International Association of Ports & Harbors
World Ports Climate Initiative
Carbon Footprinting Guidance Document

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IAPH Africa/ Europe Regional Meeting
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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
- 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

- Carbon Footprinting
  - Los Angeles

- Lease Agreement Template
  - Montreal

- Environmental Ship Index
  - Rotterdam

- On-shore Power Supply
  - Gothenburg

- 55 Supporting Ports
- Regional port branch organizations
  - American Association of Ports Authorities
  - European Sea Ports Organization
  - Pan African Port Corporation
Carbon Footprinting Theme
Guidance Document Workgroup Update

Port of Antwerp
Port of Amsterdam
The Port Authority of NY & NJ
Port of Long Beach
Port of Oakland
Port of Seattle
Port of Oslo

A CLEANER PORT. A BRIGHTER FUTURE.
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

- 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?
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Considerations and Approach

Types of Inventories
- Activity-based
- Surrogate-based
- Hybrid
Carbon Footprinting Workgroup
It's Not What You Leave After Walking Through the Coal Mine

➢ 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
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
At the 4th GreenPort Conference held in Naples, experts advised port authorities and managers to start implementing environmental strategies now if they hope to reach their future expansion plans after the current financial crisis.

Over 230 participants from 40 countries around the world attended the event on February 25 and 26, 2009. Hosted by the Port of Naples, the conference was organized in association with the European Sea Ports Organization (ESPO) and the EcoPorts Foundation.

View 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
Carbon Footprinting Guidance Document

Next Steps

- Get Comments from the Greater WPCI Group
- Incorporate Comments
- Determine if Web-Based Calculators are of Interest
- Determine if Recommendations Need to be Strengthened
- Finalize Report & Post on WPCI Report
- Periodic Review & Updates
Contact Information

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