

# WE'RE LEADING, LISTENING AND **RESPONDING**

2012 SUSTAINABILITY REPORT





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# CREATING A SUSTAINABLE PORT THROUGH **DIALOGUE** **AND COLLABORATION**

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Leading the Pacific Gateway requires a careful balance of national and regional interests, and economic, social and environmental performance. We're listening to our customers, stakeholders, governments, regional communities and First Nations to better understand their interests. We're working to develop policies, projects and initiatives that respond to these interests. And we're continuing the dialogue on tough issues to find a sustainable pathway to our common future.

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This report provides an overview of our social, environmental and economic performance for the 2012 calendar year.

- Prepared in accordance with the Global Reporting Initiative's G3.1 Guidelines
- Meets the requirements of the Global Reporting Initiative's B+ Application Level
- Independently assured by Ernst & Young LLP

# YOU HAVE QUESTIONS

We know that we don't have all the answers but as we plan for the future, we strive to reach solutions that support the economic, social and environmental aspirations of our neighbouring communities and fellow Canadians. The port authority, tenants, customers, communities, governments, First Nations and stakeholders: we all have a part to play in creating a sustainable port. In continuing the dialogue this year, these are the tough questions people asked us. Throughout this report, you'll read how we are responding.

“What is Port Metro Vancouver doing to ensure that our region has the capacity to meet the future needs of customers?”

For more information, go to page 16 of this report.

“What is Port Metro Vancouver doing to ensure construction activities and vessel operations don't impact important fish and wildlife habitats?”

For more information, go to page 29 of this report.

“Who is responsible for preventing oil spills and responding in the event that the unthinkable happens?”

For more information, go to page 22 of this report.

“What is Port Metro Vancouver doing to address water quality?”

For more information, go to page 28 of this report.

“How is Port Metro Vancouver ensuring our Gateway remains safe and secure?”

For more information, go to page 21 of this report.

“How is Port Metro Vancouver making decisions about growth and sustainable development?”

For more information, go to page 15 of this report.

“How is Port Metro Vancouver protecting industrial land?”

For more information, go to page 15 of this report.

“Reliability is critical to my business. What is being done to ensure my goods move through Port Metro Vancouver problem-free?”

For more information, go to page 32 of this report.

“As a regulator and proponent, what is Port Metro Vancouver doing to ensure transparency and accountability in environmental reviews?”

For more information, go to page 27 of this report.

“I’m concerned about the movement of goods like coal and oil through my neighbourhood, and the long-term environmental and health risks. Shouldn’t local residents have a say in what gets transported through our communities?”

For more information, go to page 37 of this report.

“How is Port Metro Vancouver reducing the negative impacts of port operations in communities that border port lands?”

For more information, go to page 35 of this report.

“How does Port Metro Vancouver engage with First Nations?”

For more information, go to page 36 of this report.

“What is Port Metro Vancouver doing to clean up and manage contaminated port lands?”

For more information, go to page 29 of this report.

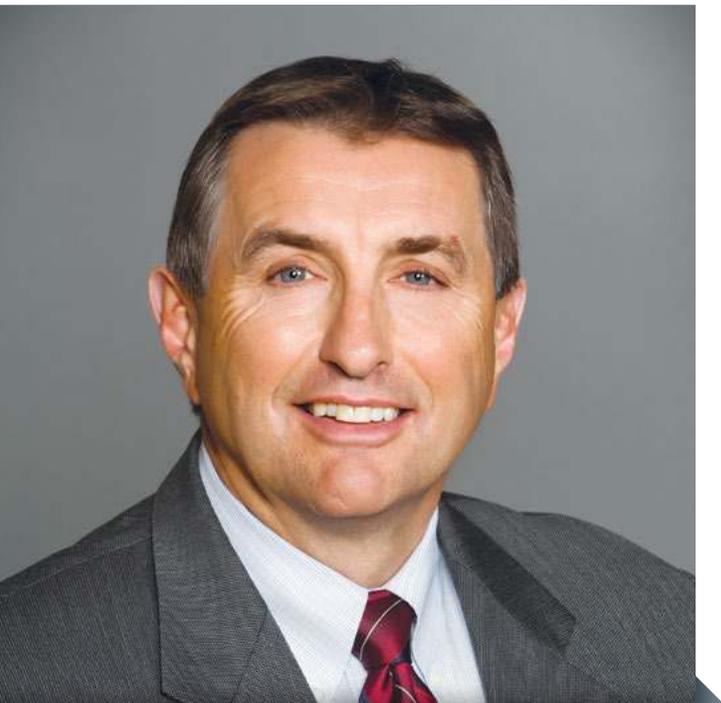
“What is Port Metro Vancouver doing to improve air quality?”

For more information, go to page 25 of this report.

“What is Port Metro Vancouver doing to address noise from port operations?”

For more information, go to page 36 of this report.





**Craig Neeser** Chair, Board of Directors

“We continuously learn from our experiences and recognize that there are challenges. A clear vision and sound governance based on principles guides us when these challenges inevitably arise.”

Canada is a trading nation. From coast to coast to coast, people rely on the goods that move through ports. The ships arriving at port terminals in Burrard Inlet, at Roberts Bank and on the Fraser River carry goods that we all count on. The business that we see going through Port Metro Vancouver, \$475 million of cargo each day, is a daily reminder that trade is vital to our lives and to the economy in Metro Vancouver and all across Canada.

Our role is to facilitate Canada's trade in a safe and environmentally responsible manner. We understand that local communities not only want to benefit from our activity, but they also want us to be a good neighbour. Together we are working to grow Canada's largest gateway to the Asia-Pacific region in a sustainable manner while continuing to generate prosperity and jobs for thousands of families – not just here in the Lower Mainland, but also across British Columbia and Canada.

I am pleased to present our third annual Sustainability Report, in which we report on our economic, environmental and social performance in 2012. We follow the internationally recognized best practice of the Global Reporting Initiative (GRI) in preparing our report, which focuses on material issues of significance to our stakeholders, including port growth and land use, safety and security, reliability and competitiveness, and our impact on community and the environment.

The process of planning, implementing, tracking and reporting on our sustainability performance has given us a better understanding of our achievements, opportunities for improvement, and the future challenges we face as an organization. We continuously learn from our experiences and recognize that there are challenges. A clear vision and sound governance based on principles guides us when these challenges inevitably arise.

I would like to take this opportunity to thank the members of Port Metro Vancouver's Board of Directors for their participation and guidance, helping steer Port Metro Vancouver through another year of growth and accomplishment. In particular, I would like to acknowledge the Community and Corporate Social Responsibility Committee for their efforts to advance port sustainability in 2012. I would also like to acknowledge our outstanding Executive Leadership Team led by President and Chief Executive Officer Robin Silvester. The Port is leading, listening and responding, and contributing to a future we can all be proud of.

A handwritten signature in black ink that reads "C. Neeser". The signature is fluid and cursive, written over a light grey rectangular background.

**Craig Neeser** Chair, Board of Directors

The Metro Vancouver region is, by many accounts, in an enviable position – renowned for its livability, natural beauty and pursuit of a sustainable future. Yet the pressure to compete in a global economy, combined with a growing population, expanding cities and aging infrastructure, is creating significant regional challenges for local governments and citizens.

Port Metro Vancouver is seeking ways to engage with communities and improve the Port's and region's long-term sustainability, in order to best support Canada's international and domestic trade. This Gateway must thrive so that we can continue to support the B.C. economy – but we must also grow in a way that balances impacts in the Lower Mainland.

This report's theme – leading, listening and responding – is about gaining a deeper understanding of how Port Metro Vancouver can best contribute to a more sustainable future and create value for our customers and stakeholders. Over the long term, we believe that our success and competitiveness will depend on our willingness to listen, to be open to new ideas and new approaches, and to work together to create a common vision.

Throughout the report you will read our responses to tough questions. And while we may not have all the answers, we are proud of how much we have accomplished in 2012, and we remain committed to developing thoughtful responses to tough questions. We continually work to improve safety and security, enhance reliability and competitiveness, and grow the Port in a way that balances the interests of our customers, stakeholders, government, the community and First Nations.

I would like to acknowledge and thank the Board of Directors for their guidance in this endeavour over the year, and the dedication of the many Port Metro Vancouver employees who work tirelessly to make our port and region a better place.



**Robin Silvester** President and CEO



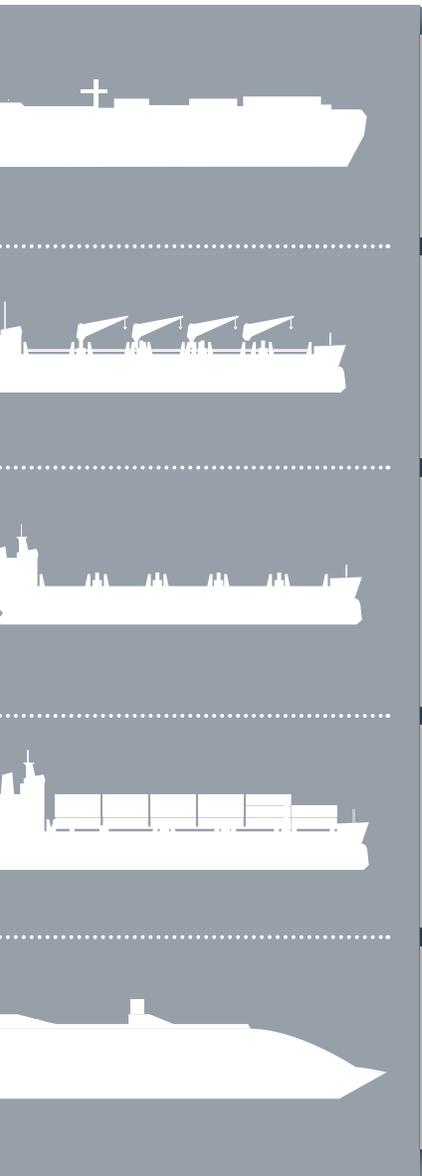
**Robin Silvester** President and CEO

“Over the long term, we believe that our success and competitiveness will depend on our willingness to listen, to be open to new ideas and new approaches, and to work together to create a common vision.”

# OUR BUSINESS

Port Metro Vancouver is Canada's largest and North America's most diversified port. Our strategic location and infrastructure enable us to play a critical role in Canada's trade with growing Asian economies.

Canada's main exports through Port Metro Vancouver are coal, grain and forest products. The Port is also the main port of entry to Canada for automobiles and consumer goods. The Port exists within a leading international urban centre – Metro Vancouver, an area of incredible natural beauty and biological diversity. It is our job to ensure that the region and the country can enjoy the benefits of this economic activity in a sustainable way.



## AUTOMOBILES

More automobiles arrive in Canada through Port Metro Vancouver than through any other port in the country. The Port receives 100 per cent of all Asian autos destined for Canada.

## BREAKBULK

Large pieces of cargo that need to be lifted on and off by crane are carried by breakbulk vessels. Examples include steel, pulp, lumber and specialized project cargo such as wind turbines.

## BULK

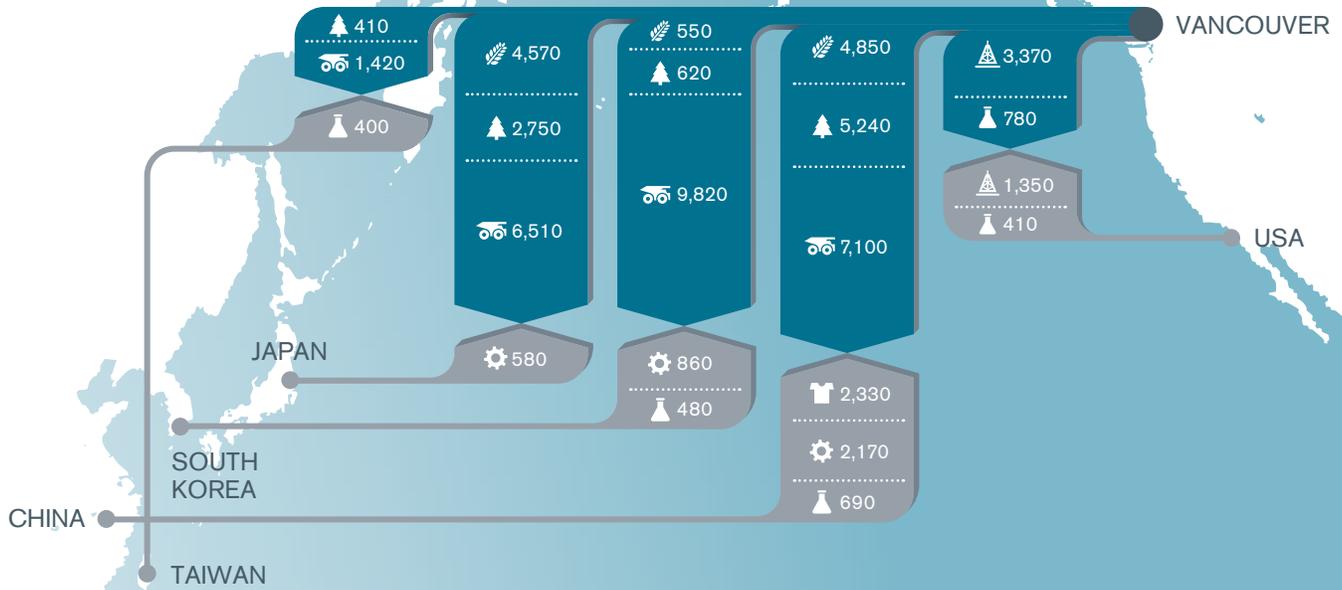
Dry or liquid cargo that is poured directly into a ship's hold is called bulk cargo. Principal cargoes include: grain, thermal coal and metallurgical coal (which is used for steel goods), potash (which is used in fertilizers), and sulphur (which is used in car tires, fireworks and medicine).

## CONTAINER

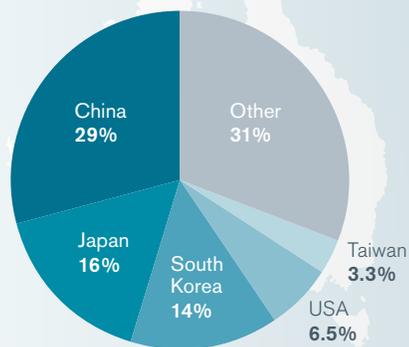
Items imported in containers include: food items, such as tropical fruit, and consumer goods like electronics, clothes and toys. After a container is unloaded, it is refilled with items like specialty grains, pulp or lumber, for export as backhaul cargo.

## CRUISE

Port Metro Vancouver is the homeport for the Vancouver–Alaska cruise, carrying more than 660,000 passengers in 2012 and generating an average of \$2M per call for regional economies.



### MAJOR FOREIGN TRADING ECONOMIES BY TONNAGE



The Vancouver Gateway is a critical hub for Canadian trade, providing a reliable link to global trade partners, in particular with Asian economies. The above map provides an overview of our Gateway's largest trade partners and the top cargo volumes traded in 2012. To learn more about trade partners and cargo volumes, please visit our website at [portmetrovancover.com/factsandstats](http://portmetrovancover.com/factsandstats)

#### Trade Commodities metric tonnes (thousands)

- Coal
- Forest products
- Grain, specialty crops and feed
- Consumer and related goods
- Petroleum products
- Chemicals, basic metals and minerals
- Machinery, vehicles, construction and materials

#### Trade Routes

- Exports
- Imports

# WHO WE ARE AND WHAT WE DO

Our mission is to lead the growth of Canada's Pacific Gateway in a manner that enhances the well-being of Canadians.

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*, and is accountable to the federal Minister of Transport, Infrastructure and Communities. We are responsible for managing over 16,000 hectares of water, nearly 1,000 hectares of land, and assets along 640 kilometres of shoreline. Our jurisdiction borders 16 Lower Mainland municipalities and one treaty First Nation, and intersects the traditional territories of several First Nations.

## CORPORATE OPERATIONS

We have direct operational control over our head office, three support facilities, five harbour patrol vessels and 21 fleet vehicles.

## VANCOUVER GATEWAY OPERATIONS

**Shipping lines, agents and vessels:** We work with federal agencies and the marine sector to ensure that vessel transits are conducted in a safe, efficient and environmentally responsible manner.

**Terminals:** We work with the operators of the Port's 28 major terminals under lease to promote continuous environmental improvement and to manage impacts on the community.

**Tenants on port lands:** We lease land and water assets to organizations that require port infrastructure and work with them through environmental assessments, project reviews and lease schedules to manage environmental and social impacts.

**Supply chain connections:** We work with major rail service providers, companies running more than 2,000 trucks and other supply chain partners to ensure reliable and efficient intermodal connections.

WEST VANCOUVER  
300 Jobs

SEASPAN SHIPYARD  
MODERNIZATION

RICHARDSON  
INTERNATIONAL  
GRAIN STORAGE  
CAPACITY

MILLTOWN  
MARINA



PROPOSED  
ROBERTS BANK  
TERMINAL 2

DELTA  
PORT  
TERMINAL,  
ROAD AND RAIL  
IMPROVEMENT  
PROJECT

NAVIGATIONAL JURISDICTION BOUNDARY



**CANADA**  
98,800 Jobs

**BRITISH COLUMBIA**  
76,800 Jobs

**NORTH VANCOUVER (DISTRICT)**  
3,500 Jobs

**NORTH VANCOUVER**  
900 Jobs

**PORT MOODY**  
300 Jobs

**PORT COQUITLAM**  
600 Jobs

**COQUITLAM**  
700 Jobs

**MAPLE RIDGE**  
200 Jobs

**BURNABY**  
1,000 Jobs

**NEW WESTMINSTER**  
3,100 Jobs

**PITT MEADOWS**  
100 Jobs

**VANCOUVER**  
13,900 Jobs

**SURREY**  
1,800 Jobs

**RICHMOND**  
5,200 Jobs

**LANGLEY TOWNSHIP**  
200 Jobs

**DELTA**  
3,300 Jobs

**LANGLEY**  
100 Jobs

In 2012, Port Metro Vancouver commissioned InterVISTAS to conduct an economic impact study of current port operations in the Lower Mainland. The study allows us to demonstrate our significant employment and economic impacts provincially and nationwide, with a particular focus on the communities that surround the Lower Mainland. The job figures listed above for British Columbia and Canada include direct, indirect and induced employment. Direct employment is related to the industry, while indirect jobs are those that support the industry. Induced employment relates to employee spending in the community. To learn more about port economic impacts, please visit our website at [portmetrovancover.com/factsandstats](http://portmetrovancover.com/factsandstats)

- Port Metro Vancouver**
  - ★ Head Office
  - ▲ Other facilities
  - Direct jobs
- Other infrastructure**
  - Port terminals
  - Rail network
  - Roads
- Port projects**
  - Port Metro Vancouver-led projects
  - Tenant-led projects

# APPROACH TO SUSTAINABILITY

Our vision is to be the most efficient and sustainable Gateway for the customers we serve, benefiting communities locally and across the nation.

As Canada's largest port, we have a responsibility to provide leadership on the sustainable development of port operations. Our approach to sustainability is articulated in how we conduct business, how we plan for the future, and how we engage our people, customers, supply chain partners, stakeholders, neighbouring communities, governments, First Nations and the broader public.

## STRATEGIC PLANNING

In 2010, we embarked on a strategic visioning process called Port 2050. We engaged representative parties with a stake in the future of the Gateway and developed a shared perspective of our anticipated future. Our task now lies in embracing a global, social, environmental and economic transition, one that requires adaptive capacity, resilience and strategic direction.

In 2012, we initiated a two-year process to update our *Land Use Plan* – developing the goals, objectives and policy directions to inform land use decisions over the next 15 to 20 years. In late 2012, we began work to develop a *Sustainability Vision and Strategy* for Port Metro Vancouver, which will provide greater detail on what the port looks like in a sustainable world and how we can get there together. The new *Land Use Plan* and *Sustainability Vision and Strategy* will help guide the Port toward The Great Transition. We expect to complete these important initiatives in early 2014.

## CORPORATE SOCIAL RESPONSIBILITY

We employ a balanced scorecard approach to delivering and measuring performance against our strategic priorities. Our scorecard tracks performance in economic, environmental and social priorities and is the basis for the annual Corporate Performance Award for employees. Corporate Social Responsibility (CSR) is one of seven strategic priorities in our business plan. Our Board Committees, such as the Community and CSR Committee, provide oversight for performance. Our Vice President, CSR, provides leadership to more than 50 employees including those in environmental programs, community and aboriginal engagement, communications and government affairs. In 2012, CSR performance made up 9 per cent of our corporate scorecard total, and in 2013 it will comprise 14 per cent.

## ENGAGEMENT

Port Metro Vancouver is committed to the business of trade. And we're committed to growing trade through sustainable development of the port – to improve quality of life for Canadians, both today and in the future. To meet this commitment, we must learn more about the values and objectives we share with our customers, supply chain partners, stakeholders, neighbouring communities, governments, First Nations and the broader public. Our engagement goals are to be inclusive and proactive in identifying and engaging on matters of interest that recognize and respond to this diversity of interests and needs. Our approach to engagement is varied because of this diversity. Throughout this report, you will find specific examples of engagement, which follow the International Association of Public Participation (IAP2) principles.

## OUR ANTICIPATED FUTURE



For more information about Port 2050, please visit our website at: [portmetrovancover.com/port2050](http://portmetrovancover.com/port2050)

## REPORTING

Our annual Sustainability Report provides information about the sustainability topics of greatest significance to Port Metro Vancouver and our stakeholders. It is 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. We follow globally accepted best practices when preparing our report and actively seek input from our stakeholders.

For a second year, we invited representatives from our customers, industry, local and regional governments, First Nations, neighbouring communities, sustainability professionals and managers from across our operations to participate in two report review panels. These panels provided feedback on our previous Sustainability Report and helped us determine material issues for this and future reports. We have incorporated the panel recommendations into this report, wherever possible.

Reflecting this input, the first section of the report, Our Gateway Performance, discusses our approach to managing important challenges across the port that are outside of our direct control but within our sphere of influence.

Within the second section of the report, Our Corporate Performance, we provide information and performance data for our own operations, including our governance, people, environmental footprint, financial results and community investment.



**To review feedback from our Report Review Panel, please visit our website at:**  
[portmetrovancover.com/accountability](http://portmetrovancover.com/accountability)

## REPORT REVIEW PANEL PRIORITIZATION OF SUSTAINABILITY TOPICS

### HIGH MATERIALITY

These aspects were identified as high priority by our report review panel 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 habitats
- First Nations relations
- Government relations
- Port economic impacts and value

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

### LOW MATERIALITY

These aspects were given lower priority by our report review panel and are found in the back of our report.



# OUR GATEWAY **PERFORMANCE**

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We are committed to the safe, efficient and environmentally responsible movement of goods and passengers through the Port, while overseeing the growth of Canada's Pacific Gateway.

# PORT GROWTH AND LAND USE

We constantly strive to balance growth in trade with the need to protect our environment and to respect the quality of life for neighbouring residents.

## WHY IT'S IMPORTANT

Leading Canada's Pacific Gateway requires careful balance of our national role – which is to enhance the competitiveness of Canadian trade and secure long-term benefits for Canadians – with the regional interests of our communities. Canadian trade is increasing, driven by international demand for our natural resources and Canadian demand for international products. The port is growing as a result. In managing this growth, we need to maintain a dialogue with our communities to understand how this growth affects them and then develop plans and programs that are responsive to their needs. In the following section you will find information on infrastructure projects across the region, how these projects are improving port operations, and what we are doing to understand and respond to community concerns.

## WHAT WE'VE HEARD FROM OUR STAKEHOLDERS

Our neighbouring communities are concerned about port expansion and the effects of port operations on the environment and their quality of life. This includes the impact of more vessels, trucks, railcars and terminal activity, and of the types of cargoes moving through the port. We've also heard that port communities want to know more about Port Metro Vancouver's role in port development, and whether we can, and will, make changes to projects based on their input.

## 2012 HIGHLIGHTS

- We began a two-year process to update Port Metro Vancouver's *Land Use Plan*. It will include policies on land use and development in the port, and identify the types of uses appropriate on land and water across our jurisdiction for the next 15–20 years.
- Following extensive community consultation, we received City of North Vancouver approval for the Low Level Road Project, part of the North Shore Trade Area.
- We completed the environmental assessment review for the Deltaport Terminal, Road and Rail Improvement Project.
- We received several proposals from tenants to improve, intensify or expand operations.

## FOCUS FOR 2013

- Develop a draft *Land Use Plan* guided by technical work and consultation activities.
- Continue to gather community input for consideration throughout planning and construction of port projects, such as Low Level Road, the Deltaport Terminal, Road and Rail Improvement Project, the proposed Roberts Bank Terminal 2 Project and the South Shore Corridor Project.

## YOUR QUESTIONS AND OUR RESPONSES

### How is Port Metro Vancouver making decisions about growth and sustainable development?

**We believe that sustainability is an ongoing process of continuous improvement. We've made significant steps toward developing policies and creating consensus on priorities for growth.**

We know that growth has impacts. What we're focusing on is making responsible decisions about growth and working with our stakeholders to create a collective vision about how port growth should happen in our region.

We began the two-year process of updating our *Land Use Plan* in 2012. The *Land Use Plan* will be closely aligned with the development of our *Sustainability Vision and Strategy*, and will support our anticipated future of The Great Transition outlined through the Port 2050 process.

The *Land Use Plan* update aims to address some of the critical issues around growth and development at Port Metro Vancouver in the following ways:

- Set clear goals and policies laying out Port Metro Vancouver's priorities for growth and development, combined with actions to be taken.
- Provide consistent policies describing the steps that Port Metro Vancouver will take when acquiring new land, and how the Port will consult on proposed changes to designations.
- Determine relevant and consistent designated land uses for the areas within the Port's jurisdiction.
- Consider social, environmental and economic interests in land use planning.
- Find balance between competing land uses and the diminishing supply of industrial land.

In 2012, we gathered input on top priorities and concerns through eight stakeholder workshops and six open houses, along with an online survey. We combined this input with leading practices to develop draft goals, objectives and policy directions. Key consultation themes included the need to intensify operations within our existing footprint before expanding, being mindful of the impacts on communities and existing municipal plans, and increasing transparency and collaboration.

In 2013 we will host additional stakeholder, First Nations and public consultation sessions throughout Metro Vancouver, prepare a draft plan for consultation in the fall, and complete a final draft of our new *Land Use Plan* by the end of the calendar year.

When the two-year process concludes, we will have held 20 workshops and open houses across the Lower Mainland, in addition to numerous presentations, meetings and online engagements.



**To learn more about the *Land Use Plan* update, please visit our website at:**  
[portmetrovancover.com/landuseplan](http://portmetrovancover.com/landuseplan)

### How is Port Metro Vancouver protecting industrial land?

**In our view, shrinking industrial land availability is one of the defining issues for the Port, and perhaps for the whole Metro Vancouver region.**

Land is a finite resource in Metro Vancouver. More than 2.6 million people live, work and play in a relatively small slice of land bounded by ocean, coastal mountains and the U.S. border. In the last 30 years, our region has lost more than 3,000 hectares of industrial land to the competing priorities of residential and commercial development. Port Metro Vancouver owns more than 1,000 hectares of land, and we acquire additional land for the long-term benefit of the Gateway. Without a long-term solution to land use issues in the Lower Mainland, competing development pressures will continue to conflict, at the expense of important economic activity and at the expense of high-paying, productive jobs. In 2012, Port Metro Vancouver put forward the concept of an 'Industrial Land Reserve' to protect existing industrial lands, help balance land use decisions, and explore innovative ways to establish new lands for growing industries. In 2013, we look forward to continued public discussion and to resolving critical industrial land shortages.

## What is Port Metro Vancouver doing to ensure that our region has capacity to meet the future needs of customers?

**To meet the capacity demands created by a growing Canadian economy, Port Metro Vancouver has a variety of capital programs and projects underway.**

Port Metro Vancouver helps Canadian businesses get their goods and products to markets around the world and is an entry point for many consumer goods, including fruits, vegetables, coffee, clothing, electronics, furniture and automobiles. Port Metro Vancouver supports Canadian trade by providing the necessary infrastructure that connects Canada's markets to trading economies around the world, particularly those in the Asia-Pacific region.

### ROBERTS BANK TRADE AREA

#### THE ROBERTS BANK RAIL CORRIDOR PROGRAM

This program is a comprehensive package of road and rail improvements funded by an unprecedented collaboration of 12 partners. Local, regional, provincial and federal governments worked together with private industry to improve this important 70-kilometre stretch of rail, which runs through numerous communities in the Lower Mainland and includes 66 road crossings. This key corridor connects Canada's largest container facility and a major coal terminal at Roberts Bank in Delta with the North American rail

network. Investments totalling \$307 million will double rail capacity and, we believe, enhance the quality of life in these communities by reducing rail crossings and corresponding traffic and noise. In 2012, work continued on several aspects of the program, including completing the 80th Street Rail Overpass Project in Delta, and completing consultation on the 232nd Street Overpass Project in Langley.

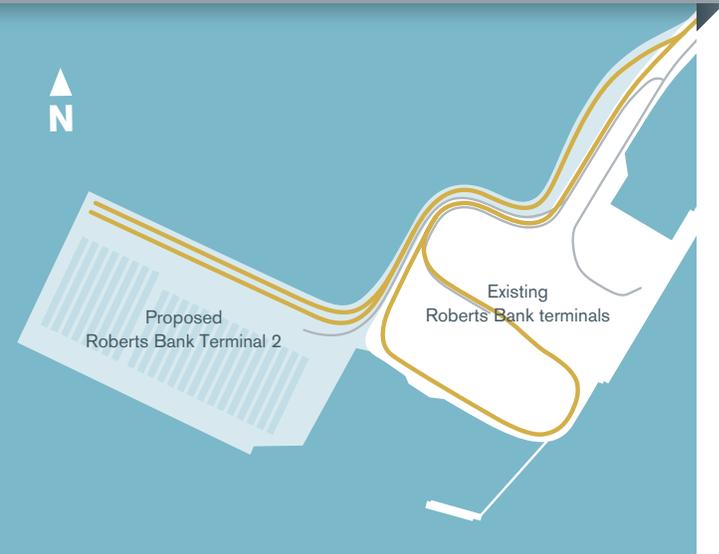
#### CONTAINER CAPACITY IMPROVEMENT PROGRAM

Container traffic through Canada's West Coast is expected to double over the next five to 10 years – and nearly triple by 2030. Based on population and economic growth forecasts, these container traffic projections identify a gap in our ability to meet future demand as early as 2015. To deliver the capacity when and where it is needed, this program looks at opportunities to improve existing terminals and infrastructure, and defines potential new infrastructure that may be required as demand continues to increase.

The Roberts Bank Terminal 2 Project is a proposed new three-berth marine container terminal. It could provide the additional capacity of more than 2.4 million twenty-foot equivalent units (TEUs) per year, to meet forecast demand for container cargo in the coming decade. This project is still in the planning phase, with environmental baseline field studies and community consultation underway. We are currently undertaking a comprehensive multi-stage community, stakeholder and public consultation process, which began in June 2011 and continued in 2012. The project will undergo a thorough and independent environmental assessment, the nature of which will be determined by federal and provincial regulators.

Communities have expressed concerns relating to the project such as loss of agricultural land, the desire for more information and technical studies, and environmental concerns related to species such as migratory birds. During Project Definition Consultation in 2012, we provided the community with options for compensation for loss of agricultural productivity, asked for input on project components such as the location of the intermodal yard, and shared information about our current studies underway to assess environmental aspects of the project such as migratory bird populations. In response to requests for more information and easier access to previous studies about Roberts Bank, we launched a project website with a document library of current and historical studies, and will continue to update it with requested studies as they become available.

### ROBERTS BANK TERMINAL 2 PROJECT



**To find out more about the Container Capacity Improvement Program, please visit our website at: [portmetrovancover.com/CCIP](http://portmetrovancover.com/CCIP)**

The Deltaport Terminal, Road and Rail Improvement Project is an efficient and cost-effective improvement to existing infrastructure that will relieve road and rail constraints and increase capacity at Canada's largest container terminal by 600,000 TEUs, for a total of 2.4 million TEUs. The project works, which will be delivered by 2015, when forecast growth will constrain existing capacity, are primarily within the existing terminal, road and rail footprint, not in the marine environment, resulting in low risk of environmental impacts. The environmental assessment was completed in 2012 and the first phase of public and stakeholder consultation was completed in January 2013. Construction of the overpass has since received funding and commenced early 2013.

During consultation, we heard that truck and rail traffic are of most concern for members of the community, as well as understanding how the Port determines the need and justification for capacity increases. We continue to work with our stakeholders on truck and rail issues, and have committed to conducting and releasing regular economic forecasts related to the Container Capacity Improvement Program to provide transparency around current demand and our anticipated future capacity requirements.

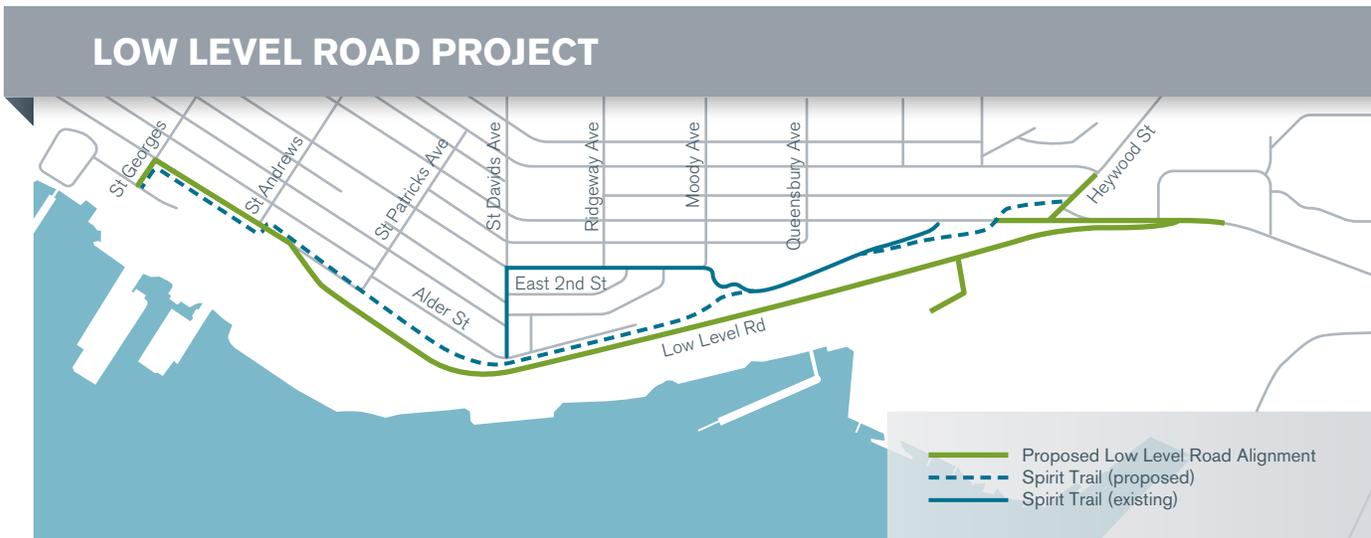
### NORTH SHORE TRADE AREA

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 2012 and will continue in 2013 include the Low Level Road Project, which Port Metro Vancouver is leading, and the Philip Avenue Overpass Project, led by Kinder Morgan and 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 designed to facilitate expanded rail and improved port operations on the North Shore. This project will help to meet the growing international trade demands while working to minimize the effects of this growth on the local community. As part of the project planning process, Port Metro Vancouver provided multiple opportunities for community and stakeholder input beginning in 2011. This involved multiple rounds of consultation during the Detailed Design Phase in 2012, including detailed design (February–March), preferred design (May–June), traffic management (August) and aesthetic features (September). More than 1,200 people participated in consultation. Key interests that we heard included road height, intersection improvements, access, the Spirit Trail, environmental protection, and minimizing view and noise impacts. The Preferred Design provides our best response to this input and achieves all the project objectives, within our technical and environmental constraints. Approximately 80 per cent of consultation participants indicated that the Preferred Design addressed community input.



## SOUTH SHORE TRADE AREA

The South Shore Trade Area supports the import and export of a wide range of cargoes, including containers, bulk (which is mainly grain) and breakbulk (which is mainly lumber). 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 \$127 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. The project is planned to be completed in 2014, including:

- **South Shore Corridor Project** – Construction of an elevated road over Stewart Street to eliminate road-rail conflicts at several at-grade crossings. The project also incorporates a pedestrian overpass in the vicinity of Victoria Drive. Construction began in 2012 and will continue through 2013.
- **Powell Street Grade Separation** – A grade separation to eliminate the existing at-grade crossing at Powell Street. This project is led by the City of Vancouver. Construction will commence in 2013.

Most of the construction of the Port-led South Shore Corridor Project is on Port land. Adjacent residents are regularly informed of upcoming construction activities and potential impacts from noise or traffic detours via community newsletters, a dedicated project website and community meetings.



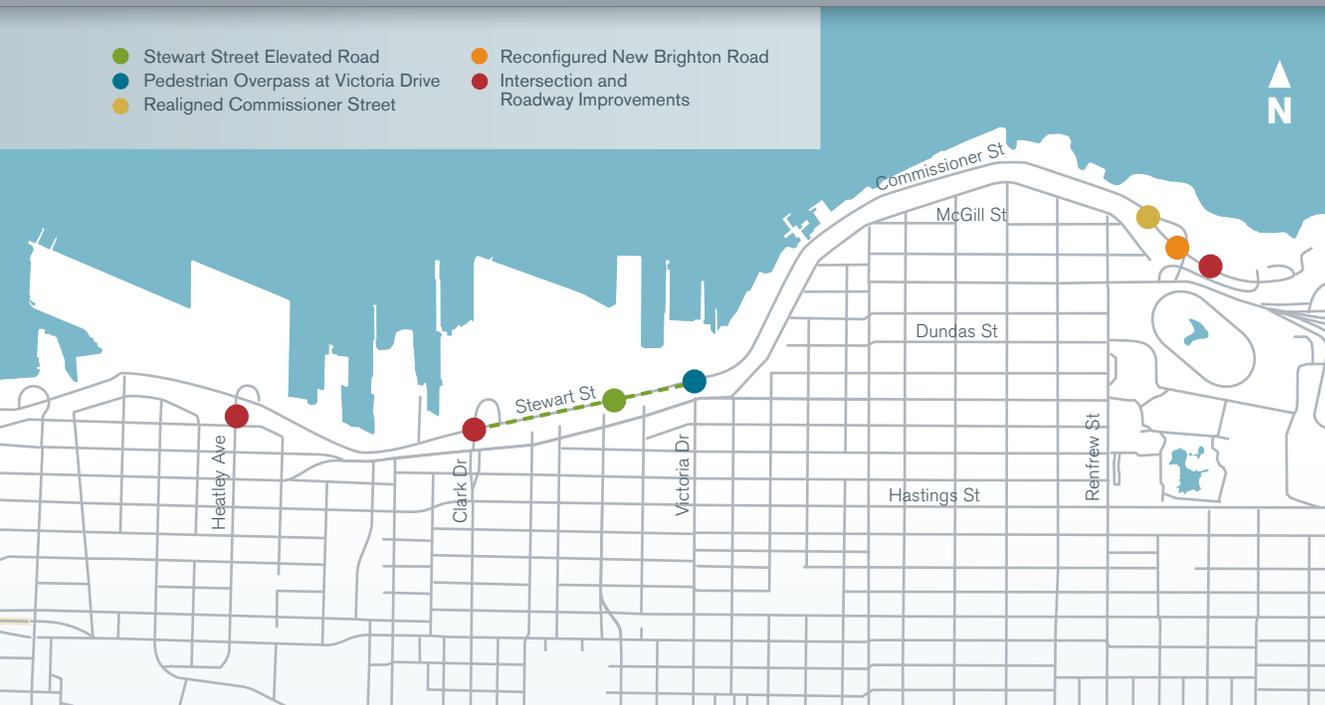
To learn more about these and other port-led projects, visit our website at: [portmetrovancover.com/projects](http://portmetrovancover.com/projects)

## What about tenant-led projects?

Port Metro Vancouver provides regulatory oversight of the projects led by tenants on Port lands. Tenant projects can include efforts to renew or maintain infrastructure, increase capacity and improve operational efficiencies, as well as make changes to the cargoes handled. Our Project Review Process is applied to all projects to ensure that development meets applicable regulations and minimizes environmental and community impacts. For larger projects, this process includes notification and consultation with the surrounding community and First Nations, as well as with local governments.

## THE SOUTH SHORE CORRIDOR PROJECT

- Stewart Street Elevated Road
- Reconfigured New Brighton Road
- Pedestrian Overpass at Victoria Drive
- Intersection and Roadway Improvements
- Realigned Commissioner Street



Similar to a municipal development approval process, Port Metro Vancouver assesses project permit applications based on generally accepted planning practices. Each project application is reviewed on its merits, impacts on local communities and the environment, and necessary mitigation measures. The Port will make a decision on a project permit only when all environmental and technical reviews and any required municipal, First Nation and community consultations are complete.

In 2012, we saw strong demand for port development and received approximately 79 project applications that triggered our Project Review Process. Some of the major tenant-led projects reviewed and approved in 2012 and early 2013 were:

- Beedie Transload Warehouse Development
- Cargill Noise Mitigation
- Columbia Containers Grain Containerization Expansion
- Milltown Marina
- Neptune Terminal Upgrades
- Old Port Mann Bridge Demolition
- Richardson International Grain Storage Capacity
- Seaspan Shipyard Modernization

Major tenant-led projects currently under review are:

- Fraser Surrey Docks Direct Transfer Coal Facility
- Lehigh Hanson Aggregate Facility



**To learn more about these and other tenant-led projects, visit our website at:**  
[portmetrovancover.com/projects](http://portmetrovancover.com/projects)

### HABITAT BANKING

Port Metro Vancouver's Habitat Banking Program is a proactive measure, intended to provide balance between the overall health of the environment, and any future development projects that may be required for port operations. The Program focuses on fish and wildlife habitat, such as saltwater marshes and eelgrass beds, which are improved or created in another location, ahead of a project, to offset a future loss.

Upon completion of construction, and once the habitat is confirmed as stable and viable, it is considered a "deposit" in Port Metro Vancouver's Habitat Bank. "Withdrawals" of habitat can be made from the Habitat Bank when required for development projects in the future. At the time of the withdrawal, Fisheries and Oceans Canada will perform an assessment of the stability and value of the habitat, and will determine if it is suitable to offset the proposed development project.



"We recognize that some citizens have concerns about the types of commodities traded through the port, and we see some unease over port expansion in general. Our job is to ensure that the cargo that travels through the port is handled in the safest, most efficient and sustainable way possible, no matter what it may be; however, decisions on what goods Canada trades with the rest of the world is beyond the scope of our Port's jurisdiction. In light of recent concerns, we have committed to a detailed review of our Project Review Process to increase transparency and improve public confidence."

Jim Crandles – Director, Planning & Development

# SAFETY AND SECURITY

The Port's reputation as a secure and dependable gateway is critical to Canada's domestic and international trade and tourism.

## WHY IT'S IMPORTANT

We believe that our responsibility as the largest Port in the country includes providing leadership on safety and security practices to supply chain partners, including vessels, terminals, railways, the trucking sector, labour and other ports. Safety and security incidents have the potential to impose lasting impacts on the reputation of the Gateway. We focus on port operations, security, emergency preparedness and management, and on providing a safe working environment.

We actively monitor and review operational practices and procedures to ensure the safe movement of goods, and we test our emergency preparedness capabilities throughout the year, including our response to major incidents like spills and earthquakes.

## WHAT WE'VE HEARD FROM OUR STAKEHOLDERS

As demand for trade and port activity increases, safety concerns are heightened. Some stakeholders – in particular, local communities – have expressed concerns about the safe transit of vessels, such as the tankers that carry crude oil and diluted bitumen, and about our ability to prevent and respond in the event of an oil spill. Our stakeholders expect that we constantly improve our capacity to respond to emergencies and security risks, maintain public safety within neighbouring communities and ensure the safety of people working in the port.

## 2012 HIGHLIGHTS

- In response to a project proposal, we completed a detailed technical study of potential liquid bulk tanker traffic on the Fraser River to assess risk.
- We participated in Exercise Magnitude, a province-wide, multi-agency security exercise including "live play" to exercise our Master Security Plan and to test our Operations Centre.

## FOCUS FOR 2013

- Support the Federal Tanker Safety Expert Panel and establish a Centre of Excellence on bulk liquids transportation, to help advance best practices and grow leadership on this important topic within the Pacific Gateway.
- Initiate a port-wide review of security practices.

## YOUR QUESTIONS AND OUR RESPONSES

### How is Port Metro Vancouver ensuring our Gateway remains safe and secure?

**Port Metro Vancouver's Operations Centre is the centralized hub managing operational activities, security incidents and emergency responses.**

Port Metro Vancouver's Operations Centre is located on the waterfront, in our head office at Canada Place. It is staffed by the Port's Operations and Security department, and is supported by a diverse team of specialists. It provides continuous monitoring and prompt incident response, 24 hours a day, every day of the year. The Centre oversees marine safety and environmental protection; port security, including control of more than 250 cameras port-wide; and coordinating resources in emergencies to ensure fluid port operations.

Port Metro Vancouver also works closely with Transport Canada, local law enforcement agencies and the Canadian Border Services Agency to ensure that the port is a secure and dependable gateway for Canada's domestic and international trade and tourism. Our safety and security measures incorporate global best practices and meet or exceed federal regulations.

With the help of Transport Canada funding, we have put in place comprehensive physical and virtual security systems to ensure adherence to federal Marine Transportation Security Regulations. Our patrol vessels are equipped with the latest surveillance equipment, including thermal imaging technology for long-range visibility, day and night, in virtually all weather conditions.

We employ the latest technologies to enhance the physical security on and around port properties, including:

- Intelligent fencing.
- Optical intrusion detection devices.
- Video surveillance and thermal imaging equipment to provide automated threat identification.
- Vehicle access control system and Port Pass program to ensure that only authorized vehicles and individuals can access port property.
- Continuous video surveillance of port roadways and terminals.
- Advanced gamma ray container screening equipment.
- Radiation screening portal program at container terminals.
- One hundred per cent passenger and baggage screening at cruise terminals.
- Incident reporting program to track suspicious activity.



“My team and I have two roles: to keep the port safe and secure, and to provide top-notch service for our customers. Our state-of-the-art 24/7 Operations Centre is the hub where it all happens. With more than 250 cameras, it is our eyes on the port, allowing us to collaborate with local and national agencies, first responders and the port community to ensure that all guidelines governing marine safety are met.”

Yoss Leclerc – Harbour Master and Director,  
Operations & Security

In 2013, Port Metro Vancouver will undertake a port-wide review of port security, called the Security Port Access Review (SPAR) initiative. SPAR is aimed at updating our overall security program to incorporate new operational requirements, replace obsolete or at-capacity technology and establish further opportunities for system integration.

## Who is responsible for preventing oil spills and responding in the event that the unthinkable happens?

**Emergency preparedness and management are part of our ongoing efforts to maintain a high state of readiness. We routinely participate in incident-response exercises with other responding agencies.**

Port Metro Vancouver has served as Canada's Pacific Gateway for bulk oil for more than a hundred years without navigational incident. The *Pilotage Act* requires all vessels over 350 gross tonnes to be boarded by a Canadian marine pilot from the Pacific Pilotage Authority. Marine pilots must be professionally trained and committed to the safety and

protection of the environment. Tankers calling at our port are double-hulled and subject to strict international, national and Port Metro Vancouver standards. In addition, all tankers navigating Burrard Inlet must:

- Be pre-vetted for operating history and condition.
- Have two senior B.C. Coast Pilots onboard, in addition to a fully trained ship's crew.
- Be assisted by three tethered, high-powered tugs, commanded by senior captains.
- Transit through the Second Narrows only during daylight hours, with good visibility and at slack tide.
- Have priority right-of-way if it is a loaded tanker.

Terminals thoroughly inspect every ship before permitting them to call at their facilities. Transport Canada participates in the Port State Control Program, under which ships are inspected and any deficiencies shared internationally. Any major deficiencies are identified and result in immediate repair prior to entry into our port.

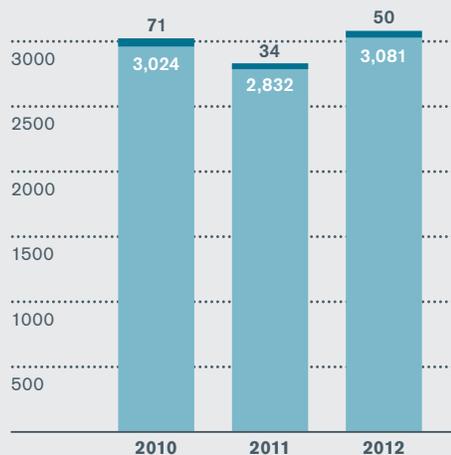
In the unlikely event of a spill, the first point of contact is the Canadian Coast Guard emergency line. The Western Canada Marine Response Corporation (WCMRC) is then notified. The WCMRC is the Transport Canada-certified and industry-funded organization mandated to respond to an oil spill anywhere on the B.C. coast. They are capable of responding to a spill of up to 26,000 tons.

Canadian regulations require all tankers to have an approved oil response contractor available to assist them. The *Marine Liability Act* ensures that the owner of a ship is strictly liable for oil pollution damage, including costs for cleanup, monitoring, preventative measures and reinstatement measures. This includes the protection of wildlife, economic and environmental sensitivities, and the safety of both the responders and the public. Currently, a total of approximately \$1.37 billion in insurance is available through a variety of funds, with provisions to clean up oil spills even when the source cannot be identified. Industry contributes to these funds through a levy on all the oil that is transported.

In 2012, Port Metro Vancouver completed an assessment of the risks associated with liquid bulk tanker traffic on the Fraser River. The study is informing the environmental assessment of a proposed aviation fuel terminal on the Fraser River intended to support airport operations.

In 2013, we are working with federal government, industry, academia and community partners on tanker safety. We are supporting the Federal Tanker Safety Expert Panel and establishing a Centre of Excellence on bulk liquids transportation, to help advance best practices and grow leadership on this important topic within the Pacific Gateway.

## FOREIGN VESSEL CALLS



Legend:

■ Crude oil tanker calls ■ Total vessel calls

Foreign vessel calls were up 2% in 2012, to 3,081. Of those, crude oil tanker traffic rose from 34 tankers in 2011 to 50 tankers in 2012, representing less than 2% of total vessel traffic through Port Metro Vancouver.

## EMERGENCY PREPAREDNESS

Every year, we exercise our Master Security Plan. In 2012, we partnered with Exercise Magnitude and participated in “live play” for the first time in the areas that were tested.

Planning involved three working groups to develop all of the scenarios: one with Port Metro Vancouver staff, one with security partners and the third with a number of federal emergency management agencies.

On October 19, 2012, our Operations and Security team conducted a full-scale exercise to test both our security and emergency response plans.

Our test assumed a massive earthquake in the Georgia Strait that severely impacted Metro Vancouver. Some of the external agencies provided Liaison Officers in the Operations Centre to support the live play, and a number of controllers, evaluators and observers helped ensure that we followed the formal exercise process.

As a result of the exercise, we identified a number of ways to improve our emergency and security operations, and ways to enhance relationships with the external agencies that participated.



**To learn more about spill response, please visit our website at:**  
[portmetrovanancouver.com/operations](http://portmetrovanancouver.com/operations)

## INCIDENT RESPONSE

On December 7, 2012, the bulk carrier *Cape Apricot* struck the loading berth causeway at Westshore Terminals, a coal facility operating at Roberts Bank. The causeway, trestle and conveyor were damaged and sank following the incident. Port Metro Vancouver’s Harbour Master Yoss Leclerc attended the incident and responsible agencies were notified. The incident highlighted an opportunity for us to improve our notification processes to local First Nations, community stakeholders and municipalities. It also highlighted the strength and flexibility of our permitting process, which enabled the terminal to be back in operation within a short time, minimizing the impact on the overall supply chain.

## 24/7 OPERATIONS CENTRE



Our Operations Centre is staffed 24 hours a day, seven days a week, 365 days a year to ensure a high standard of customer service, safety, security and environmental protection. For marine, land, rail or security matters, please contact the centre.

☎ 604.665.9086

@ harbour\_master@portmetrovanancouver.com

# ENVIRONMENT

We are working to reduce our impact on the environment by monitoring our performance and investing in programs that help improve air, land and water quality, and protect fish and wildlife.

## WHY IT'S IMPORTANT

Our port operates in a sensitive and beautiful natural environment that is rich in biodiversity and is home to hundreds of species of fish, crustaceans, birds and marine mammals. We are concerned with impacts on the quality of air, land, water, and fish and wildlife habitat in our jurisdiction. At the core of our mission is a commitment to enhancing the well-being of all Canadians, which includes the stewardship of natural resources within our jurisdiction. Managing environmental impacts is essential to the long-term viability of the port and therefore an important part of our social licence to operate. We also recognize the role we play in collaborating on a regional, national and global scale to help promote a more sustainable port.

## WHAT WE'VE HEARD FROM OUR STAKEHOLDERS

We understand that communities are concerned about port impacts on the environment and the risk that this presents to the ecosystem and to the quality of life in their communities. Of particular concern are air quality issues affecting human health, potential spills affecting water quality, and the health of wildlife. Communities are concerned about the impacts on critical habitat, and interference with feeding and breeding, in particular with regard to key species such as southern resident killer whales and salmon. Impacts on wildlife can arise from construction activities, dredging, or vessel movements. Recently, we have heard that communities are also concerned about the types of goods shipped through the port, such as petroleum and coal, in regard to their contribution to climate change. For more information on this particular topic, please see page 37.

## 2012 HIGHLIGHTS

- Our Marine Mammal Observation Program, in its fifth year of operation, continued to ensure that our dredging activities in the Fraser River did not impact the at-risk southern resident killer whale population.
- We improved our EcoAction Program, exceeding the newly designated North American Emission Control Area requirements to reduce vessel emissions.
- We participated in and provided funding for Metro Vancouver's air quality station in Delta, which is part of the Lower Fraser Valley Air Quality Monitoring Network. Monitoring data in 2012 showed that air contaminant levels did not surpass regional air quality objectives.

## FOCUS FOR 2013

- Expand shore power installations at Canada Place and explore the feasibility of shore power at container terminals.
- Install a new air quality monitoring station in the Burrard Inlet. The new monitoring station will track key criteria air contaminants such as sulphur oxides and expand regional air quality monitoring capacity.

## YOUR QUESTIONS AND OUR RESPONSES

### What is Port Metro Vancouver doing to improve air quality?

**We are exploring opportunities to reduce emissions and improve port performance through a number of initiatives, including reducing criteria air contaminant emissions, implementing air and energy action initiatives and encouraging environmental stewardship through our Blue Circle award program.**

The movement of goods is an energy-intensive process requiring heavy industrial equipment that is primarily powered by diesel fuel – this fuel consumption impacts regional air quality and contributes to climate change. Though port activities are an important source of emissions, they account for less than 5 per cent of the region's total air emissions.

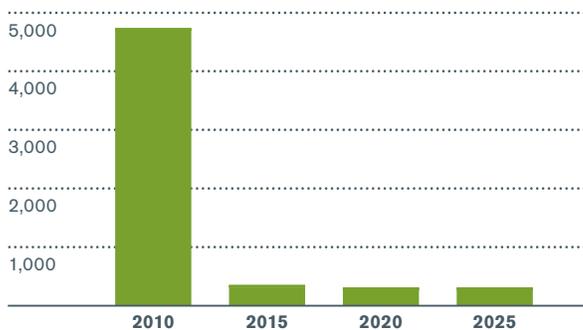
Port-related emissions can be attributed to four primary activities: vessel, truck and rail movement, and cargo

handling equipment used at terminals to load and unload cargo. Within these activities, we measure criteria air contaminants that affect air quality and greenhouse gases that contribute to climate change. Diesel soot (exhaust from diesel engines) is one form of particulate matter that is of particular concern, as exposure has been identified as a serious risk to human health.

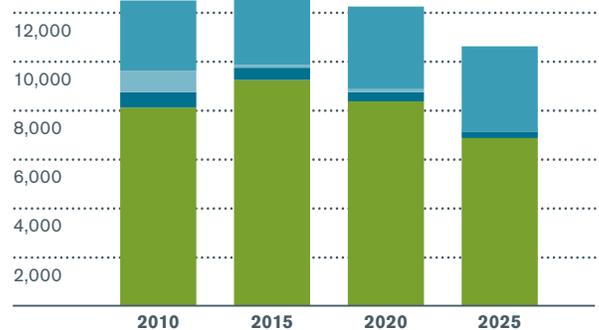
Significant improvements have been made by industry to reduce air contaminant emissions over recent years. For example, since 2005, diesel particulate matter emissions have decreased steadily, despite an increase in port activity throughput. Reducing greenhouse gas emissions remains a challenge because technological improvements in fuel efficiency cannot keep pace with anticipated growth. We believe, alternative energy is required to reduce greenhouse gas emissions in port activities, and we are actively exploring the topic with our customers, stakeholders and governments to advance this opportunity.

### PORT EMISSION FORECASTS WITHIN THE REGIONAL AIRSHED

**Sulphur Oxides (tonnes)**



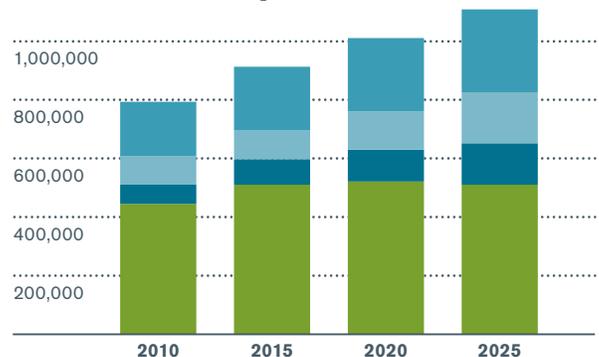
**Nitrogen Oxides (tonnes)**



**Particulate Matter <math>\leq 2.5 \mu\text{m}</math> (tonnes)**



**Greenhouse Gases (tCO<sub>2</sub>e)**



**Legend:** ■ Marine ■ Cargo Handling Equipment ■ Truck ■ Rail

Data is derived from Port Metro Vancouver's 2010 Landside Emissions Inventory and Environment Canada's Marine Emissions Inventory. For more information, please visit [portmetrovancover.com/environment](http://portmetrovancover.com/environment)

The designation of waters off the North American coastline as an Emission Control Area in March 2010 set stringent international emissions standards that apply to all ships travelling within the coastline. The first phase of these standards commenced in the summer of 2012, and the second phase begins in 2015. This regulation will significantly reduce sulphur oxides and associated particulate matter by regulating the sulphur content of fuels used by all vessels calling at Port Metro Vancouver. In 2015, compliance with this regulation is expected to reduce diesel particulate matter from marine vessels by up to 85 per cent.

## AIR AND ENERGY ACTION INITIATIVES

We are exploring opportunities to reduce emissions and improve port performance through energy conservation and the use of clean energy for port operations. By improving our understanding of these opportunities, we are better positioned to support innovation and work with our partners toward building a more sustainable port.

### ECOACTION PROGRAM

Our EcoAction Program provides incentives to cleaner ships by offering discounted harbour dues to vessels that have implemented emission reduction measures and other environmental practices. A variety of fuel quality, technology options and environmental management practices are eligible to receive discounted harbour dues rates. The EcoAction Program promotes emission reduction measures that exceed the current North American Emission Control Area requirements adopted under the International Maritime Organization. In 2012, 469 vessel calls participated in this program.

### BLUE CIRCLE AWARDS

The Blue Circle Award recognizes marine carriers with the highest participation in our EcoAction Program. Recipients in 2012 were:

- APL (Canada)
- Grieg Star Shipping (Canada) Ltd.
- Hapag-Lloyd (Canada) Inc.
- Holland America Line
- "K" Line
- Maersk Line
- Princess Cruises
- Silversea Cruises
- Westwood Shipping Lines

## SHORE POWER FOR CRUISE SHIPS

Our shore power facilities for cruise ships at Canada Place enable cruise ships to shut off their diesel-powered engines and connect to the land-based hydroelectrical grid while docked, reducing air emissions and noise, and delivering significant improvements in local air quality. Since its installation in 2009, this system has reduced greenhouse gas emissions related to cruise ships by 5,400 tonnes.

SHORE POWER CONNECTIONS				
Item	2009	2010	2011	2012
Successful connections	11	44	35	60 ✓
Calls capable of connecting	n/a <sup>1</sup>	58	58	74 ✓
Fuel savings (tonnes)	93	476	424	725 ✓
Net greenhouse gas emission reductions (tCO <sub>2</sub> e)	289	1,521	1,318	2,266 ✓
Criteria air contaminants reduced, including SO <sub>x</sub> , NO <sub>x</sub> and particulate matter (tonnes) <sup>2</sup>	7	54	47	80 ✓

✓ Independently assured by Ernst & Young LLP

<sup>1</sup> Number of vessel calls capable of connecting was not tracked in 2009.  
<sup>2</sup> Emission reductions generated through the use of shore power facilities are influenced by the sulphur content of the fuel used by cruise ships. Calculations for 2012 use the 2011 sulphur content values, which are the most up-to-date values available.

## CARGO HANDLING EQUIPMENT

In 2012, we began planning a program to further reduce particulate matter emissions associated with cargo handling equipment. The program will expand anti-idling policies, encourage newer equipment, and promote innovation and alternative energy. The program is in the planning phase and is intended to become effective in 2014.

## TRUCKING

Our Truck Licensing System includes stringent environmental requirements for all trucks and phasing out older, dirtier trucks. The program targets all trucks on port lands to have particulate matter levels equivalent to a 2007 model year engine or better, by 2017. In 2013, we participated in a collaborative study with Metro Vancouver and other partners to explore the potential for remote sensing technology on heavy duty vehicles. This study provided greater insight into our truck fleet emissions and the technology that may inform future emissions management programs in the region.

## As a regulator and as a proponent, what is Port Metro Vancouver doing to ensure transparency and accountability in environmental reviews?

**We follow a rigorous environmental review process that mirrors federal requirements, and continue to look for areas for improvement.**

Our Environment Policy requires us to conduct reviews of all proposed projects, physical works or activities within the Port's jurisdiction that could have an adverse environmental affect on land, air or water, regardless of the presence of legislated requirements. We take a precautionary approach and uphold a high level of environmental protection within our jurisdiction, to meet and exceed legislative requirements.

The scope and duration of environmental reviews can vary, depending on the specifics of the proposed initiative and the existing environment or community in which it will occur. Typically, we assess fish and fish habitat, aquatic species, migratory birds, health and socio-economic conditions, physical and cultural heritage, and the current use of lands and resources for traditional purposes.

**Environmental conditions are included as part of any project permit. Some examples include:**

- All work must comply with the requirements of the *Fisheries Act*, and all other applicable laws, legislation and best management practices. Note that Section 36(3) of the federal *Fisheries Act* prohibits the discharge of deleterious substances to waters frequented by fish, including indirectly by storm sewer. Due diligence is required at all times to prevent such discharges; adherence to these conditions does not provide relief from ongoing responsibilities in this regard.
- Dust and air emissions associated with project construction and operation shall be managed to avoid health and safety issues on-site, and those and other impacts off-site, as well as to prevent adverse effects on regional and local air quality.
- A noise and nuisance management plan will be developed and implemented. Noise monitoring will be conducted to confirm the effectiveness of noise mitigation and low noise initiatives, as described in the noise and nuisance management plan. A copy of the results of the noise monitoring shall be submitted to Port Metro Vancouver.



“On July 6, 2012, the *Canadian Environmental Assessment Act* was updated to respond to Canada's current economic and environmental context. Our approach remains unchanged as we conduct environmental reviews of all projects or activities within our jurisdiction that have the potential to affect air, land or water. We regularly refer proposed projects to federal, provincial or regional agencies for review and comment. In 2012, we completed more than 200 environmental assessments, with more than 100 completed following the introduction of the updated regulation.”

Darrell Desjardin – Director, Environmental Programs

✓ The number of environmental reviews completed during 2012, including the number completed since the introduction of the 2012 *Canadian Environmental Assessment Act*, have been independently assured by Ernst & Young LLP.

- An appropriate spill prevention, containment and cleanup contingency plan for hydrocarbon products (e.g., fuel, oil, hydraulic fluid, etc.) and other deleterious substances should be put in place prior to work commencing. Appropriate spill containment and cleanup supplies should be kept available on-site whenever the subject works are underway, and personnel working on the project should know the spill cleanup plan and how to deploy the spill response materials.
- Excavation works shall be monitored for the presence of contaminants. Should materials be encountered that are suspected to be contaminated, Port Metro Vancouver must be notified immediately.
- In the event that archaeological resources are encountered, excavations shall cease immediately and the BC Archaeology Branch and an individual with appropriate archaeological qualifications shall be contacted.

## COORDINATED REVIEW

Port Metro Vancouver is a partner in the Burrard Inlet Environmental Action Program and the Fraser River Estuary Management Program (BIEAP-FREMP), a unique inter-governmental partnership program with Environment Canada, Fisheries and Oceans Canada, Metro Vancouver, the Ministry of Environment, and the Ministry of Forests, Lands and Natural Resource Operations established to proactively coordinate environmental management of these areas. As part of our environmental review process, projects that involve physical works within the BIEAP-FREMP jurisdiction have undergone review by multiple regulatory agencies in a coordinated manner.

Due to evolving mandates of partner organizations, the BIEAP-FREMP office closed its doors on March 31, 2013. At the request of the partners, Port Metro Vancouver agreed to take a lead in coordinating project referrals on an interim basis while a new process for review is developed. We remain in support of coordinated review processes and committed to finding a revised partnership model.

## What is Port Metro Vancouver doing to address water quality?

**We're working to address port-related risks to water quality, including discharge from vessels and activities of port tenants.**

### VESSELS

A well-established program of ballast water exchange is regulated through the *Canada Shipping Act*. The Act prohibits ballast water exchanges within our Port's jurisdiction. Prop and hull cleaning is generally prohibited within our jurisdiction; however, vessels can obtain a permit to do so, through Port Metro Vancouver. We apply strict conditions about the methods to be used and the manner in which the procedure must be conducted, to contain contaminants and prevent the introduction of invasive species. Our Harbour Patrol crews are 'our eyes on the water', keeping watch for any signs of discharges or threats to water quality.

### PORT TENANTS

Water discharge from port tenants is managed through two mechanisms: project permitting for construction works or activities, and tenant lease requirements for ongoing operations. Any project on port land must undergo an environmental review, and projects with potentially adverse impacts go through a coordinated review with other agencies such as Fisheries and Oceans Canada. This review ensures that, prior to receiving approval, tenants provide construction plans with acceptable measures to prevent impacts such as sedimentation or equipment-related spills. The review may also require tenants to monitor the environment throughout construction activities. On an ongoing basis, our lease agreements include clauses that require measures such as soil, groundwater and sediment contamination assessments, stormwater management practices and other measures specific to tenant activities to help prevent accidental discharges.

## What is Port Metro Vancouver doing to ensure that construction activities and vessel operations don't impact important fish and wildlife habitats?

**We address potential impacts on fish and wildlife in two ways: first, at a project level, we conduct environmental assessments and identify specific mitigation measures to address them. Second, on an ongoing basis, we monitor key wildlife groups and species including southern resident killer whales, other marine mammals, salmon, other fish (herring, white sturgeon and eulachon) and invasive species such as cordgrass.**

### SOUTHERN RESIDENT KILLER WHALES

The southern resident killer whale population is listed as being at risk. Our Marine Mammal Observation Program ensures that navigational dredging activities in the lower Fraser River, an area identified as critical habitat, do not impact southern resident killer whales. A trained marine mammal observer is present on-board each dredging vessel. If the presence of a killer whale is detected within 1,000 metres of the dredging or disposal site, all operations cease and do not continue until 30 minutes after the whale has left the area. In 2012, monitoring was carried out for more than 1,960 hours , with two killer whale sightings recorded; one outside the 1,000-metre safety zone, and one within this zone after dredging work was complete.

### MARINE MAMMALS

Marine mammals, such as killer whales, need to hear each other to communicate, hunt, and maintain healthy populations. Our increasingly busy marine environment may affect their ability to do this. To better understand and minimize the impacts of vessel traffic and underwater noise on marine mammals, we participated in the Ocean Noise in Canada's Pacific workshop, hosted by the World Wildlife Fund (WWF), in February 2012. We continue to work with the WWF and others to better understand the impacts of ocean noise on marine mammals and to identify ways to mitigate these impacts.

### SALMON

Salmon is an iconic species for British Columbians, an important food source, and a species that plays a vital role in several ecosystems and in First Nations culture. We can protect the salmon by protecting their habitat. We avoid "fisheries sensitive periods", protecting juvenile and adult salmon and other species when we have to do work in the water. Where driving of steel pipe piles is required for construction projects, bubble curtains are used to prevent

impacts on juvenile salmon and other fish species. Streams of air bubbles are pumped around the pile during driving, lessening the underwater shock wave and reducing underwater noise.

We continued to support the Pacific Salmon Foundation, donating \$50,000 in 2012 to support their work to protect, conserve and rebuild wild Pacific salmon populations in British Columbia.

### MANAGING INVASIVE SPECIES: SPARTINA

The Pacific Coast is home to several species of invasive cordgrass, including *Spartina anglica*. These invasive grasses significantly decrease habitat for shorebirds, waterfowl, fish, shellfish and other invertebrates; cause sediment accumulation; and impact coastal-based industries such as shellfish growers, fisheries and tourism.

In 2012, Port Metro Vancouver committed \$25,000 to the BC *Spartina* Working Group toward eradicating invasive *Spartina* species along the B.C. coast.

## What is Port Metro Vancouver doing to clean up and manage contaminated port lands?

**We continue the process of remediating and redeveloping lands to address historical contamination.**

Certain lands managed by Port Metro Vancouver have been contaminated from past activities conducted in a regulatory environment much less stringent than today's. This legacy of past contamination influences how we can use and occupy affected lands today.

Remediation of contaminated lands offers one way to help maximize industrial land available for development while reducing reliance on green space. In 2012, we commenced development of a Brownfield Renewal Strategy, which we will continue in 2014 following our *Land Use Plan* update.

Our leases also hold tenants responsible for ensuring their activities do not adversely impact environmental quality. Tenants are required to conduct an assessment that measures the quality of existing conditions of their site at the beginning and end of their tenure. Should the exit assessment indicate a reduction in environmental quality, the tenant is responsible for conducting remediation works to bring the site back to its previous condition or better.



**To learn more, visit our website at:**  
[portmetrovancover.com/environment](http://portmetrovancover.com/environment)

 Independently assured by Ernst & Young LLP.

# RELIABILITY AND COMPETITIVENESS

Port Metro Vancouver is taking a leadership role with customers, government and industry to promote collaboration across sectors and to create a reliable and competitive gateway.

## WHY IT'S IMPORTANT

Port Metro Vancouver is a full-service port. We compete with other ports to support the international shipping community's needs. Efficiency, capacity and reliability are critical to maintaining competitiveness and delivering value to the customers and stakeholders we serve. We collaborate with government, customers 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 FROM OUR STAKEHOLDERS

Customers and stakeholders have raised concerns regarding reliability of supply chain linkages such as rail, trucking, labour interruptions, terminal productivity and cost of business.

## 2012 HIGHLIGHTS

- Port Metro Vancouver welcomed more than 3,000 vessels and moved 124 million tonnes of cargo.
- We launched our Smart Fleet trucking strategy, including a GPS pilot program, to improve supply chain efficiency.
- We collaborated with terminal operators and supply chain partners to meet the service requirements of customers, such as reducing in-dock times for ships and waiting times for trucks picking up and dropping off cargo, to expedite goods to market.
- We are building land-side projects that boost rail and road efficiency, increasing our container terminal capacity and reducing on-dock dwell times through collaboration with supply chain partners.
- In February 2012, the BC Marine Employers Association and the International Longshore and Warehouse Union Locals 514 and 500 ratified an extension of their collective agreements to March 2018.

## FOCUS FOR 2013

- Launch of vessel on-time incentive program.
- Implement expanded Smart Fleet GPS program.

## YOUR QUESTIONS AND OUR RESPONSES

### How is the economy affecting trade?

Canada's largest and most diverse port showed continued growth in 2012, setting new records in the container and bulk sectors. Port Metro Vancouver handled 124 million tonnes of cargo through the end of December, an increase of

1 per cent over 2011. Total foreign tonnage posted a 1 per cent increase, with 96.8 million tonnes, while domestic tonnage increased by 1 per cent to 27.1 million tonnes. The 2012 throughput volumes reflect growth in Asian economies and continuing strength in the Canadian economy.

#### AUTOMOBILES

Auto volumes ended the year, after a strong rebound, with a total of 384,000 units, an increase of 29%. This marked increase was largely due to the resumption of imports from Japan after the devastating earthquake and tsunami in March 2011, which shut down a large part of the Japanese auto manufacturing industry.

#### BREAKBULK

Breakbulk cargo of 16.7 million tonnes represents an increase of 4%. More than half of the continued growth was supported by 8.4 million tonnes of logs, up 14%, and 1.4 million tonnes of woodpulp, up 3%.

#### BULK

Bulk volumes of 83.8 million tonnes represents a slight decrease of 1% overall. While both liquid and solid bulk were trending up for the year, damaged loading equipment at Canada's largest coal export terminal in early December caused numbers to stall, which affected overall annual performance for this sector.

#### CONTAINER

Container traffic volumes continue to exceed forecasted growth and 2012 container traffic has set a record with 8% growth over 2011 to 2.7 million TEUs.

#### CRUISE

Cruise passenger numbers in 2012 posted an expected slight increase of .5% over 2011. Cruise passenger volumes are anticipated to increase in 2013 to more than 820,000 passengers.



## Reliability is critical to my business. What is being done to ensure that my goods move through Port Metro Vancouver problem-free?

**We're making capacity, reliability and efficiency enhancements throughout the Gateway. Our performance is continually improving, thanks to a number of new collaboration initiatives.**

Our customers demand reliability. By advancing a comprehensive suite of initiatives and executing critical infrastructure projects, we strive to deliver capacity, reliability and improved efficiency with less impact on communities.



**In 2012, Port Metro Vancouver's cruise terminal at Canada Place won the Cruise Insight's "Best Turnaround Port Operations" (home port) and "Most Efficient Terminal Operation" award.**

## UNDERSTANDING OUR CUSTOMERS' NEEDS

In 2012, we continued our efforts to better understand our customer needs by conducting an in-depth review of the services we provide. We met with 29 customer organizations to discuss our business relationship, the value and benefits of our services, and the ease of doing business with us. These interviews replaced the annual reputation monitor conducted in previous years, allowing us to explore issues and opportunities in a more comprehensive way. Based on this input, we are revising our approach to customer service by focusing on strategic alignment of services with customer needs. We will continue to develop our customer segmentation approach in 2013 in order to improve satisfaction and streamline internal resources.

## CAPACITY

Capacity constraints arise when port facilities are unable to handle increased cargo volumes, resulting in delays for the businesses and customers who rely on those cargoes or products. Our initiatives in 2012 were aimed at maximizing capacity and efficiency of current operations, for example the South Shore Corridor Project, the Low Level Road Project on the North Shore, and the Deltaport Terminal, Road and Rail Improvement Project. With 3.7 million TEUs of current capacity, an additional 600,000 TEUs expected in 2015, and the proposed Roberts Bank Terminal 2 Project planning underway, we remain focused on meeting customer needs.

## RELIABILITY

Reliability of port operations is necessary to provide shipping companies and businesses with the consistency they need. For example, a container delayed due to technical issues in Vancouver can have a big impact on a business in Montreal or Halifax that relies on those goods to serve their customers. That is why we remain focused on promoting and supporting reliability throughout the Gateway. The current labour agreements within the Gateway help to provide a high degree of overall reliability in port operations. Inclement weather conditions can also affect reliability; for example, our region's reputation for rain complicates the loading of grain. In 2012, we introduced feeder hole grain pouring as a practical, safe and effective solution to ensure that cargo is loaded in dry, quality-controlled conditions. The new long-term labour agreement also adds to overall reliability.

## EFFICIENCY

Competitiveness and scarcity of available industrial land in the region coupled with an increasing demand for trade are factors requiring the continuous improvement of efficiency in port operations. Efficiency enables the port to do more with less and to get cargoes to their destination sooner. Our collaboration agreements with Canada's major railways, Canadian National Railway and Canadian Pacific Railway, are boosting efficiency and have helped us to reduce on-dock dwell time by two days since 2009. In 2013, we will introduce a Container Vessel On-Time Incentive Program to encourage container vessel operators to arrive on schedule and thereby contribute to overall supply chain consistency. Given that a large proportion of container traffic moves to and from the terminals by truck, improvements to reliability and efficiency in this sector are vital. Two important truck efficiency projects initiated in 2012 are discussed separately on the following page.

## CONTAINER TRUCK EFFICIENCY PILOT PROGRAM

The Container Truck Efficiency Pilot Program consists of several initiatives, including a review of container truck traffic flows at port access points, a new labelling program and a terminal gate compliance initiative.

More than 300 trucks have been outfitted with global positioning system (GPS) units, representing about 16 per cent of the fleet. The GPS initiative will enable us to track truck movement through the Gateway, improve our understanding of traffic flows, and help us plan toward an optimized transportation network and improved speed of service. The GPS data collected has improved our understanding of container drayage truck movements and has enabled supply chain partners to better plan their operations – reducing unnecessary truck movements through the Gateway and minimizing our impact on the port communities where we operate. Based on this success, Port Metro Vancouver is working with Transport Canada to add an additional 700 units in 2013. We aim to have all trucks that service the Port equipped with the latest technology in the near future, which will directly benefit communities through reduced congestion and help improve efficiency of the trucking sector.

## SMART FLEET

In 2012, we completed the Smart Fleet Trucking Strategy, our three-year action plan to drive performance, accountability and sustainability within the trucking sector. This comprehensive program seeks to better coordinate hours of work, establish target turn times, and improve consistency in terminal gate operations. The strategy outlines the following priorities:

- Identify impediments and commercially viable solutions for supply chain efficiency.
- Providing a forum for terminal operators and industry leaders to work openly to address challenges in the container trucking sector.
- Conduct a review of the Truck Licensing System to ensure safe and high quality trucks on our roads.
- Expand the GPS initiative, monitor performance, and identify opportunities for efficiency improvements or reduction in traffic congestion. This will improve efficiency and productivity, reduce congestion, and build on and enhance the successful pilot program.



To learn more about our trucking strategy, visit our website at: [portmetrovancover.com/trucking](http://portmetrovancover.com/trucking)



“Container traffic continues to grow, and given that a large proportion moves to and from terminals by trucks, improvements to efficiency are vital. Our Smart Fleet Trucking Strategy, just one example of what we are doing to address reliability within the Gateway, is the result of a year-long collaboration with the trucking sector. We are seeing better outcomes for customers, container terminals and port service providers as a result.”

Peter Xotta – Vice President, Planning & Operations

# COMMUNITY

We take responsibility for understanding the interests of our neighbouring communities and managing the port in a way that responds to these interests.

## WHY IT'S IMPORTANT

Port-related operations run 24 hours per day and include terminal, road, rail and marine activities. While these operations provide economic benefits, including jobs, locally and across the country, they also affect residents living near these operations. Under the *Canada Marine Act*, we are responsible for balancing Canadian demand for trade with the interests of the 16 municipalities, one treaty First Nation and the traditional territories of several First Nations in which we operate. Additionally, our port operates in a densely populated urban area, which creates tension between residential and industrial activities.

Managing community impacts is an important part of our business and integral to the Gateway's social licence to operate. Over the next 30 years, Metro Vancouver's population is expected to grow by over one million people, placing additional pressures on land use, infrastructure and transportation corridors.

## WHAT WE'VE HEARD FROM OUR STAKEHOLDERS

Local residents are concerned that, as the port gets busier, impacts on the community will intensify. We have heard concerns from residents living near the port about noise, dust, light and air emissions, traffic congestion and general quality of life. We have also received letters from citizens concerned about exports of coal and liquid bulk cargoes that contribute to global climate change or pose risks to natural environments. First Nations have expressed concerns about participation funding, archaeological considerations and culturally significant areas, impacts on fisheries and wildlife habitat, and vessel traffic. Communities across Canada want to ensure that we are working to facilitate trade and supporting their livelihoods and the industries and businesses they work in.

## 2012 HIGHLIGHTS

- Consultation with local residents about the impacts of port operations and infrastructure development projects.
- Port Metro Vancouver staff led, attended or participated in more than 600 community events, public meetings, open houses and information sessions.

## FOCUS FOR 2013

- Install acoustic monitors on the North and South Shore of Burrard Inlet and in Delta near Deltaport to gain a better understanding of noise issues, and apply mitigation where possible.

## YOUR QUESTIONS AND OUR RESPONSES

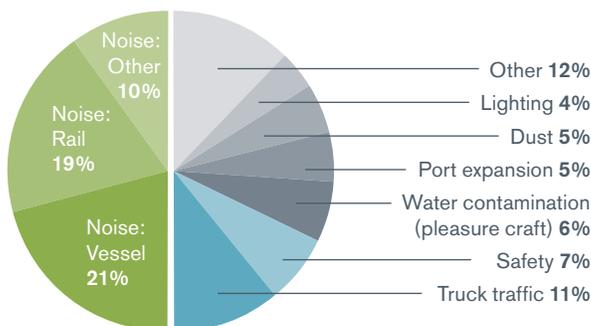
How is Port Metro Vancouver reducing the negative impacts of port operations in communities that border port lands?

**We see an increase in trade as a benefit for the country as a whole, supporting industry and businesses, and creating jobs for Canadians. We also recognize that it can be hard for a person living next to the port, dealing with construction, noise, trains and traffic congestion; we are working to reduce the impacts of these port activities.**

We value open, collaborative communication in addressing community concerns. We try to provide opportunities for communities to participate in port-related development processes and to express their concerns and suggestions on an ongoing basis. We have three established community liaison groups: the North Shore Waterfront Liaison Committee, the East Vancouver Port Lands Liaison Group and the Port Community Liaison Committee in Delta. These groups bring together residents, municipal representatives, First Nations, industry and Port Metro Vancouver to identify concerns and recommend potential solutions related to port operations. Port noise and truck traffic tend to be primary concerns for these groups, and we remain committed to working with port stakeholders to alleviate these issues.

### COMMUNITY COMPLAINT LINE

We strive to be good neighbours. That's why we like members of our communities to let us know if they have complaints. We received 239 complaints about port operations in 2012, half of which related to noise. To let us know of a concern or complaint, call 604.665.9004 to speak with a member of our operations staff, or email [community.complaints@portmetrovancover.com](mailto:community.complaints@portmetrovancover.com).



This data represents general complaints relating to port operations. Concerns that relate to specific projects are discussed within the port growth and land use section of the report on pages 14–19. Concerns relating to the potential expansion of coal and other commodities are discussed on page 37.



“We understand from our communities that port noise is a concern. We try to be a good neighbour, and are continually working with port stakeholders to limit noise impacts. We are expanding our noise monitoring program to gain a better understanding of the issues and mitigate where possible. We also have a community complaint line that neighbours can phone to tell us of their concern directly.”

Carrie Brown – Manager, Environmental Programs

## What is Port Metro Vancouver doing to address noise from port operations?

**We know that noise is a big concern. Many of the infrastructure projects we have underway will help address noise, and we are working to expand our noise monitoring program to enable us to better respond to these concerns.**

The Port contains a variety of activities that must operate on a 24-hour basis to serve Canada's trading interests. The close proximity of urban areas and the nature of port industrial activity can produce undesirable tensions with regard to noise incidents. Communities across the port have expressed concerns with regard to port noise. We have been able to respond to some of these issues, for example the Vanterm audible safety warnings that were resolved in 2011. We remain committed to resolving

others wherever possible. In support of this effort, we are expanding our noise monitoring program to enable us to monitor noise in real time. This, in combination with our Community Complaint Line, will allow us to be better at identifying noise sources and developing effective responses.

## How does Port Metro Vancouver engage with First Nations?

**There are many areas of common interest between the Port and First Nations, ranging from environmental stewardship to economic development.**

The lands and waters managed by Port Metro Vancouver intersect with the traditional territories of several First Nations and one treaty First Nation. We continue to develop opportunities to engage with First Nations so that we can better hear and understand the interests and concerns



### RAIL

Rail noise is a key community issue, especially on the North Shore. The North Shore Rail Steering Committee, bringing together North Shore municipalities, Canadian National Railway, Port Metro Vancouver, Squamish Nation and Transport Canada, works to mitigate rail noise impacts while protecting the operational efficiency of the trade area. The committee identified seven priority rail crossings, including Chesterfield, Forbes and Mosquito Creek, to be upgraded, with an anticipated completion date of January 2014. Construction of the Low Level Road Project will remove three at-grade rail crossings – St. Andrews, St. Patricks and Neptune-Cargill – and will include noise walls along much of the new road, to further minimize rail noise on the North Shore.



### VESSEL

Residents in Delta have told us that generator noise from a number of ships visiting Roberts Bank is a concern. When we receive a complaint of this nature, port operations staff contacts the ship's agent to let them know of the complaint and request mitigation, if possible. Complaints related to Roberts Bank operations are tracked and discussed at Port Community Liaison Committee meetings.



### TRUCK

Vancouver residents living close to South Shore terminals have raised concerns about increasing numbers of container trucks moving to and from the Port. Port Metro Vancouver's Smart Fleet Trucking Strategy, our three-year plan to achieve excellence in the container trucking sector, aims to reduce congestion in communities. Continued collaboration between Port Metro Vancouver, the City of Vancouver and the trucking community is critical to finding solutions to mitigate the community impacts of truck traffic on city streets.

they may have with respect to port-related operations and developments. Initiatives include working to enhance our understanding of First Nations' historical and current land use, fostering transparency, building trust and exploring port-related business and employment opportunities.

In 2012, we conducted a complete review of our approach to First Nation consultation and aligned that approach with the *Government of Canada's Aboriginal Consultation and Accommodation: Updated Guidelines for Federal Officials to Fulfill the Duty to Consult*. We created internal guidelines and review processes in keeping with our Project Review Policy and identified resources required to deliver the procedural aspects of First Nation consultation. We developed guidelines around the provision of participation funding to facilitate the participation of First Nations in Port Metro Vancouver-led consultation initiatives.

During the subsequent review and implementation, we encountered several challenges: some of our staff members are unfamiliar with the full details of First Nations' rights; project review timelines can prove challenging for First Nations; and implementing and properly tracking First Nation consultation is important but requires a great deal of administration. We're working to address these, with improved dialogue and staff training.



**To learn more about how we engage with First Nations, visit:** [portmetrovancover.com/community](http://portmetrovancover.com/community)

I'm concerned about the movement of goods like coal and oil through my neighbourhood, and the long-term environmental and health risks. Shouldn't local residents have a say in what gets transported through our communities?

**We're committed to working with local communities as we develop new projects or make significant changes to existing operations.**

Port Metro Vancouver consults with communities on projects and initiatives that represent a significant change in how we currently operate. We recognize that some citizens or groups have concerns about the types of commodities traded through the port. While we are actively working towards sustainable development at the port, the debate about which commodities Canada trades should take place between citizens, industry and federal government, as this falls outside the scope of Port Metro Vancouver's mandate and

jurisdiction. Our job is to ensure that the cargo that travels through the port is handled in the safest, most efficient and sustainable way possible, no matter what it may be.

In 2012, we received 680 complaints regarding the movement of coal through Port Metro Vancouver and coal-related expansion projects. Of these, about half were from residents living in communities bordering the port. The remaining complaints were from outside the Lower Mainland.



**In response to these concerns, we issued open letters to clarify certain points and provide more information for consideration. Read the letters at:** [portmetrovancover.com/community](http://portmetrovancover.com/community)

## MUNICIPAL ENGAGEMENT

Through our municipal outreach program, members of our executive leadership team work to engage with 16 municipal governments, one regional government (Metro Vancouver), and one treaty First Nation (Tsawwassen First Nation). We endeavour to be in regular contact with municipal staff, Mayors and Councillors throughout the year. We have paired members of our executive with each municipality to facilitate open communication, share ideas, resolve issues and build long-term relationships.

In 2012, we commissioned an independent review of our Municipal Outreach Program. The purpose of the review was to understand the scope and effectiveness of our current program; identify strengths, weaknesses and opportunities related to municipal outreach; and to identify best practices in this area. The review revealed that the current program, while consistent with best practice, was not resonating at the level it should with port communities. Although municipalities appreciate the value of the Port and its positive contribution to the economy, they do not see Port Metro Vancouver as a strong partner that supports them and contributes to their success. A key recommendation was that ongoing municipal outreach should focus on relationships and a partnership model, recognizing that it is value-based, rather than an equal partnership. While the review also identified that engagement is a key aspect of long-term strategy and that results were beginning to be achieved, adjustments to the municipal engagement strategy began in 2013 and will form part of the long-term approach to municipal engagement.



Princess



CANADA

Zaandam

Zaandam

# OUR CORPORATE **PERFORMANCE**

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As Canada's largest port, we provide leadership on the sustainable development of port operations.

# ROLE AND GOVERNANCE

Port Metro Vancouver is responsible for a jurisdiction bordering 16 Lower Mainland municipalities and one treaty First Nation, and intersecting the traditional territories of several other First Nations.

## CANADA MARINE ACT

Port Authorities carry a federal mandate as outlined in the *Canada Marine Act*, which was introduced in 1999. The Act ensures that we operate in a manner that supports national, regional and local social and economic objectives while promoting and safeguarding Canada's competitiveness and trade objectives. This includes promoting the success and competitiveness of our port, ensuring marine transportation services are organized to satisfy the needs of users at a reasonable cost, ensuring safety and environmental protection, and taking into account input from users and the community in the areas where we operate.

## VANCOUVER FRASER PORT AUTHORITY

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*, and accountable to the elected federal Minister of Transport, Infrastructure and Communities.

We are governed by a diverse, independent board of directors representing government and industry, able to make independent and timely decisions on business plans and capital spending. The Board is clearly focused on the operational needs of port users and is guided by a vision for long-term growth and competitiveness.

The Board of Directors for Port Metro Vancouver is composed of 11 members: one federal appointee; seven federal appointees recommended by port users; one local municipal appointee; one B.C. provincial appointee; and, in recognition of Port Metro Vancouver's reach beyond the region, one appointee for the Prairie provinces of Alberta, Saskatchewan and Manitoba. Board candidates are appointed based on their acknowledged and accepted stature within the transportation industry or the business community.

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

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



**For more information about our role and governance, please see our website at:**  
[portmetrovancover.com/corporate](http://portmetrovancover.com/corporate)

## PRESIDENT AND CHIEF EXECUTIVE OFFICER

**Chief  
Financial  
Officer**

**Vice  
President**  
Corporate Social  
Responsibility

**Vice  
President**  
Human Resources  
and Organizational  
Excellence

**Vice  
President**  
Infrastructure  
Delivery

**Vice  
President**  
Planning &  
Operations

**Vice  
President**  
Real Estate

# PEOPLE

The successes and strengths of our organization are a direct result of our talented people. Our commitment to continuous learning, diversity and balance is reflected in our corporate values.

## OUR PEOPLE

We aim to provide our employees with a challenging and enjoyable work environment, competitive salaries and a comprehensive benefits package. Benefits include an earned time-off program, access to an on-site fitness facility, and programs for employee and family assistance. We consider the safety and well-being of employees a top priority. Our Safety Policy defines our commitment to conducting operations in a manner that minimizes the risk of injury or disease to employees, the public, customers and contractors. A joint management and employee Health and Safety Committee oversees our health and safety programs.

## LABOUR RELATIONS

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

## EMPLOYEE ENGAGEMENT

We engage our employees in ongoing dialogue through surveys and focus groups. We work to identify our strengths and areas for improvement. Employee learning and development, our physical work environment, co-workers

and sustainability were all identified as strengths in our most recent employee survey conducted in June 2012. Systems and processes, managing performance and career opportunities were all identified as areas for improvement. We are currently working on several initiatives to leverage our strengths and make improvements.

## EDUCATION AND TRAINING

We encourage our employees to undertake continuous education, training and development. We have a program in place that requires all employees to prepare an annual development plan. Completion of training identified in development plans is a component of our Corporate Balanced Scorecard and a factor in the annual Corporate Performance Award for employees. In 2012, we invested more than half a million dollars in the training and development of our employees. We are developing a process to align training with identified development planning strategies such as developing our leaders for future roles.

In 2012, we conducted organization-wide training on goal setting with all employees; 96 per cent of employees completed this training.

We provide a broad orientation program for new employees, including an overview of the Port, a harbour tour, security training and an introduction to our Corporate Social Responsibility programs. New employees are required to acknowledge our Code of Ethical Conduct Policy and complete online harassment awareness training.

PORT METRO VANCOUVER'S WORKFORCE 							
	Employment Contract		Employment Type		Employees Joining	Employees Leaving	Employee Turnover Rate <sup>2</sup>
	Permanent	Fixed Term	Full Time	Part Time			
Total	248	43	279	12	83 <sup>1</sup>	18	5%
Male	127	20	146	1	53	9	6%
Female	121	23	133	11	30	9	4%
Under 30	18	13	31	0	19	2	6%
30-49	153	30	172	11	49	9	4%
50+	77	0	76	1	15	7	8%

At the end of 2012, there were 289 employees based in Vancouver, plus two representatives working out of our 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 staff who were called on as needed throughout the year.

<sup>1</sup> On December 1, 2012, Port Metro Vancouver entered into a management agreement to provide services to Canada Place Corporation, a subsidiary of Port Metro Vancouver. As a result, 40 Canada Place employees joined Port Metro Vancouver on this date.

<sup>2</sup> Calculation of turnover rate applies to permanent employees only. In 2012, 13 permanent employees left Port Metro Vancouver.

 Independently assured by Ernst & Young LLP.

# ENVIRONMENTAL FOOTPRINT

We lead by example, improving our environmental practices to reduce our corporate environmental footprint.

## ENERGY USE AND AIR EMISSIONS

Our primary energy sources are electricity and natural gas at our offices, and fuel used by our five harbour patrol vessels and 21 fleet vehicles. In 2012, we exceeded our energy reduction target, reducing electricity consumption at our facilities by 6 per cent (66 MWh). Since our 2009 baseline year, we have reduced electricity consumption at our facilities by 16 per cent (211 MWh). Our corporate greenhouse gas emissions increased by 9 per cent, due to several factors, including the opening of a new 16,000 sq. ft. office at our Canada Place location and an increase in employees and associated emissions from employee commuting. We are implementing further energy conservation measures identified through energy audits to improve efficiency and reduce greenhouse gas emissions.

## SUSTAINABLE TRANSPORTATION

We encourage our employees to commute sustainably and provide services to support this, including secure bike storage, shower facilities and participation in the TransLink Employer Pass Program. Port Metro Vancouver was recognized as one of the leading participants in the 2012 BEST Commuter Challenge, and 49 per cent of employees participated in our annual Commuter Challenge in September 2012.

During 2012, our employees travelled a total of 81,785 kilometres in our fuel-efficient hybrid fleet vehicles, saving 3,028 litres of fuel and 7.1 tCO<sub>2</sub>e of greenhouse gas emissions when compared with travelling the same distance in equivalent standard vehicles.

MEASURE	2012 TARGET	PROGRESS	2012 PERFORMANCE	2013 TARGETS
Electricity consumption	2% reduction on 2011 levels	✓	6% reduction	2% reduction on 2012 levels
Waste	2% reduction in solid waste per employee on 2011 levels	✓	35% reduction since 2010 <sup>1,2</sup>	2% reduction in solid waste per employee 65% waste diversion rate
Employee commuting	73.5% of employees commuting sustainably	✗	67.5% of employees commuting sustainably	1% increase on 2012 levels 60% Commuter Challenge participation 80% participation in Commuter Survey



**Our environmental footprint performance is measured through our Corporate Scorecard, which contributes towards the annual Corporate Performance Award for employees.**



**In April 2012, Port Metro Vancouver was named one of Aon Hewitt's Green 30. This award recognizes the top 30 Canadian organizations whose employees are the most positive about their record on environmental stewardship and their efforts to consider long-term social, environmental and economic impacts when making decisions.**

<sup>1</sup> Our waste service provider weighs our waste as it is collected and provides this information to us on a monthly basis. Since they were unable to provide accurate data for the 2011 calendar year, we have worked closely with them to put processes in place to ensure that we received comprehensive waste data for the 2012 calendar year. In light of this, we have reported our waste performance against a 2010 baseline.

<sup>2</sup> Forty employees joined Port Metro Vancouver from Canada Place Corporation on December 1, 2012. These employees are not included in the calculation of waste per employee.



**Our operations were carbon neutral for a third consecutive year through purchasing BC-based carbon offsets from the Pacific Carbon Trust.**

## WASTE MANAGEMENT

Our comprehensive SortSmart waste management program includes organic waste composting and recycling of paper, glass, metals, plastics and cardboard. In February 2012, we implemented new colour-coded bins, and improved signage and recycling facilities for film and foil plastics, to further reduce waste to local landfills. Since 2010, the amount of organic waste composted at our facilities has nearly tripled and the landfill waste per employee has reduced by 35 per cent. In 2013, we will start to measure our waste diversion rate, with a corporate scorecard target of 65 per cent diversion.

## MATERIAL STEWARDSHIP

In 2012, we completed the development of sustainable procurement guidelines for our administrative operations, which will be rolled out across the organization in 2013. These guidelines are designed to assist employees in integrating sustainability factors into product selection, enabling economic, environmental and social impacts to be considered. As part of this process, we changed our corporate stationery supplier to work with a local business that shares our sustainability commitment and values. They are the first carbon-neutral stationery supplier in Vancouver, using electric vehicles for all their deliveries.

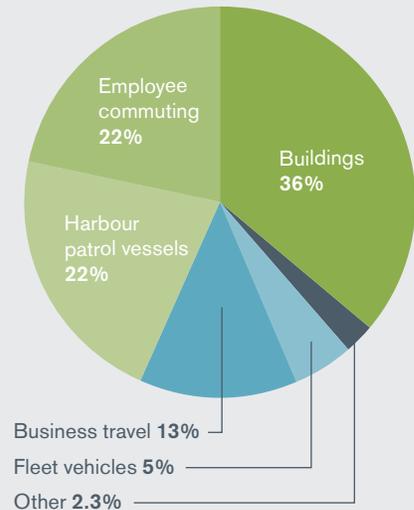
1 Our greenhouse gas emissions data was calculated in accordance with ISO 14064 – Part 1, using the control approach for establishing operational boundaries. Annual activity has been captured through the use of direct invoice data, internal data tracking and employee postal code information for commuting. Emission factors were referenced from the 2012 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions, Ministry of Environment, September 2012, and Environment Canada’s National Inventory Report, GHG Sources and Sinks, UN Framework Convention, Parts 1, 2, and 3, 1990–2008.

2 Our greenhouse gas emissions data includes a biogenic emission component (BioCO<sub>2</sub>), as defined in the 2012 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.

3 Scope 2 emissions associated with purchased electricity have been restated for 2010 and 2011 due to a correction in the number of recoverable accounts. A recoverable account is a utility bill that we receive but is transferred directly on to the responsible tenant.

4 Forty employees joined Port Metro Vancouver from Canada Place Corporation on December 1, 2012. These employees are not included in the calculation of Scope 3 emissions associated with employee commuting.

## GREENHOUSE GAS EMISSIONS BY SOURCE (tCO<sub>2</sub>e)



## GREENHOUSE GAS EMISSIONS<sup>1,2</sup> (tCO<sub>2</sub>e)



### Legend:

- **Scope 1** Emissions from direct fuel consumption by harbour patrol vessels and fleet vehicles and for building heating
- **Scope 2** Emissions from electricity and natural gas consumption at our facilities and for infrastructure on port lands, such as street lighting<sup>3</sup>
- **Scope 3** Emissions from business travel, employee commuting<sup>4</sup>, paper consumption and waste disposal

# FINANCIAL RESULTS

We continue to create value and jobs through a period of slow global growth by diversifying our revenues and investing in infrastructure.

Port Metro Vancouver is committed to financial self-sufficiency to enable the long-term sustainability of the Gateway. We reinvest profits to continuously improve port facilities, maintain and improve infrastructure and services for users, benefit communities and enhance our environmental programs.

more information on our approach to risk management. In 2012, all of Port Metro Vancouver's six divisions and 18 business units were assessed for corruption-related risks as part of our Enterprise Risk Management initiative.

## OVERVIEW OF RESULTS

Port Metro Vancouver continues to be a financially sound entity with a strong credit profile and cash position. We demonstrated financial strength in 2012 through an increase in our economic value generated. Our strength and stability continues to come from our diversity. We are the most diversified port in North America in terms of cargo sectors, trading partners and import-export balance. The year saw continued growth of cargo volumes passing through Port Metro Vancouver, posting new records in container and bulk sectors. Increased volumes through the Port translated into increased harbour dues, wharfage, berthage and variable rent revenues for 2012. Fixed rent accounts for approximately half of our total revenues, meaning that half of our revenues are protected against fluctuations in commodity volumes.

The accompanying table summarizes Port Metro Vancouver's direct economic value generated, distributed and retained for 2012 and 2011, and includes the results of our subsidiaries. This information should be read in conjunction with our 2012 Financial Report.

## RISK MANAGEMENT

We assess risks and internal controls throughout the year to identify, evaluate and manage risks posed to the achievement of our objectives. Our Enterprise Risk Management Committee leads this assessment. Our Board of Directors retains overall responsibility for risk management and for determining the appropriate level of risk in the conduct of Port Metro Vancouver's business activities. Examples of top risks include interruptions to port operations, environmental impacts and community relations. Please see our Financial Report for



**In 2010, we became the first port authority in Canada to issue a rated, private placement bond, supported by a Standard & Poor's (S&P) AA credit rating. This credit rating has been reaffirmed by S&P in 2011 and 2012, which further supports our strong and consistent financial position.**

<b>DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED<sup>1</sup></b>		
In thousands of dollars reported under International Financial Reporting Standards (IFRS)		
	<b>2011</b>	<b>2012</b>
<b>Direct economic value generated</b>		
Revenues	183,009	209,437
<b>TOTAL VALUE GENERATED</b>	<b>183,009</b>	<b>209,437</b>
<b>Economic value distributed</b>		
Operating costs	62,727	63,068
Employee wages and benefits	29,554	29,724
Payments to providers of capital	5,163	5,155
Payments to government – Stipend <sup>2</sup>	5,665	5,772
Payments to government – Payments in lieu of taxes <sup>3</sup>	6,449	5,994
Community investments	1,466	3,690
<b>TOTAL VALUE DISTRIBUTED</b>	<b>111,024</b>	<b>113,403</b>
<b>ECONOMIC VALUE RETAINED</b>	<b>71,985</b>	<b>96,034</b>



**Please see our 2012 Financial Report for a full financial review, including highlights from 2012, detailed statements, and our management discussion and analysis at: [portmetrovancover.com/accountability](http://portmetrovancover.com/accountability)**

<sup>1</sup> The summary of direct economic value generated and distributed has been prepared in accordance with Global Reporting Initiative standards. Numbers in the above table do not tie directly to Port Metro Vancouver's audited consolidated financial statements. Operating revenue above includes gain on disposal of structures and equipment, investment income and gain from investment in joint ventures. Operating and other expenditures above have also been grouped differently. Ending 2012 net income of \$96,034 (2011 – \$71,985) is consistent in both sets of statements.  
<sup>2</sup> Under the *Canada Marine Act*, Port Metro Vancouver is obligated to pay an annual stipend to the Minister of Transport, Infrastructure and Communities to maintain its Letters Patent in good standing.  
<sup>3</sup> Under the *Payments in Lieu of Taxes Act (PILT)*, Port Metro Vancouver is obligated to make payments in lieu of municipal taxes on its unleased properties.

# COMMUNITY INVESTMENT

We dedicate up to 1 per cent of our net income to community investment based on three key pillars: education, community enrichment and environmental stewardship.

In 2012, recipients included:

- Bright New Day Reconciliation Circles at the Musqueam First Nation
- Hastings Sunrise Community Policing Centre Outreach Program for Seniors
- Heart of the City Festival at the Carnegie Centre in Vancouver
- Hyde Creek Salmon Festival in Port Coquitlam
- Lonsdale Business Association Christmas Festival on the North Shore
- Orphaned Wildlife Rehabilitation Society in Delta
- Party for the Planet in Surrey
- Ray-Cam Sponsor-a-Family Christmas Hampers
- Rotary Club's Goal of Zero Waste at the Canada Day Parade on the North Shore
- Tsawwassen Sun Festival

Additionally, members of the port industry worked together to raise \$170,000 at the 13th Annual Port Fundraising Gala. Beneficiaries included Mission Possible (facility rehabilitation), Harvest Project (relocation to a purpose-built facility) and Arts Umbrella (establishment of a furniture bank program). The Port Gala has raised \$956,000 over the past 12 years for local charities that contribute to a higher quality of life in their communities.

## EDUCATION

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 have supported 105 students in five communities through the Leadership Program in Metro Vancouver since the start of the program in 2004.

## EVENTS

Being a good neighbour also means getting out in the community. In 2012, our Community Relations Team, along with our mascot Salty, participated in 48 events within the Metro Vancouver area, including Party at the Pier in North Vancouver, Riverfest in New Westminster, Fusion Festival in Surrey, the Richmond Maritime Festival and the Vancouver International Children's Festival.



**To learn more about our approach to community investment, visit our website at:**  
[portmetrovancover.com/community](http://portmetrovancover.com/community)

# PERFORMANCE OVERVIEW

CATEGORY	MEASURE	UNITS	2010 VALUE	2011 VALUE	2012 VALUE
<b>OUR PEOPLE</b>					
Employees	Total employees	#	206	226	291 ✓
	Employees joining	#		46	83 ✓
	Employees leaving	#		26	18 ✓
	Employee turnover rate	%	8	9	5 ✓
Training and development	Investment in training and development	\$	261,650	365,323	515,525 <sup>1</sup> ✓
	Average training per employee	\$	1,270	1,631	2,070 <sup>2</sup> ✓
	Employees completing harassment awareness training this year	#		42	26 <sup>3</sup> ✓
<b>OUR ENVIRONMENTAL FOOTPRINT</b>					
Direct energy use	Diesel	GJ	3,620	3,295	3,678
	Natural gas	GJ	1,224	2,549	2,037
	Gasoline	GJ	786	804	799
	Propane	GJ	89	150	106
	<i>Total</i>	GJ	5,719	6,798	6,620 ✓
Indirect energy use	Natural gas	GJ	3,127	3,581	5,426
	Electricity	GJ	15,116	17,612	11,819
	<i>Total</i>	GJ	18,243	21,193	17,245 ✓
Reductions in energy use	Reduction in electricity use at Port Metro Vancouver facilities	%	9	2	6 ✓
		MWh	117	28	66 ✓
	Fuel saved through use of hybrid vehicles <sup>4</sup>	litres	1,925	1,780	3,028 ✓
Greenhouse gas emissions	Scope 1	tCO <sub>2</sub> e	402	446	449 ✓
	Scope 2	tCO <sub>2</sub> e	254	293	362 ✓
	Scope 3	tCO <sub>2</sub> e	424	425	458 ✓
	<i>Total</i>	tCO <sub>2</sub> e	1,080	1,164	1,269 ✓
Reductions in greenhouse gas emissions	Reductions through electricity conservation at Port Metro Vancouver facilities	tCO <sub>2</sub> e	2.9	0.7	1.7 ✓
	Reductions through use of hybrid fleet vehicles	tCO <sub>2</sub> e	4.6	4.3	7.1 ✓
	Greenhouse gas emissions offset	%	100	100	100 ✓
Common air contaminants	Nitrogen oxides	kg	3,840	3,876	4,261 ✓
	Sulphur oxides	kg	44	47	55 ✓
	Particulate Matter ≤2.5µm	kg	380	366	398 ✓
Sustainable commuting	Employees participating in Commuter Challenge	%	43	49	49 ✓
Waste	Composted	kg	2,970	Not Available	8,090 ✓
	Landfill	kg	7,600	Not Available	5,950 ✓
Environmental compliance	Fines	\$	0	0	0 ✓
	Non-monetary sanctions	#	0	0	0 ✓

CATEGORY	MEASURE	UNITS	2010 VALUE	2011 VALUE	2012 VALUE
<b>OUR FINANCIAL RESULTS</b>					
Financial results	Total value generated (thousands)	\$	179,338	183,009	209,437 ✓
	Total value distributed (thousands)	\$	105,045	111,024	113,403 ✓
	Economic value retained (thousands)	\$	74,293	71,985	96,034 ✓
Capital funding	Capital project funding received (thousands) <sup>5</sup>	\$	1,782	19,455	12,045 ✓
Corruption risks	Business units analyzed for corruption risks	%	100	100	100 ✓
<b>COMMUNITY INVESTMENT</b>					
Community investment	Community investment	\$	311,000	462,000	420,000
	Community events attended	#	60	40	48

1 Conferences, travel and other indirect training costs have been included in the calculation of total investment in training and development in 2012.

This information was not included in the 2010 and 2011 values, as it was not available at that time.

2 Forty employees joined Port Metro Vancouver from Canada Place Corporation on December 1, 2012. The training undertaken by these employees is not included in the total investment in training for 2012, and these employees have not been included when calculating the average training per employee.

3 New employees are required to complete harassment awareness training. In 2012, 26 employees completed the training, which takes approximately 30 minutes. This represents 9 per cent of all employees. New employees who joined towards the end of 2012, including 40 employees from Canada Place Corporation, will complete this training in 2013.

4 Fuel saved through use of hybrid vehicles when compared to equivalent standard vehicles.

5 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.

✓ Independently assured by Ernst & Young LLP.



# REPORT **DETAILS**

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We apply best practices to prepare a report that offers a fair and reasonable assessment of our sustainability performance.

# ABOUT THIS REPORT

This report serves as an assessment of our sustainability performance. We offer it as a basis for continued dialogue and collaboration with our stakeholders.

## SCOPE OF REPORT

Our annual Sustainability Report provides information about the sustainability topics of greatest significance to Port Metro Vancouver and our stakeholders.

We recognize that it is often the issues outside of our direct control that are of greatest interest to our stakeholders, and which pose the greatest challenge or opportunity for sustainability. We have, therefore, dedicated the first half of the report, titled Our Gateway Performance, to discussing these areas of focus and our approach to collaborating with others to address our collective challenges.

Within the second section of the report, titled Our Corporate Performance, we provide information and performance data for our own operations, including governance, our people, environmental footprint, financial results and community investment.

The environmental and social impacts of major capital projects, to which we are a project partner, are discussed within this report but are not included within our indicator data. We do, however, track performance data for these projects wherever possible and will continue to explore ways to include performance reporting for multi-partner capital projects in future reports.

Port Metro Vancouver has five subsidiaries:

- Canada Place Corporation – Owner and landlord of Canada Place Vancouver.
- Port Metro Vancouver Ventures Inc. – Incorporated to provide a vehicle to invest in business ventures necessary to support the Port's operations.
- Port Metro Vancouver Enterprises Inc.
- Port Metro Vancouver Holdings Inc.
- North Fraser Terminals Inc.

The latter three subsidiaries are property holding companies that undertake strategic real property acquisitions. We have excluded our subsidiaries from this report, with the exception of data supporting figures for value generated, value distributed and government funding received, which are based on consolidated financial data from our audited

financial statements. This is due to the relatively limited scope of environmental and social impacts related to these entities. On December 1, 2012, Port Metro Vancouver entered into a management agreement to provide services to Canada Place Corporation, a subsidiary of Port Metro Vancouver. As a result, 40 employees joined Port Metro Vancouver and are included in the employee information on page 41. Information with respect to the operations of Canada Place is not covered in this report.

## GUIDELINES

Our report is prepared in accordance with the Global Reporting Initiative (GRI) G3.1 Sustainability Reporting Guidelines that provide a globally recognized framework for reporting on economic, social and environmental performance (globalreporting.org). This report meets the requirements of GRI's B+ Application Level. The GRI index can be found on pages 54–55.

## DATA

This report discloses data for the year ending December 31, 2012. Historical data is included, where available, to provide comparative information and demonstrate data trends. For our performance indicators, we have followed the protocols contained within the GRI Guidelines unless otherwise stated.

## INDEPENDENT ASSURANCE

Consistent with our 2010 and 2011 Sustainability Reports, Ernst & Young LLP has provided third-party assurance (identified by ) of selected performance indicators contained within our report and has reviewed the application of GRI 3.1 Guidelines to confirm that our report is consistent with the GRI B+ Application Level.



**This is a summary of our sustainability efforts. For more detailed reporting and additional information, please visit:**  
[portmetrovancover.com/accountability](http://portmetrovancover.com/accountability)

Over the past year, Port Metro Vancouver's progress on sustainability can be attributed to the efforts of many people. We thank those who provided advice on our reporting efforts.

We would especially like to thank the following organizations for providing feedback on our reporting process:

- Chamber of Shipping of British Columbia
- City of Vancouver
- Metro Vancouver
- Neptune Bulk Terminals
- North Shore Waterfront Liaison Committee
- Port Community Liaison Committee Delta
- Seaspans Marine Corporation
- Simon Fraser University's Beedie School of Business
- Solstice Sustainability Works
- Teck Resources Limited
- Tsawwassen First Nation Economic Development Corporation
- TSI Terminal Systems Inc.
- Vancity
- World Wildlife Fund Canada

## WE WELCOME YOUR FEEDBACK

### **Port Metro Vancouver**

100 The Pointe, 999 Canada Place  
Vancouver, B.C. Canada V6C 3T4  
Telephone: 1.604.665.9000  
Fax: 1.866.284.4271

### **Duncan Wilson**

Vice President, Corporate Social Responsibility

### **Email**

[sustainability@portmetrovancover.com](mailto:sustainability@portmetrovancover.com)

# 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"), standard for assurance engagements 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 2012 Sustainability Report (the "Report") for the period January 1, 2012 to December 31, 2012. The scope of our engagement, as agreed with management, is as follows:

- **Subject Matter 1:** To obtain a limited level of assurance on the fair presentation, in all material respects, of the specified performance information, as identified by the '✓' symbol in the GRI Content Index within the Report (the "Specified Performance Information") and to express a conclusion thereon.
- **Subject Matter 2:** To obtain a reasonable level of assurance on the fair presentation, in all material respects, of Port Metro Vancouver's 2012 greenhouse gas assertions identified in the GRI Content Index table within the Report and to express an opinion thereon:
  - EN16: Total direct and indirect greenhouse gas ("GHG") emissions by weight
  - EN17: Other relevant indirect greenhouse gas 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, Scope 2 and Scope 3 greenhouse gas 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 respect, the Application Level of B+ in accordance with the Application Level Criteria set out in the GRI G3.1 Guidelines 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 Port Metro Vancouver's assertion 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 Port Metro Vancouver's assertion 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)

We were engaged to perform a combined reasonable and limited assurance engagement. A limited assurance engagement comprises primarily of inquiries and analytical procedures and the work is substantially less than that undertaken for reasonable assurance engagement. In a limited assurance engagement, the level of assurance is lower than would be obtained in a reasonable assurance engagement.

## CRITERIA

- **Subject Matter 1:** GRI G3.1 Guidelines.
- **Subject Matter 2:** ISO 14064 – Part 1 and 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.

## PORT METRO VANCOUVER'S BOARD AND MANAGEMENT'S RESPONSIBILITIES

The Report was prepared by management of Port Metro Vancouver, who is responsible for the collation and presentation of the Specified Performance Information, Greenhouse Gas Assertions, Carbon Neutral Assertion, 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.

There are currently no prescribed requirements relating to the preparation, publication and assurance of sustainability information.

## 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, organizational boundary and time period for reporting.
- 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 information in Port Metro Vancouver's schedules of 2012 greenhouse gas emissions and the 2012 carbon offsets.

## 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 period January 1, 2011 to December 31, 2011.
- 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, 2012 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, 2012 in accordance with ISO 14064 – Part 1.
- **Subject Matter 4 – 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, 2012 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, 2012 is not, in all material respects, in accordance with criteria internally developed by management.

*Ernst + Young LLP*

Chartered Accountants  
Vancouver, Canada  
May 16, 2013

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<sup>1</sup> There are no significant changes from previous reporting periods in terms of scope, boundary or measurement methods.

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<sup>2</sup> Indicator LA10 is only partially reported, in accordance with the Global Reporting Initiative GRI G3.1 Guidelines.

<sup>3</sup> Assurance was provided on the existence of three programs to promote lifelong learning and manage career endings. These programs were the continuous education program, the training and development planning process, and the employee assistance program.

<sup>4</sup> Assurance was provided on the existence of five initiatives to manage the impacts of operations on communities. These initiatives were Community Liaison Groups, Community Complaint Line, Truck Licensing System, Shore Power for Cruise Vessels and Project Consultation.

<sup>5</sup> Assurance was provided on the completion of customer interviews in 2012 to better understand our customer needs.

## OUR MISSION

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

## OUR VISION

To be the most efficient and sustainable Gateway for the customers we serve, benefiting 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.

## PORT METRO VANCOUVER

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