIRONMENTAL FOOTPRINT						
Direct energy use	Diesel	GJ	3,929		3,678	3,295
	Natural gas	GJ	2,075		2,037	2,549
	Gasoline	GJ	805		799	804
	Propane	GJ	147		106	150
	Total	GJ	6,956	✓	6,620	6,798
Indirect energy use	Natural gas	GJ	6,783		5,426	3,581
	Electricity ³	GJ	9,967		11,819	17,612
	Total	GJ	16,750	✓	17,245	21,193
Reductions in energy use	Reduction in electricity use at Port Metro Vancouver offices through conservation measures	GJ	0 ⁴	✓	238	100
	Fuel saved through use of hybrid vehicles ⁵	litres	2,868	✓	3,208	1,780
Greenhouse gas emissions ⁶	Scope 1	tCO ₂ e	473		449	446
	Scope 2	tCO ₂ e	378		362	293
	Scope 3	tCO ₂ e	500		458	425
	Total	tCO ₂ e	1,351	✓	1,269	1,164
Reductions in greenhouse gas emissions	Reductions through use of hybrid fleet vehicles	tCO ₂ e	6.7	✓	7.1	4.3
	Greenhouse gas emissions offset	%	100	✓	100	100
Common air contaminants	Nitrogen oxides	kg	4,592	✓	4,261	3,876
	Sulphur oxides	kg	49	✓	55	47
	Particulate matter $\leq 2.5\mu\text{m}$	kg	437	✓	398	366
Sustainable commuting	Employees participating in Commuter Challenge	%	60	✓	49	49
Waste ⁷	Composted	kg	6,500	✓	8,090	n/a
	Recycled	kg	14,308	✓	n/a	n/a
	Landfill	kg	5,627	✓	5,950	n/a
	Waste diversion rate	%	79	✓	n/a	n/a
Environmental compliance ⁸	Fines	\$	0	✓	0	0
	Non-monetary sanctions	#	0	✓	0	0

✓ Independently assured by Ernst & Young LLP

n/a Not Available

CATEGORY	MEASURE	UNITS	2013	2012	2011	
OUR FINANCIAL RESULTS						
Financial results ⁹	Total value generated (thousands)	\$	210,901	✓	188,598	182,449
	Total value distributed (thousands)	\$	116,508	✓	93,471	110,464
	Economic value retained (thousands)	\$	94,393	✓	95,127	71,985
Capital funding ¹⁰	Capital project funding received (thousands)	\$	63,986	✓	12,045	19,455
Corruption risks	Business units analyzed for corruption risks ¹¹	%	100	✓	100	100

COMMUNITY ENGAGEMENT AND INVESTMENT

Engagement	Engagement events and public consultation	#	524	600	n/a
	Community events attended	#	58	48	40
Investment	Community investment ¹²	\$	440,000	420,000	462,000

1 Investment in training and development includes conferences, travel and other indirect training costs. These items are not included within the 2011 figures, as this information was not available at that time.

2 New employees are required to complete harassment awareness training. In 2013, 62 employees completed the training, which takes approximately 30 minutes to complete. This represents 21 per cent of all employees. New employees who joined towards the end of 2013 will complete this training in 2014.

3 Over 95 per cent of the electricity generated by BC Hydro comes from hydroelectric facilities.

4 No specific energy conservation measures were undertaken at our facilities in 2013 due to work required to optimize the heating, ventilation and air-conditioning system that services our office expansion at Canada Place. For more information, see page 19.

5 This represents fuel saved through the use of hybrid vehicles when compared to equivalent standard vehicles.

6 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 employee postal code information for commuting. Emission

factors were referenced from the 2013 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions, Ministry of Environment, December 2013, 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 (BioCO₂), as defined in the 2013 B.C. Best Practices Methodology, which accounts for the Renewable and Low Carbon Fuel Requirements Regulation. These biogenic emissions represent around 1 per cent of our total emissions. The greenhouse gas emission factor intensity for electricity, as reported by BC Hydro, is significantly lower in 2013 at 14 tCO₂e/GWh when compared with the previous year's factor of 25 tCO₂e/GWh. Applying this new lower electricity emission factor results in a reduction in our total emissions of around 2 per cent. Air travel information captured by our corporate travel agents does not include travel by Helijet or floatplane or flights that were booked directly by employees.

7 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 2013, 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 2013, and extrapolated this data for the full year.

8 There were no identified instances of non-compliance with environmental laws or regulations in 2013.

9 Total value generated represents our operating revenues, total value distributed represents our expenses and economic value retained represents our net income. The financial results for 2011 and 2012 were restated 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.

10 Port Metro Vancouver receives funding from the Government of Canada, Transport Canada and the Province of British Columbia to reimburse us for the purchase and construction of infrastructure, shore power and security assets.

11 All 19 Port Metro Vancouver business units were analyzed for corruption risks as part of our Enterprise Risk Management process.

12 This includes investments through the Community Investment Fund, educational scholarships and matching employee charitable donations. Investment through the local channel dredging program is not included.

OUR PEOPLE

	Employment Contract		Employment Type		Employees Joining		Employees Leaving		Employee Turnover Rate ¹³	New Hires Rate ¹³
	Permanent	Term	Full time	Part time	Permanent	Term	Permanent	Term		
Total	253	40	284	9	15	20	20	11	8%	6%
Male	130	16	145	1	10	8	12	6	9%	8%
Female	123	24	139	8	5	12	8	5	7%	4%
Under 30	15	11	26	–	2	3	1	1	7%	13%
30–50	165	25	181	9	12	12	10	8	6%	7%
50+	73	4	77	–	1	5	9	2	12%	1%

13 Calculation of employee turnover rate and rate of new hires is based on permanent employees only.



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 ISAE 3000 *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* and the Canadian Institute of Chartered Accountants Handbook Section 5025 (“CICA HB Section 5025”), 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 2013 Sustainability Report (the “Report”) for the period January 1, 2013 to December 31, 2013. 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 ‘G’ symbol in the Global Reporting Initiative (GRI) 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 2013 greenhouse gas (“GHG”) assertions identified in the GRI Index within the Report and to express an opinion thereon:
 - » EN16: Total direct and indirect GHG emissions by weight
 - » EN17: Other relevant indirect GHG emissions by weight (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 EN16 and EN17 have been neutralized through the purchase of 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 that Port Metro Vancouver’s Report has achieved, in all material respects, the Application Level B+ and to express a conclusion thereon.
- **Subject matter 5:** To obtain a limited level of assurance on the fair presentation, in all material respects, of the number of community complaints and classification by type of complaint presented in the Report (the “Community Complaints Assertion”) and to express a conclusion thereon.
- **Subject matter 6:** To obtain a limited level of assurance on the fair presentation, in all material respects, of the number of environmental reviews presented in the Report (the “Environmental Review Assertion”) 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.

- **Subject matter 1:** GRI G3.1 Guidelines
- **Subject matter 2:** ISO 14064 – Part 1 and criteria internally developed by Management based on the GRI G3.1 Guidelines
- **Subject matter 3:** ISO 14064 – Part 1 and criteria internally developed by Management
- **Subject matter 4:** The Application Level Criteria set out in the GRI G3.1 Guidelines
- **Subject matter 5:** Criteria internally developed by Management
- **Subject matter 6:** Criteria internally developed by Management

BOARD AND MANAGEMENT RESPONSIBILITIES

The Report was prepared by the Management of Port Metro Vancouver, who is responsible for the collation and presentation of the Specified Performance Information, Greenhouse Gas Assertions, Carbon Neutral Assertion, Community Complaints Assertion, Environmental Review Assertion, 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, including the GRI Reporting Team, 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, the Community Complaints Assertion and the Environmental Review Assertion 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 GHG 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.
- Management's forward-looking statements.
- Any comparisons made by Port Metro Vancouver against historical data, with the exception of Specific Performance Information, the Greenhouse Gas Assertions, the Carbon Neutral Assertion, and the Community Complaints assertion for which we have provided assurance for the 2011 and 2012 period.
- The appropriateness of definitions for internally developed criteria applied to the Carbon Neutral Assertion, the Community Complaints Assertion, and the Environmental Review Assertion.

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 G3.1 Guidelines.

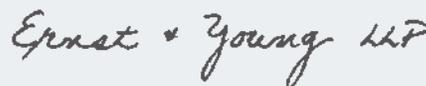
Subject matter 2 – Greenhouse Gas Assertions: In our opinion, the Report presents fairly, in all material respects, the Greenhouse Gas Assertions for the year ended December 31, 2013 in accordance with ISO 14064 – Part 1 and GRI G3.1 Guidelines.

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, 2013 in accordance with ISO 14064 – Part 1 and criteria internally developed by Management.

Subject matter 4 – GRI Application Level: Nothing has come to our attention that causes us to believe that the Report does not, in all material respects, meet the criteria for application level B+ in accordance with the Application Level Criteria set out in the GRI G3.1 Guidelines.

Subject matter 5 – Community Complaints Assertion: Nothing has come to our attention that causes us to believe that the Community Complaints Assertion for the year ended December 31, 2013 is not, in all material respects, in accordance with criteria internally developed by Management.

Subject matter 6 – Environmental Review Assertion: Nothing has come to our attention that causes us to believe that the Environmental Review Assertion for the year ended December 31, 2013 is not, in all material respects, in accordance with criteria internally developed by Management.



Chartered Accountants
Vancouver, Canada
14 May, 2014

GLOBAL REPORTING INITIATIVE INDEX

GRI INDICATOR	PAGE
1	STRATEGY AND ANALYSIS
1.1	Statement from most senior decision-maker of organization 3
1.2	Description of key impacts, risks and opportunities 2–4, 17
2	ORGANIZATIONAL PROFILE
2.1	Name of organization Front cover
2.2	Primary brands, products and/or services 6–7, 12
2.3	Operational structure of the organization 5, 12
2.4	Location of organization's headquarters 9, 11
2.5	Number of countries where the organization operates 9, 11
2.6	Nature of ownership and legal form 12
2.7	Markets served 6–9, 14
2.8	Scale of the organization 11, 12, 17, 56–57
2.9	Significant changes during the reporting period regarding size, structure and ownership ¹ 61
2.10	Awards received in the reporting period 19, 35
3.0	REPORT PARAMETERS
3.1	Reporting period 5
3.2	Date of most recent previous report 4
3.3	Reporting cycle 4
3.4	Contact point for the report 5
3.5	Process for defining report content 4
3.6	Boundary of the report 5
3.7	Limitations on the scope or boundary of the report 5
3.8	Basis for reporting on joint ventures, subsidiaries and other entities 5
3.9	Data measurement techniques 5
3.10	Explanation of the effect of any restated information from previous reports 17
3.11	Significant changes from previous reporting periods in scope, boundary and measurement methods 5, 17
3.12	Table identifying the location of standard disclosures in the report 60–61
3.13	Independent assurance for the report 58–59
4.0	GOVERNANCE
4.1	Governance structure of the organization 12
4.2	Whether Board Chair is also an executive officer 12
4.3	Independent and/or non-executive members of the Board 12
4.4	Mechanisms for shareholders and employees to provide recommendations to the Board 12
4.5	Linkage between compensation and organization's performance 16, 19
4.6	Processes to ensure conflicts of interest are avoided 12
4.7	Process for determining the composition, qualifications and expertise of Board members 12
4.8	Mission, values, codes of conduct and principles 12, 19, back cover
4.9	Board procedures for overseeing management of economic, environmental and social performance 12, 17
4.10	Processes for evaluating the Board's performance 12
4.11	Explanation of how the precautionary approach is addressed by the organization 46
4.12	Externally developed economic, environmental or social charters/principles 50, 58–59
4.13	Memberships in associations ² 61
4.14	List of stakeholder groups engaged by the organization 14
4.15	Basis for identification and selection of stakeholders with whom to engage 4, 14
4.16	Approaches to stakeholder engagement 4, 14–15, 24–28, 31, 45, 48–51
4.17	Key topics and concerns raised through stakeholder engagement 22–28, 30–33, 36–37, 42–45, 48–51

GRI INDICATOR	PAGE
ECONOMIC PERFORMANCE INDICATORS	
Management approach	17
EC1 Direct economic value generated and distributed	17, 57
EC4 Financial assistance received from government	57
ENVIRONMENTAL PERFORMANCE INDICATORS	
Management approach	19, 42–46
EN3 Direct energy consumption by primary energy source	56
EN4 Indirect energy consumption by primary energy source	56
EN5 Energy saved due to conservation and efficiency improvements	56
EN6 Initiatives to provide energy-efficient or renewable energy-based products and services	44
EN7 Initiatives to reduce indirect energy consumption and reductions achieved	19, 56
EN16 Total direct and indirect greenhouse gas emissions	56
EN17 Other relevant indirect greenhouse gas emissions	56
EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved	19, 56
EN20 NO _x , SO _x and other significant air emissions	56
EN22 Total weight of waste by type and disposal method	56
EN26 Initiatives to mitigate environmental impacts of products and services	40, 44
EN28 Value of significant fines and number of non-monetary sanctions for non-compliance with environmental laws and regulations	56
LABOUR PRACTICES AND DECENT WORK PERFORMANCE INDICATORS	
Management approach	18–19
LA1 Total workforce by employment type and contract	56–57
LA2 New employee hires and employee turnover	56–57
LA10 Average hours of training for employees ³	56
LA11 Programs for skills management and lifelong learning ⁴	18–19
HUMAN RIGHTS PERFORMANCE INDICATORS	
Management approach	18–19
HR3 Employee training on policies and procedures concerning human rights	56
SOCIAL PERFORMANCE INDICATORS	
Management approach	17, 48–52
SO2 Business units analyzed for risk related to corruption	57
SO10 Measures implemented in operations with potential or actual impacts on local communities ⁵	24–28, 33, 44–45, 48, 50–51
PRODUCT RESPONSIBILITY PERFORMANCE INDICATORS	
Management approach	31
PR5 Practices related to customer satisfaction	31

1 There were no significant changes in size, structure or ownership of the organization during the reporting period.

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

3 Indicator LA10 is only partially reported in accordance with the Global Reporting Initiative G3.1 guidelines, as information about the total number of hours spent on training by gender, employment contract and employment type is not available.

4 Assurance was provided on the existence of five programs to promote lifelong learning and manage career endings. These programs are the Continuous Education Program, the Training and Development Planning Process, the Strategic Management and Leadership Program, the Individual Incentive Bonus Program and the Employee Assistance Program.

5 Assurance was provided on the existence of seven initiatives to manage the impacts of operations on communities. These initiatives are: project consultation, the Truck Licensing System, shore power for cruise ships, the Community Feedback Line, community liaison groups, the Noise Monitoring Program, and engagement through PortTalk and social media.

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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