

Item No.

7c supp.

Date of Meeting

May 5, 2009

THE GREEN GATEWAY



Carbon Footprint Study for the Asia to North America Intermodal Trade

Overview

- Concern about greenhouse gas impacts
- First assessment to evaluate the carbon impacts of the transportation supply chain from origin to destination
- Conducted by Herbert Engineering

Methodology

- Analysis determined tons carbon dioxide equivalent per TEU from Asia to points in U.S. mainland
- Vessel sizes: 4,500 to 12,500 TEU
- Asian Origin Ports:
 - Shanghai, Hong Kong, Singapore
- North American Ports:
 - Prince Rupert, Seattle, Los Angeles/Long Beach, Houston, Savannah, Norfolk, New York/New Jersey
- North American Destination Cities:
 - Chicago, Columbus, Memphis

Methodology

- Routings:
 - West Coast ports and intermodal trains to destination cities
 - All-water via Panama Canal to Gulf and East Coast Cities
 - All-water via Suez Canal to Gulf and East Coast Cities
- Independent review:
 - University of Washington
 - Seattle Climate Partnership
 - Industry (3PLs, shippers, carriers, railroads)

Results

- The Pacific Northwest gateway offers the lowest carbon footprint to 180,000,000 consumers in the northern half of the United States
- The West Coast ports collectively offer a lower carbon footprint throughout the entire continental United States

Implications

- The West Coast ports are the most energy-efficient gateways from Asia to U.S. consumers
- The Pacific Northwest ports have a slightly lower carbon footprint from Asia than any other port in North America
- This study adds data to the emerging field of carbon footprint assessments of supply chains
- Results can give us a competitive edge

Committed to Reducing our Footprint

- Puget Sound Maritime Air Emissions Inventory
 - Most comprehensive maritime inventory to date; first to include greenhouse gases
- Northwest Ports Clean Air Strategy
 - Groundbreaking effort of the Ports of Seattle, Tacoma, and Vancouver (B.C.) to reduce emissions from maritime operations
- Vessels
 - Shore power for Holland America Line and Princess Cruises
 - At-Berth Clean Fuels Vessel Incentive Program
 - Required use of 1.5% (or less) sulfur fuels for cruise vessels
- Cargo-Handling Equipment
 - Exhaust retrofits and cleaner fuels for cargo-handling equipment
- Trucks
 - Recent Commission approval of the Port's Clean Truck Program

THE GREEN GATEWAY

Puget Sound

Asia

