World Ports Climate Initiative
Carbon Footprinting Guidance Document

Lisa Wunder
Environmental Specialist
Port of Los Angeles

AAPA Harbors, Navigation and Environment Seminar
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Overview

- Background
- Carbon Footprinting Guidance Document Overview
World Ports Climate Initiative
Mission Statement

- Raise Awareness in the Port & Maritime Community of Need for Action
- Initiate Studies, Strategies, & Actions to Reduce GHG Emissions & Improve Air Quality
- Provide a Platform for the Maritime Port Sector for the Exchange of Information
- Make Available Information on the Effects of Climate Change on the Maritime Port Environment & Measures for its Mitigation
**WPCI Organization & Themes**

**International Collaboration**

- **C40 Cities** (CLIMATE LEADERSHIP GROUP)

**World Ports Climate Conference**

**WPCI**

- **CHAIR**
  - GERALDINE KNATZ (CHAIR IAPH-PEC)

**WPCI Bureau**

- FER VAN DE LAAR (DIRECTOR)

- **IAPH Toolbox Expansion**
  - Los Angeles

- **Cargo-handling Equipment**
  - New York / New Jersey

- **Intermodal Transport**
  - Amsterdam

**Regional port branch organizations**

- American Association of Ports Authorities
- European Sea Ports Organization
- Pan African Port Corporation

**55 Supporting Ports**

**Thematic Approach!**

- Carbon Footprinting
  - Los Angeles

- Lease Agreement Template
  - Montreal

- Environmental Ship Index
  - Rotterdam

- On-shore Power Supply
  - Gothenburg
Carbon Footprinting Theme
Guidance Document Workgroup Update

Port of Antwerp
Port of Los Angeles
THE PORT AUTHORITY OF NY & NJ
Port of Amsterdam
Port of Houston Authority
Port of Long Beach
The Green Port
Port of Oakland
Port of Seattle
Port of Oslo

IA PH
International Association of Ports and Harbours
Carbon Footprinting Guidance Document

Genesis

- Started in February at 2009 IAPH Naples Annual Meeting
- Designed to be User Friendly Guidance for Broad Range of Port Experience with Greenhouse Gases
- Monthly Meetings to Develop & Review Guidance
- Collaborative Effort
- Released at IAPH Meeting in Hamburg in November 2009

- GOAL: Create a Living, User-Friendly Document that Ports with all Levels of Carbon Footprinting Experience Can Use
Carbon Footprinting Guidance Document
Considerations and Approach

➢ What are the drivers behind developing a GHG inventory?
➢ What uses will be made of the information?
➢ Will change over time be tracked and to what resolution?
➢ What source categories will be covered?
➢ What are the geographical boundaries of the inventory?
➢ What level of information detail/transparency will be needed?
➢ What administrative/regulatory goals/policies are in place, or will need to be met?
Types of Inventories

- Activity-based
- Surrogate-based
- Hybrid
Carbon Footprinting Workgroup

Decision-Making Flow Chart
Carbon Footprinting Workgroup

Port-Related GHG Source Category Scopes

- SCOPE 1: Port Direct
- SCOPE 2: Port Indirect
- SCOPE 3: Port Tenants Indirect

- Purchased Electricity for Port-Owned Buildings and Operations
- Port-Owned Fleet Vehicles, Buildings
- Ships, Trucks, Cargo Handling Equipment, Rail, Harbor Craft, Buildings, and Purchased Electricity
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Comparing Footprints

Numerous Variables to Take Into Consideration when Comparing Footprints

- Geographical Boundary
- Date (time period) of Inventory
- Method/Approach Taken
- Emissions Factors & Defaults
- Level of Data Resolution & Quality Utilized
- Type of Port Operations (Landlord vs. Operational)
- Source Categories Included in Scopes 1, 2, & 3

Data may have to be normalized to meaningfully compare inventories between Ports
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Source Categories

Emission Estimation Methods Developed for:

- Mobile Sources
  - Cargo Handling Equipment
  - Heavy-Duty On-Road Vehicles
  - Railroad Locomotives
  - Harbor Craft & Inland Waterway Vessels
  - Ocean-Going Vessels
  - Construction Equipment

- Stationary Sources
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Helpful References

- Contacts at Ports with Inventory Experience
- Published International Emission and Load Factors
- Global Warming Potentials
- Emissions from Electricity Generation
- Units
- Existing Frameworks and Information Sources
Emission Control Areas Designated for North American Waters

On March 26, 2010, the International Maritime Organization (IMO) officially designated waters off North American coasts as an area in which stringent international emission standards will apply to ships. These standards will dramatically reduce air pollution from ships and deliver substantial air quality and public health benefits that extend hundreds of miles inland.

Read More...

NEWS DESK

MAY 4-6, 2010
AAPA Harbors, Navigation and Environment Seminar and GreenPort Americas 2010: Charleston, South Carolina
Read More...

JUNE 7-9, 2010
IAPH Mid-Term Board Meeting in Savannah, Georgia
Read More...

FIND WPCI MEMBERS

Fifty-five of the world’s key ports have come together in a commitment to reduce their greenhouse gas emissions.

Learn more about these ports

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[Map of the world with ports highlighted]
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Next Steps

➢ Continue to Incorporate Comments on Draft Document
➢ Continue to Work with Other Groups Interested in Carbon Footprinting at Ports
  ➢ ClimePort
  ➢ Carbon War Room
  ➢ Shippers and MTOs
➢ Periodic Carbon Footprinting Subgroup Review & Updates
➢ Carbon Calculator
  ➢ Development of a Prototype
  ➢ Solicit Comments from the Carbon Footprinting Subgroup
  ➢ Determine Interest and Applicability
Contact Information

Lisa Wunder
Environmental Specialist
Port of Los Angeles
lwunder@portla.org
http://www.portoflosangeles.org