The International SmartWay Transportation Summit: Transforming the Global Supply Chain



### "Supply Chain Accounting and Harmonization of Metrics"

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### Agenda

Who is Maersk Logistics?

What drives the need for greener supply chains?

How does Maersk Logistics help our clients?

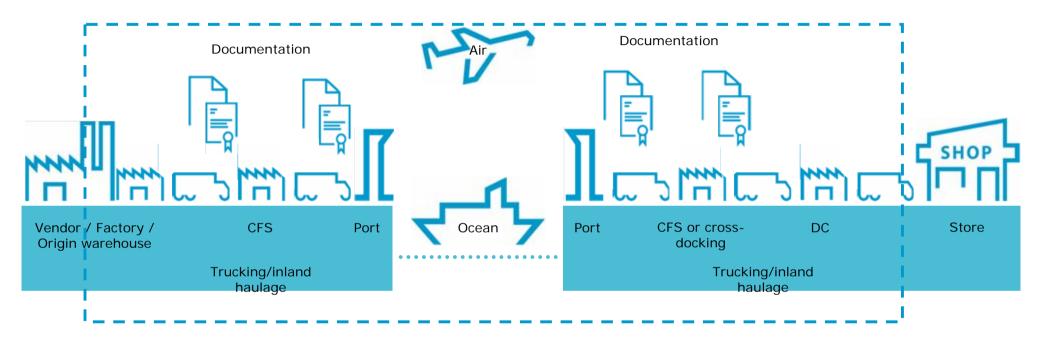
What are the results so far? (Case studies)

What will happen next?





Maersk Logistics designs, optimizes and executes international supply chains



- > Part of the A.P. Moller Maersk Group
- > 8,500+ employees
- > 200+ offices and 100+ countries
- Main customer segments:
  Retail, FMCG, Electronics & Chemicals





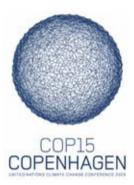
### What drives the need for a greener supply chain?

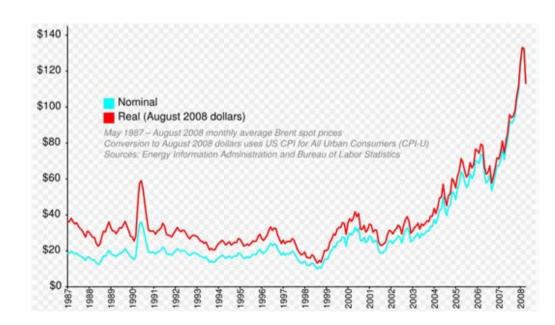
#### > Pressure from:

- Consumers, Environmental groups, Customers, and shareholders
- > Rising and highly volatile energy prices
- > Regulatory requirements
  - > EU plans to include a carbon tax for international aviation from 2011
  - The UN, the EU and many environmental parties are stressing the fact that international transportation should be considered in post-Kyoto agreements





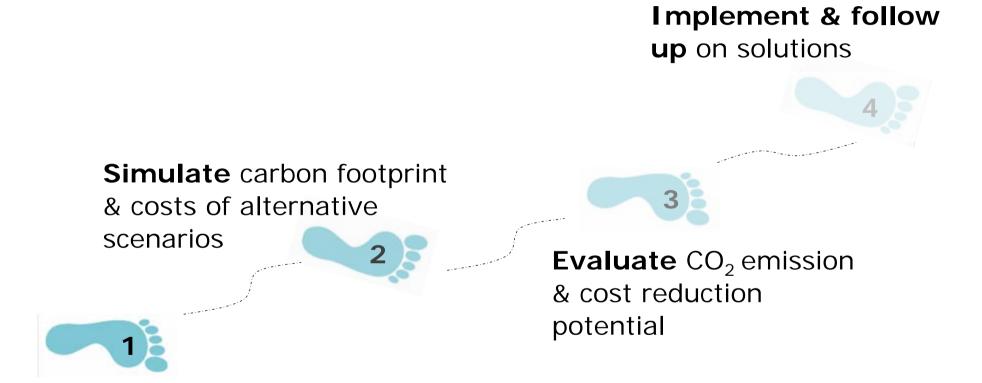






### SupplyChain CarbonCheck™ - a standardized approach

4-step methodology based on internationally recognized emission standards



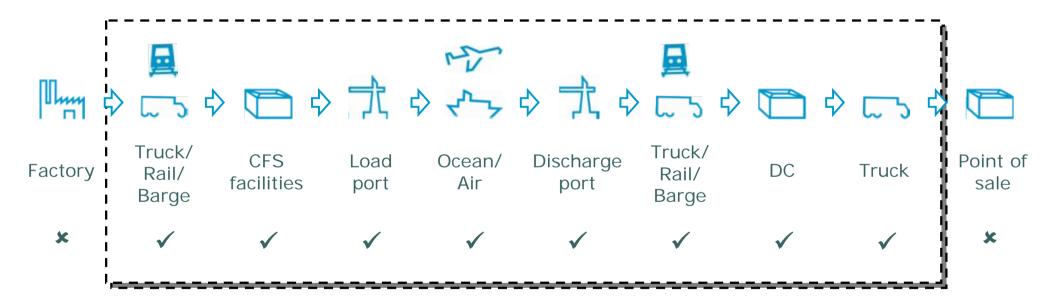
**Estimate** current supply chain carbon footprint & costs





### SupplyChain CarbonCheck™ - comprehensive scope

The scope can cover supply chain activities from factory gate to store door





### Mode selection has significant impact on a company's carbon footprint





### Drivers of Carbon Emissions and Reduction Potentials Part of supply chain Driver of emissions Ways to reduce emissions (examples)

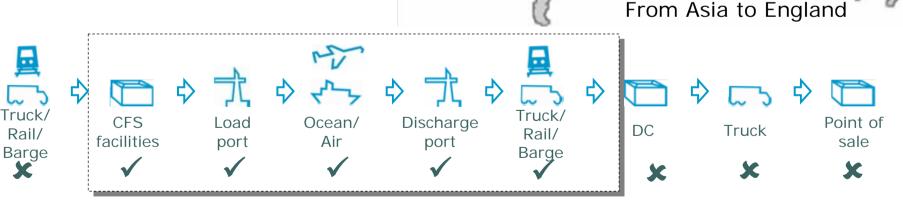
Part or suppry chair	Driver of emissions	ways to reduce emissions (examples)
Ocean transportation	<ul><li>Volume moved</li><li>km covered</li></ul>	<ul> <li>Higher container utilisation</li> <li>Use of more eco-friendly carriers</li> </ul>
Air transportation	<ul><li>kg moved</li><li>km covered</li></ul>	Air to Sea-Air conversion
Port moves	Number of containers	<ul><li>Sourcing patterns</li><li>Higher container utilisation</li><li>20' to 40' conversion (origin consolidation)</li></ul>
Domestic distribution	<ul><li>Transportation mode (truck vs. rail)</li><li>km covered</li><li>Volume moved</li></ul>	<ul> <li>Distribution network optimization</li> <li>Higher utilisation of delivery trucks/vans</li> <li>Double-decker trailers</li> <li>Use of bio-fuel</li> </ul>
Warehousing	<ul><li>Number of days in warehouse</li><li>Number of CBM</li></ul>	<ul><li> <u>Direct to stores</u></li><li> Cross docking</li><li> Reduce safety stock</li></ul>

Boots decreased CO<sub>2</sub> by 29% and supply chain costs by 21% per cubic metre from Asia to England from 2004 to 2007 while maintaining service levels

#### How:

- ✓ Reduced % of cargo shipped by air
- ✓ Consolidated cargo in Asia to increase container utilization
- ✓ Converted 20' to 40' containers

Rail/



SupplyChain CarbonCheck™:

**Boots Internal Mapping** 

MAERSK LOGISTICS



## Macy's and Maersk Logistics have identified CO<sub>2</sub> and supply chain cost reduction potential in excess of 10%



Transport Carrier Selection 2.4% less **CO**<sub>2</sub> 0.5% less **\$** 

Distribution Network Optimization

6.4% less **CO**<sub>2</sub> 11% less **\$** 

One Greener

**Supply Chain** 

Transport
Mode
Optimization

3.6% less **CO**<sub>2</sub> 1.4% less **\$** 

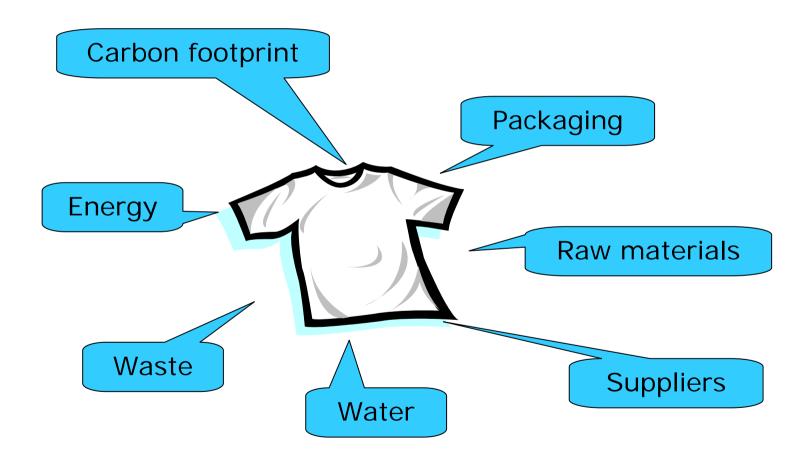
Equipment
Utilization
Improvement

0.4% less **CO**<sub>2</sub> 0.4% less **\$** 



#### Sustainability - the next trend

Companies should have a sustainability strategy towards their supply chain which goes beyond carbon footprint



### Our advice to you



- > Put green demands on your suppliers and yourself
- > Collaborate, share knowledge & challenge status quo
- > Top management commitment key to your environmental strategy
- > Measure CO<sub>2</sub> emissions and supply chain cost
- > Sustainability look beyond CO<sub>2</sub>



### **Green Supply Chain**

- Reduce carbon emissions
- > Lower supply chain costs
- > Improve corporate image

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