Global Harmonization of Emission Calculations

The Global Logistics Emissions Council (GLEC)

Dr Alan Lewis
Smart Freight Centre
Growing awareness and activities...confusion
Imagine

One universal and transparent way of calculating logistics emissions across the global multi-modal supply chain that is used by companies to compare and select more fuel efficient modes and carriers and identify ways to increase efficiency and reduce costs.
Introduction to GLEC

- Established in 2013 & led by Smart Freight Centre
- Harmonizes greenhouse gas emissions accounting for the freight sector
- Builds on existing standards and methodologies...
  - work with the best of what already exists
  - and output from COFRET / US NCFRP projects
GLEC Structure
Comparing Existing Methodologies to allow easier comparison

Understanding what’s in your breakfast...

...and what’s in a freight emissions methodology

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GLEC Base Methodologies

IATA RP1678
IMO EEOI
SmartWay
EcoTransIT
Clean Cargo
Working Group
IMO EEOI
Green Logistics
Green Efforts

Air
Inland Waterways
Road
Rail
Sea
Trans-shipment Centers

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Consumption Factor
Common Currency Across Stakeholders

\[ Consumption \ factor = \left( \frac{\Sigma \ fuel}{\Sigma \ tonne \ km} \right) \]

- Amount of goods: tonnes (used more frequently than volume)
- Distance unit: km (miles can be converted)
- \( \Sigma \ Fuel \): total fuel measured over many similar round-trip journeys
- \( \Sigma \ Tonne-km \): (tonnes x km) + (tonnes x km) etc.
GLEC Consultation Process

Open Consultation Meetings

- Washington DC: 14 January 2015
- Brussels: 28 October 2015
- Beijing: 6 November 2015

Invitation Only

- MIT: 18 August 2015

Written Feedback Deadlines

- 15 June & 15 November
Who is Committed to GLEC?

Note: verbally confirmed companies and associations members pending approval are not listed here

INDUSTRY PROGRAMS:
- Air Cargo Carbon Footprint / Airfreight Carbon Initiative

ASSOCIATIONS:
- IATA
- ECTA
- IRU
- ESC
- European Cargo Federations
- BBSF
- FIA
- ADBA
- GIE
- IATA

EXPERTS:
- Colin Smith (EST), Jens Froese (Green Efforts), Kerstin Dobers (Fraunhofer IML), Marc Cottignies - (ADEME)

INSTITUTES/OTHER:
- EICB
- EcoTransIT
- ACEEE
- I4C
- ICCT
- World Resources Institute

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GLEC Framework Validation

18 Transport Legs

- 2 Air Legs
- 1 Sea Leg
- 2 Rail Legs
- 13 Road Legs
- 14 Transhipment Centers

7 Countries

30,000+ Kilometers

Partners: HP, DB Schenker, DHL, Kühne + Nagel
Challenges: How to bring in other stakeholders?

Leadership to set direction for transformational change
- Government
- Private sector
- Civil society

Policies, Partnerships and Programs to enable action and innovation at scale
- Set targets
- Collaborate & Exchange
- Measure, Report and Verify
- Implement Actions

Business Value
- Policy influence
- Competitiveness
- Labels & Recognition

Societal Value
- Climate, air pollution, environment
- Socio-economic benefits

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Challenges: Different Perspectives

Shippers

Logistics Service Providers

- Transparency is low
- Information may be harder to obtain and verify
- Change may be difficult

- High level of transparency
- Simpler data collection
- Easier to enact change

Sub-contracted Fleets

LSPs Own Fleets

Air
Sea
Trans-shipment Centers
Inland Waterways
Rail
Road

Air
Sea
Trans-shipment Centers
Inland Waterways
Rail
Road
Challenges: Balance

- Accuracy / Flexibility / Simplicity / Transparency
- Reporting / Forecasting
- Developed / formative
- Real / default data
What Next? GLEC Timeline

2015

1. GLEC FRAMEWORK VALIDATION on freight transport chains, tools and programs
2. Base GLEC FRAMEWORK: launch consultation and revision

2016

1. Launch full GLEC FRAMEWORK
2. Pursue Built on GHG Protocol Mark

2014 - 2017

1. GLEC ROADMAP 2015-2017 to address key issues
2. DRIVE ACCEPTANCE AND USE