X.1 LCAs, Carbon Footprinting

X.1.1 Optional -- Environmental Impact of Product Transportation

Manufacturers shall annually conduct an assessment of greenhouse gas (GHG) emissions from supply chain transportation activities for products declared to conform to this Standard, from the point of final product assembly to the customer or transfer of product ownership.

The scope shall include transport for the applicable modes of freight movement for road, air, sea, inland waterways and rail, for products declared to conform to this Standard. The manufacturer may include additional products in the scope.

The manufacturer may choose to exclude from the assessment transportation segments where the customer controls the decision on the carrier choice and/or mode of transportation.

The assessment of supply chain GHG emissions shall include well-to-wheel GHG emissions from all modes of freight movement utilized (road, air, sea, inland waterways and rail), and shall be performed once per fiscal or calendar year using one or a combination of the following methodologies:

- the following mode-specific methodology as geographically applicable (if well-to-tank emissions are not included in a mode-specific methodology they shall be included by means of a scaling factor (such as that included in GLEC)):
  - Road—U.S. EPA SmartWay Performance Benchmarking Methodology or CEN EN 16258
  - Air—International Air Transportation Association (IATA) RP167
  - Sea—Clean Cargo Working Group (CCWG) Carbon Emissions Accounting Methodology or International Maritime Organization (IMO) Energy Efficiency Design Index (EEDI)
  - Inland waterways—IMO EEDI or U.S. EPA SmartWay Performance Benchmarking Methodology
  - Rail—U.S. EPA SmartWay Performance Benchmarking Methodology or EcoTransIT Information Tool Worldwide (EcoTransIT World)
- a methodology which includes a well-to-wheel performance-based assessment that uses fuel-based or activity-based metrics for each applicable mode (e.g., weight and, or volume of freight moved, and/or distance by mode). Data used shall include fuel consumption and published emission factors by fuel type.

A summary of results for absolute freight GHG emissions (e.g., annual tonnes of CO2e) and normalized GHG emissions (e.g. grams of CO2e per tonne-km) for each mode (road, air, rail, inland waterways and sea) shall be publicly disclosed annually and shall indicate what framework or mode-specific approaches were used and where third party verification applies.

Each year, results of the transportation carbon footprint shall be third party verified against the standard(s) used to calculate the transportation carbon footprint.

Manufacturers shall also develop a transport supply chain greenhouse gas emission reduction goal and publicly report progress towards meeting this goal annually.
Verification requirements:

(a) Demonstration of the location where the summary of results, the transport supply chain greenhouse gas reduction emission goal and progress report towards the goal are publicly posted (e.g. manufacturer URL, Corporate Sustainability Report (CSR) report or program URL),

(b) Demonstration of, if applicable, third-party verification in conformance with the applicable modes in the GLEC Framework or other mode-specific approaches described above. Document shall include credentials and contact information of third-party verifier.

Definitions

Well-to-wheel emissions: an accounting of the life cycle GHG emissions from transportation of products. Well-to-wheel analysis assesses the overall greenhouse gas impacts of a fuel, that include each stage of its production and use. GLEC defines this as an “approach to estimate the impact of the full fuel cycle including fuel production.”

Well-to-tank emissions: an accounting of the GHG emissions from fuel production, including extraction, cultivation, refining, transformation, transport and distribution of fuels. This is the first stage of the life cycle GHG emissions, before the combustion “tank to wheel” or “operating phase.” GLEC defines “Well to Tank” as “upstream phase of fuel production only.”

Normative References

2. U.S. EPA SmartWay Performance Benchmarking Methodology
3. CEN EN 16258, Methodology for Calculation and Declaration of Energy Consumption and GHG Emissions of Transport Services (Freight and Passengers).
4. International Air Transportation Association (IATA) RP1678
5. Clean Cargo Working Group (CCWG) Carbon Emissions Accounting Methodology
6. International Maritime Organization (IMO) Energy Efficiency Design Index (EEDI)
7. EcoTransIT Information Tool Worldwide

Acronyms

GHG – greenhouse gas
GLEC - Global Logistics Emissions Council
IATA - International Air Transportation Association
CCWG - Clean Cargo Working Group
IMO – International Maritime Organization
EEDI - Energy Efficiency Design Index