

# 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

# The SEA Model



**Tomorrow**

**Innovation**  
**Efficiency**

**Growth path /  
trajectory**

**Global condition**

**Internal**

**External**

**Profit**

**Reputation**

**Risk**

**Right to Operate**

**Today**

# 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

# 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



- Year 1-2 (2002-2004)
  - 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

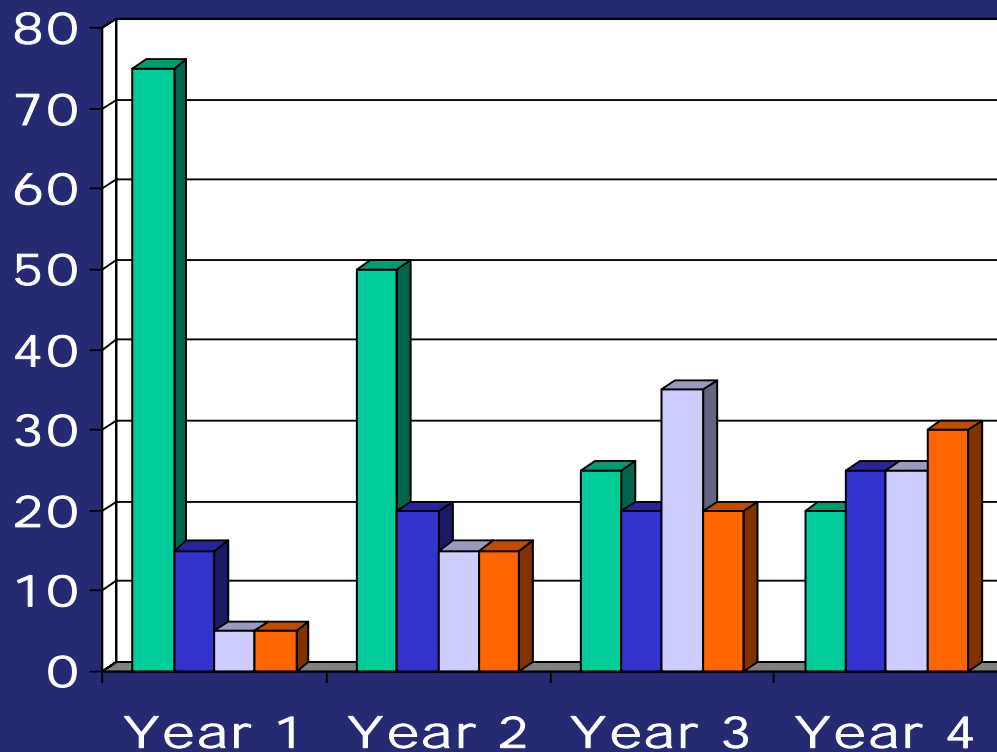
# Five Year Plan



- 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

# Towards Sustainability



- Management
- Community
- Innovation
- Stewardship

# Regulatory Compliance



Protects our business  
Due Diligence  
Environmental  
Protection  
EMS

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

# Port Environmental Management Systems



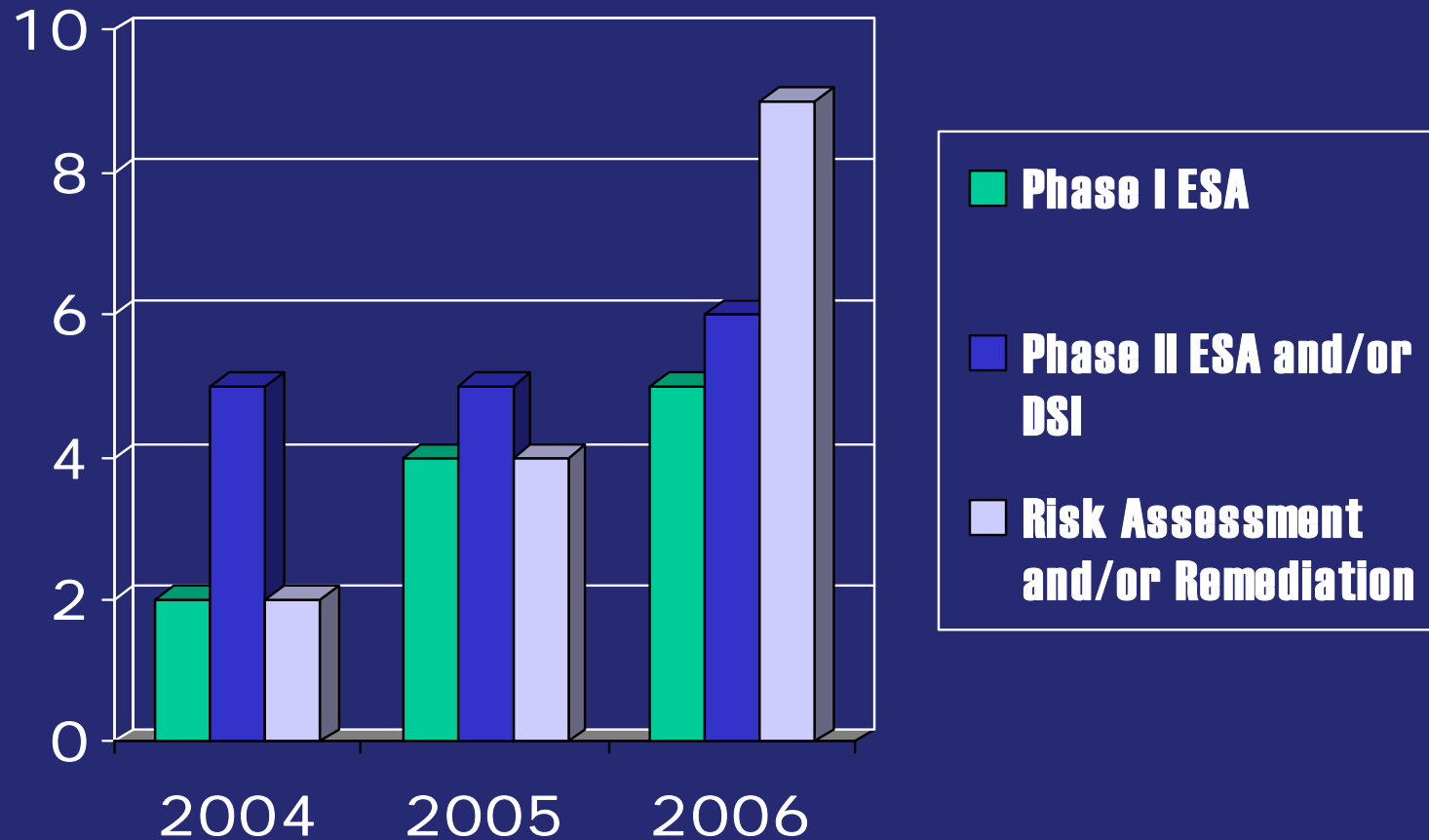
- Key tenants develop ISO 14001 EMS
- VPA's Environmental Performance Evaluation ISO 14031.4
  - Continual Improvement
  - Report and Communicate performance
  - Identify opportunities for pollution prevention
  - Increase efficiency
  - Identify Strategic Business Opportunities

# Protecting our assets

- Contaminated Sites Policy Direction
- Baselines and Closure Audits Guidelines
- Project Approval Process (EIA)
- Pre-acquisition Site Assessments
- Environmental lease provisions



# Contaminated Sites 2004 to 2006



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
  - 1<sup>st</sup> 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



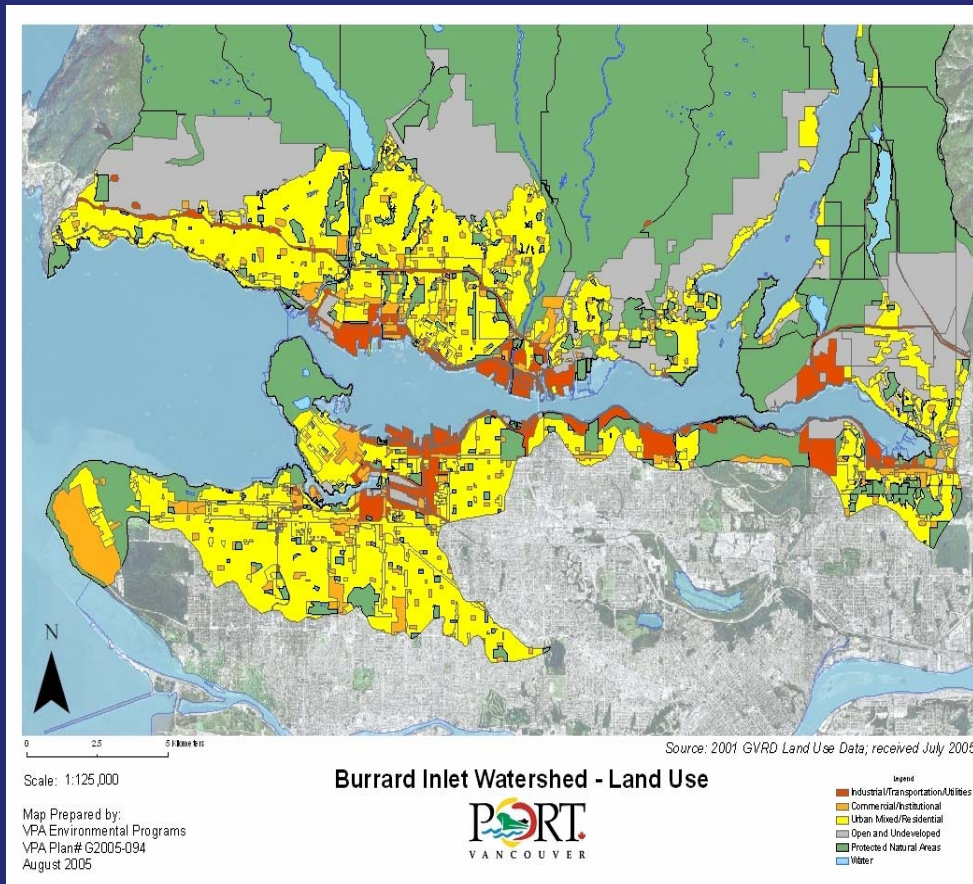
# Collaborative Processes



- 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

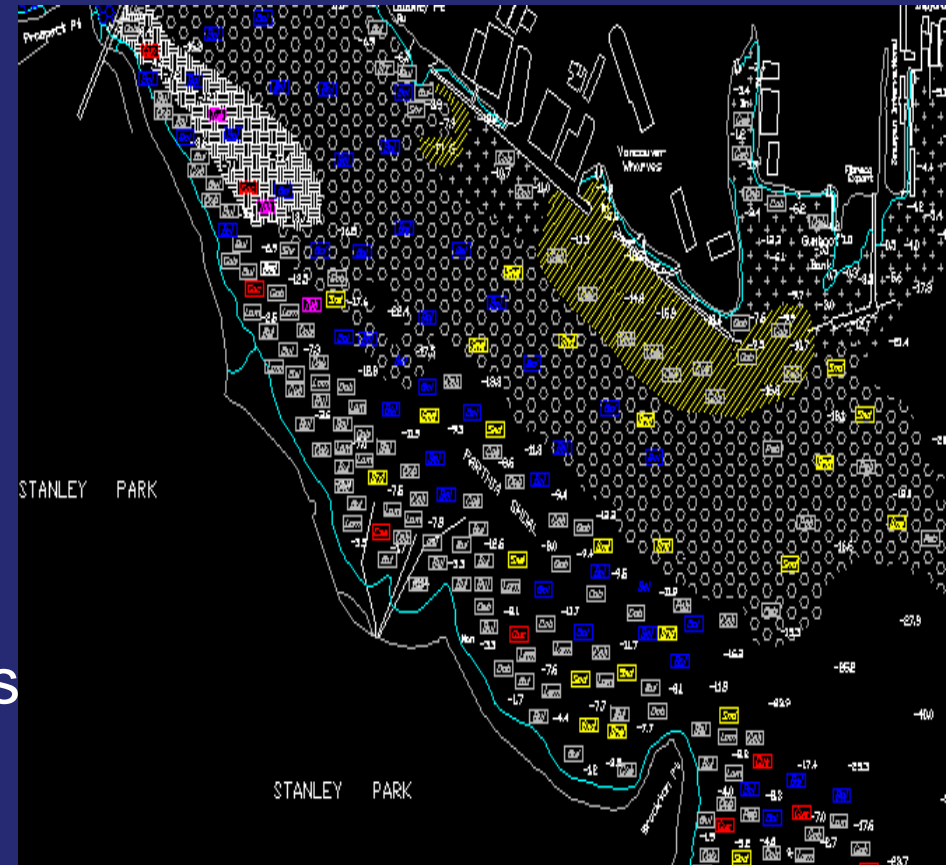


- Frequency-severity risk analysis
- Upland issues
- Existing Controls
- Existing baseline studies
- Transect design
- Indicators
- Data Collection

# 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:
  - Combustall: Fuel additive to reduce harmful emissions and improve fuel efficiency. Vanterm, Maintenance and Seaboard.
  - 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

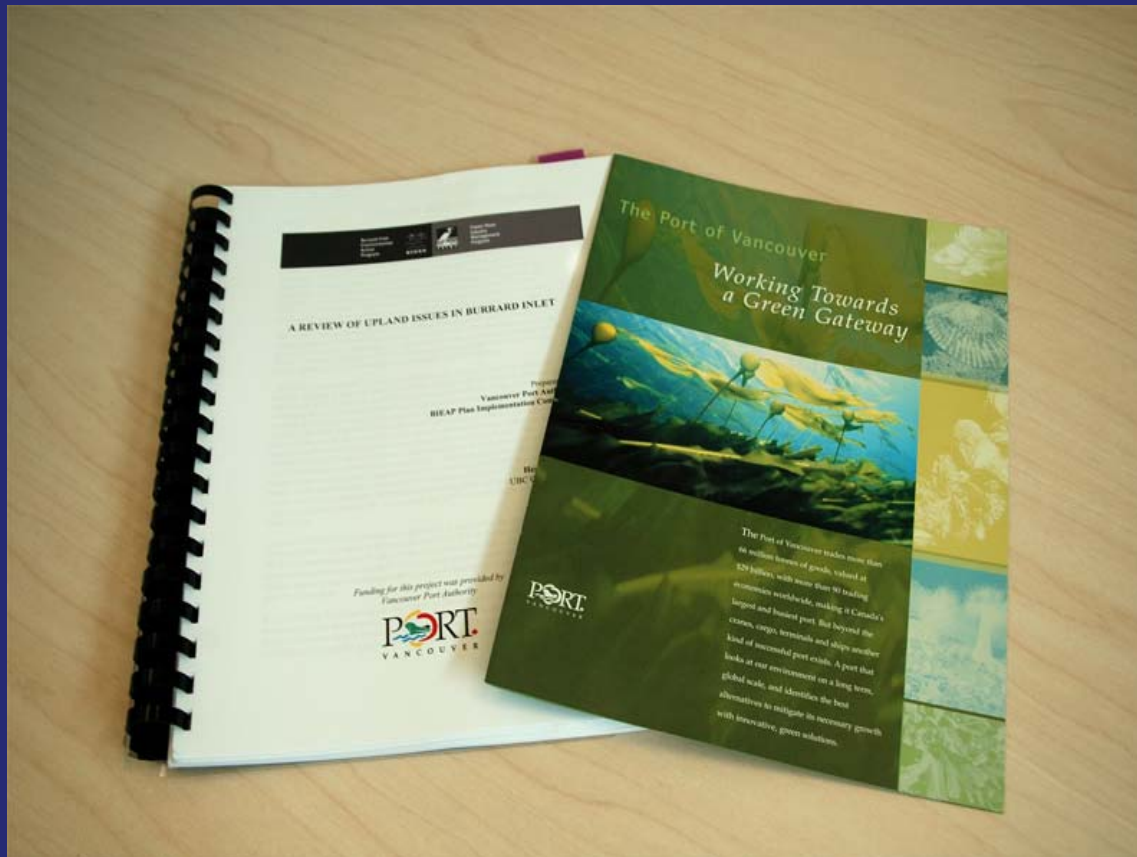


# VPA Building LEED Certification



- Area 55,000 square feet (5110m<sup>2</sup>)
- 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.



# Sustainable Development Policy



- 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

# Questions



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