BSR and Clean Cargo Working Group (CCWG)

EcoTransIT World Stakeholder Workshop
Hapag Lloyd, April 2012
BSR is a Global Leader in Sustainability

Our mission: We work with business to create a just and sustainable world.

Our strategy: We develop sustainable business strategies and solutions through consulting, research, and cross-sector collaboration with our global network of 300 member companies.

We have worked in more than 70 countries from our seven offices in Asia, Europe and North America.
BSR provides consulting services through teams that specialize in 10 major industries and eight sustainability themes. This consulting work plays a very important role in the pursuit of our mission.

**Industry Expertise**
- Consumer Products
- Energy
- Financial Services
- FBA
- ICT
- Media
- Mining
- Transport & Logistics
- Travel & Tourism

**Sustainability Expertise**
- Sustainable Supply Chain
- Reporting
- Strategy & Integration
- Sustainable Local Benefits
- Sustainable Consumption
- Human Rights
- Climate Change

- Alcatel-Lucent
- Aramex International
- AREVA Group
- Best Buy
- Boeing
- Cisco Systems
- Coca-Cola
- COSCO
- ExxonMobil
- Ford Motor Company
- GE
- Hitachi
- IBM
- IKEA
- Komatsu
- Kraft Foods
- Levi Strauss & Co.
- Li & Fung, Ltd.
- Marks & Spencer
- McDonald’s
- Microsoft
- Nike
- Novartis
- Panasonic
- Pfizer
- Royal Dutch Shell
- SAP
- Sodexo Group
- Sony Corporation
- Takeda
- Toshiba
- Starbucks Coffee
- Unilever
- Walmart Stores
- Walt Disney
- Yahoo!
Transport and Logistics practice

Mission: Working with companies to define and integrate responsible and sustainable practices through their supply chains.

We do this via -

• **Consulting:** integrating sustainability into corporate strategy, e.g.
  – United Airlines Environmental Materiality Assessment and Strategy
  – Maersk Line Sustainability Strategy
  – UPS Packing project
  – Agility Logistics and APM Terminals Sustainability Reports

• **Collaboration:** proactive facilitation of cross-sector partnerships to integrate sustainability into logistics supply chains, e.g.
  – Clean Cargo Working Group (CCWG)
  – Environmental Assessment Tool pilot for Ports & Terminals
  – Maritime Anti-Corruption Network (MACN)

• **Research:** On critical and emerging sustainability issues and articulating the value generated from addressing them through logistic supply chains, e.g. Sustainability in the Container Shipping Industry – A Future Trends Research Summary
Shipper Needs for Sustainable Logistics Solutions
Shippers & their Customers are already Setting Public Goals to Reduce Total Footprint Emissions

By 2020 CO₂ emissions from our global logistics network will be at or below 2010 levels despite significantly higher volumes.

<table>
<thead>
<tr>
<th>TARGET</th>
<th>PERFORMANCE</th>
<th>PROGRESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver 30-percent absolute reduction in CO₂ emissions from 2003 by FY20. (2003 baseline is 311,859 tonnes)</td>
<td>FY09 produced a 14-percent increase in CO₂ emissions from the FY03 baseline.</td>
<td>On track</td>
</tr>
</tbody>
</table>

Efforts to reduce this impact can be appreciated when the CO₂ percent change is compared to the overall growth in business during this timeframe. Nike brand revenue increased approximately 70 percent from FY03 to FY09.
The Shippers Challenge

- In order to understand where reductions within the logistics network can be made, it is necessary to understand the impacts across the value chain.

- Essential factors for measurement include:
  - standardized widely accepted methodologies
  - comparable basis of reporting across modes
  - good input data
  - effective output information

- The work of Clean Cargo is shaped by continually addressing these factors within the maritime segment and across the intermodal chain.
For international shippers, the ocean-going leg of the journey is normally the most significant e.g. 70-75% of the carbon footprint.

How CCWG helps shippers –
- Emissions data for ocean going leg comes from primary data supplied by carriers that represent over 70% ocean going cargo
- Carriers provide data in standardized format
- Aggregated emissions factors by trade lane are updated annually
Mapping logistic network and data needs

- Numerous tools and methodologies exist/in development for data collection across the intermodal chain. Alignment and standardization needed to enable effective use.

How CCWG helps shippers –
- Allows for direct dialogue between peers and other groups developing these tools, to help shape them for your needs.
- CCWG emissions factors will be used by other indices and service providers e.g. EcoTransIT, NTM.
The Clean Cargo Working Group provides the platform for Members to Address the Needs for Good Data & Performance Improvement Via Collaboration
CCWG has a Global Membership

**Carriers**
- Hapag-Lloyd
- NYK Line
- HANJIN SHIPPING
- HAMBURG SÜD
- MAERSK
- MOL Mitsui O.S.K. Lines
- HMM
- CMA CGM
- COSCO
- APL
- OOCL
- YANG MING GROUP
- BSR

**Shippers**
- WAL*MART*
- NORDSTROM
- IKEA
- Electrolux
- POLO RALPH LAUREN
- AMERICAN EAGLE OUTFITTERS
- PVH
- TCHIBO

**NVOCCs**
- DHL
- KUEHNE + NAGEL
- DAMCO
With Clear Mission and Objectives

• **Mission:** CCWG is a global business-to-business initiative dedicated to environmental performance improvement through measurement, evaluation and reporting in maritime transportation management.

• **Objectives:**
  – Create practical tools for measuring and reducing the environmental impact of global goods transportation
  – Enable direct dialogue between brands and transportation providers
  – Drive standardization in the industry to achieve efficiencies
Showing Continuous improvement over 7 Years

- **Fact-based** dialogue between shippers and carriers
- **Verification** standard implemented for increased data quality
- **Transparency** increased by facilitating efficient exchange of information between shippers and carriers
- **CO2 methodology standard** for ocean transportation

Aggregated Clean Cargo CO2 emission rates in 2008 showed nearly a **10% decrease** on average (across trade lanes) relative to 2007, and a **17% decrease** relative to 2006.
And Striving Toward Industry Standardization

• Clean Cargo looks beyond its membership to learn from other initiatives and influence the industry at large

• Vision is for CCWG tools and methodology to become *the industry standard* where applicable

CCWG tools and methods are informed by:

• WRI GHG Protocol
• Global Reporting Initiative (GRI)
• World Economic Forum (WEF)
• International Maritime Organization (IMO)
• World Shipping Council (WSC)
• U.S. EPA SmartWay
• Clean Shipping Project

CCWG currently in discussions to align intermodal tools with:

• World Economic Forum (WEF)
• EcoTransIT
• NTM
• U.S. EPA SmartWay
As well as Improving Transparency and availability of information for the Industry

CCWG public overview available online at www.bsr.org/cleancargo.

“Beyond the Factory Gates” Report discloses industry-leading aggregate emissions factors by trade lane in the interest of public disclosure and dialogue
Clean Cargo Working Group – Members Tools

- Environmental Performance Metrics & Survey
- Industry Data
- Intermodal Emissions Calculator
1. Environmental Performance Metrics & Survey

Carrier Performance Metrics:

- Standardized set of metrics for assessing ocean carriers’ environmental performance
- Scorecard for quantifying performance

Carrier Environmental Performance Survey:

- Gathers qualitative information on carriers’ environmental management and performance
- Carriers submit metrics data and survey annually

Key areas of performance assessment:

- CO$_2$ emissions
- SO$_x$ emissions
- NO$_x$ emissions
- Waste management
- Water effluents
- Chemical use
- Environmental Management Systems
- Transparency
2. Annual Aggregated Industry Performance Data

• Gathered CO2, SOX, NOx emissions data from 10+ carriers for past 7 years – reflecting one of the largest environmental data sets in the shipping industry

• Aggregated environmental performance data is released to membership annually, highlighting industry-wide performance

• Data can be used to benchmark individual carriers against industry performance

Membership represents over
70%
of global container transport

Clean Cargo gathered environmental data on
1,206
container ships in 2009 – a 50% increase over 2008
Example Output – Aggregated CO$_2$ Emissions

Circle = intra-regional emissions factor

17 of 25 trade lanes’ dry performance improved vs. 2009 Between 1%-17%
### Example Output - Sulfur Content of Fuel by Carrier

<table>
<thead>
<tr>
<th>Carrier</th>
<th>Score</th>
<th>Average Sulfur Content of Fuel used in Fleet (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>14</td>
<td>2.0%</td>
</tr>
<tr>
<td>B</td>
<td>15</td>
<td>2.1%</td>
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<tr>
<td>C</td>
<td>15</td>
<td>2.3%</td>
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<tr>
<td>D</td>
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<td>E</td>
<td>14</td>
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<td>M</td>
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</table>

**SAMPLE DATA**
### 3. Intermodal Emissions Calculator

- Calculates the absolute carbon emissions associated with moving goods from place to place.
- Uses the best available emissions factors, including primary data from Clean Cargo carriers.
- Is consistent with WRI’s GHG Protocol methodology.
- Accommodates all modes (ocean, rail, air, road).

#### Clean Cargo Working Group
**Intermodal Emissions Calculator**

<table>
<thead>
<tr>
<th>Year</th>
<th>Qtr</th>
<th>Corridor Number [1-100]</th>
<th>Inbound/Outbound</th>
<th>Carrier Code</th>
<th>Mode (Specific)</th>
<th>Amount of Cargo Shipped</th>
<th>Units</th>
<th>Port Pair #</th>
<th>Distance [km]</th>
<th>Units of Distance</th>
<th>\[g CO2/ t-km]</th>
<th>Total CO2 Emissions [kg]</th>
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</thead>
<tbody>
<tr>
<td>2028</td>
<td>1</td>
<td>1</td>
<td>Inbound</td>
<td></td>
<td>Ship_Aisa North Europe</td>
<td>16</td>
<td>Tonnes</td>
<td>Bangor - Rottermond</td>
<td>16,758</td>
<td>Kilometers</td>
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<td>13,942</td>
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<tr>
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<td>Inbound</td>
<td></td>
<td>Truck_32-40, diesel</td>
<td>16</td>
<td>Tonnes</td>
<td>Rotterdam - Hamburg</td>
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<td>Air Freight, jrc &gt;1500cm</td>
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<td>Tonnes</td>
<td>Hong Kong - Seattle</td>
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<td>Truck_32-40, diesel</td>
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<td>Hamburg - Kalmarndam</td>
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*Note: The table above shows a snapshot of the data input into the Intermodal Emissions Calculator. The calculator accepts various types of data, including the mode of transportation, amount of cargo, and distance travelled, to calculate the total carbon emissions.*

**BSR**
CCWG Achievements and Endorsements

“Clean Cargo brings together large multinationals that compete with each other in the marketplace to take on environmental issues with remarkable results, helping us develop sustainable transportation strategies.”

Thomas Bergmark
IKEA
March 2010

Membership represents over 70% of global container transport

Sustainable Shipping Awards 2011

1st Runner up for Outstanding Contribution to Sustainable Shipping

Clean Cargo gathers environmental data for over 1,500 container vessels

IKEA
3 takeaways for developments & progress
A Growing Number of Important Maritime (&Intermodal) Industry Initiatives

- Standardize Methodologies and Reporting Principles
- Alignment of Stakeholder needs for Information
- Collaborate to have Impact
Focus on Methodology

CCWG is this year –

• Drafting a CCWG methodology paper – evolution of why CO2 methodology and future plans

• Developing an aggregated utilization factor for 2012

• Pilot testing with a carrier the material impact of using real utilization compared to nominal capacity
## Shippers Needs and Expectations across the Sustainability Agenda are Evolving Rapidly

<table>
<thead>
<tr>
<th>Today</th>
<th>Tomorrow</th>
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<tbody>
<tr>
<td>• Sustainability serves as a qualifier or as “extra credit” when all else is equal</td>
<td>• Increased weight of sustainability factors in procurement decisions</td>
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<td>• Specific standards and indices for sustainability are under development</td>
<td>• Dramatically increased transparency, down to product-level and container-specific impacts</td>
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<tr>
<td>• Environment, and carbon in particular, is the primary focus for most</td>
<td>• Expanded focus to full range of environmental impacts, i.e., Sox &amp; NOx, waste, water, ship building/breaking/recycling, etc.</td>
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<tr>
<td>• Other key areas such as ethics, health &amp; safety, and security are taken for granted as baseline requirements</td>
<td>• Human rights and labor issues will become more important for some</td>
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<tr>
<td>• Primary focus on direct impact of carrier operations</td>
<td>• Expanded focus to full supply chain impacts, i.e., chartered vessels, ports, trucking companies, etc.</td>
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</tbody>
</table>

“We use carbon, cost and customer service as the criteria when buying transportation services on a lane-by-lane basis”
- Unilever
For more information please contact:

Angie Farrag
Manager, Advisory Services
Lead Transport & Logistics Practice & Project Manager CCWG
afarrag@bsr.org
CCWG Membership

Membership and Costs

- Open to all shippers (cargo owners), carriers (vessel owners) and NVOCC’s (non vessel owning ocean cargo carriers e.g. 3pl’s)
- BSR Members: $5,650
- BSR non-members: $8,350

Governance

- Steering Committee made up of 4 companies voted in every 3 years
- BSR facilitates the working group with dedicated staff across the world
- Data protection and exchange of information governed by anti-trust policy and operating principles

Benefits

- Immediate access to CCWG tools and shared resources that enable you to measure impacts for reporting and procurement decision making
- Join twice annual full group meetings, regional convenings and regular team calls focused on group objectives, to engage with peers and influence continuous improvements
- Access speaking opportunities and discounted entry to global industry conferences to learn more and exhibit your company’s leadership in this domain