The Port of Vancouver Sustainability Plan

Presentation to AAPA
June 2006
Outline

- A model for Sustainability
- The 5 year plan
- VPA and the Port’s progress to date
- The next five years
Road Map

- Board Adopts 5 year plan (2003 - 2008) for Sustainability
  - Improve Environmental and Social Performance
  - Develop monitoring tools to assess progress
  - Report on Performance
A Sustainable Port Model

**Tomorrow**
- Clean technologies
- Sustainable processes
- Innovation, R&D
- Continuous improvement
- Efficiency improvements
- Strategic Planning
- Value Proposition
- Community development
- Value added service
- Scenario Planning
- Stewardship, Leadership
- Global impact reduction
- Influencing up and down
- Risk Management

**Internal**
- Toxics emission reduction, PP
- Footprint reduction
- EH & S compliance, EMS
- Corporate Standards
- Emergency Preparedness
- Financial Health
- Assets preservation
- Risk Assessment
- Information Management

**External**
- Stakeholder Engagement
- Partnerships First Nations
- Sustainability Reporting
- Reputation / Social Licence
- Partnerships
- Transparency
- Competitiveness

**Today**

- AB 2006
Sustainability Objectives

- Integrate Environmental strategic thinking into all activities by providing input to policy, planning, design, construction and operations
- Ensure that the Port’s financial viability, the protection of the environment and maintenance of sustainable local communities are all considered
- Ensure accountability on partners and tenants to fulfill their mandates and obligations.
The Five Year Plan
Five Year Plan 2002-2007

  - Compliance, Management Systems
  - Community / Stakeholder Consultation
- Year 2-3 (2003-2005)
  - Environmental Protection
  - Protecting the Business Base
  - Strategic Development
Five Year Plan

- Year 3-4 (2004-2006)
  - Developing Key Performance Indicators
  - Developing Sustainable Development Policy
  - Objectives and Targets
  - Social Aspects Evaluation
- Year 4-5 (2005-2007)
  - Assessing Performance
  - Internal Reporting
Five Year Plan

- Year 5 + (2007 +)
  - Leadership and Stewardship
  - Global Impact Reduction
  - Developing Sustainable Development Thinking
  - Stretch objectives and targets
  - Trends and Scenario Playing
  - Influencing up and down
VPA and The Port’s Progress to Date
Regulatory Compliance

- Summaries and Audit Protocols
- Audit Programs
- Documentation
- Emergency Preparedness
- Waste Management

Protects our business
Due Diligence
Environmental Protection
EMS
- Key tenants develop ISO 14001 EMS
- VPA’s Environmental Performance Evaluation
  ISO 14031.4
  - Continual Improvement
  - Report and Communicate performance
  - Identify opportunities for pollution prevention
  - Increase efficiency
  - Identify Strategic Business Opportunities
Protecting our assets

- Contaminated Sites Policy Direction
- Baselines and Closure Audits Guidelines
- Project Approval Process (EIA)
- Pre-acquisition Site Assessments
- Environmental lease provisions
Note: The bar chart indicates number of projects initiated each year by VPA. Tenant initiatives and property purchases are not included.
Environmental Protection

- Outfalls Policy and Guide
- Industrial Effluents
- Storm Water Quality
- CSO’s
- WWTP effluent
- Water Purveyor EMS
Strategic Development

- Stakeholders issues
  - Community Relationships
  - 1st Nations Relationships
- Develop Programs / Partnerships / Tools
- Knowledge Bank
- Strategic Plans
Community and First Nations Programs

- Managing / Reducing impacts
  - Impact Reduction Research
    - Noise, Odour, Lights, Traffic
    - Air Pollution
    - Development of Guidelines, Buffering
  - Community Consultation
- Community Outreach / Engagement
Engagement

- Stakeholder and Employee Surveys
- Reputation Surveys
- Responsiveness to Complaints
- Tenant’s community engagement programs
- First Nations Partnerships
Collaborative Processes

- Towards a State of the Environment Report
  - 8 municipalities
  - 4 regulatory agencies
  - 3 first nations
  - Academics
  - NGO’s
- Risk-based
- Actionable Indicators
State of the Environment

- Frequency-severity risk analysis
- Upland issues
- Existing Controls
- Existing baseline studies
- Transect design
- Indicators
- Data Collection
Knowledge Bank

- Inventories
  - Sediment core profiles
  - Habitat mapping
  - Outfalls
  - Marine vessels emissions
  - Contaminated sites
Strategic Planning

- Liquid Bulk Strategy
- Land acquisitions program
- Strategic Plan to Manage Air Emissions
- Supply Chain Strategy
- Marketing Plan
- Security Plan
Air Emissions Program

- Technology:
  - Three tenants conducting own pilots (TSI, WMG, Neptune)
  - Construction emission reduction measures
  - Shore power pre-feasibility study
  - Clearinghouse
  - TSI DP3 Commitments, Hybrid RTG’s, B20 Biodiesel
Air Emissions Program

- SECA
- Trucks
  - Air Care on Road
  - Repairs
  - Idle reduction program
  - Truck reservation system
  - Biodiesel
- Vehicles
  - Hybrid Security Vehicles
  - Hydrogen
Terminal Design and Construction

- Ensure maximum efficiency in terminal operations thus minimizing environmental impacts and emissions. Footprint reduction.
- Generate environmental conditions for tender documents to minimize emissions and impacts during the construction of the terminals.
VPA Building LEED Certification

- Area 55,000 square feet (5110m²)
- 160 occupants
- Energy
  - 20% reduction in lighting power
  - 36% reduction in HVAC power consumption
  - Elimination of fossil fuel consumption
  - 39% reduction in potable water consumption
- 69.8% of construction waste diverted from landfill
Develop Programs, Partnerships and Tools

- GB Marine Emissions Working Group
- Port Environmental Managers Association
- Burrard Inlet Environmental Action Plan
- West Nile Virus Program
- West Coast Diesel Collaborative
- ACPA, AAPA
Port Expansion

- Adaptive Management Plan for DP3
- Stewardship Plan for Roberts Bank and Sturgeon Bank
- Habitat Compensation Plan for DP3
Next Steps
Developing Key Performance Indicators

- SD indicators by functional area at the VPA
- Risk based indicators for ecological health at Burrard Inlet. Adaptive Management parameters for Roberts Bank
- Features and Functions approach for Roberts Bank and Sturgeon Bank
- Inventories, water consumption, energy consumption, waste generation, bilge water treated, etc.
Developing Sustainable Dev Policy

A statement of commitment on Sustainability through employee engagement
Objectives and Targets

- Improved Emergency Response Preparedness
- Due diligence and progressive clean up of contaminated sites
- Protection of real estate assets
- Protection of transportation corridors and assets
- Environmental Protection of ecosystems
- Buffer zone land acquisitions
- Environmental management systems
- 10% reduction in air emissions over 2003 by 2020
The Next Five Years
2008-2013
New Directions

- Objectives and Targets
- Sustainable processes
- Sustainable thinking
- Trends
- Scenario Planning
- External Reporting
- Influencing – Leading practices