

The need for **external verification** of performance assessment in goods transport

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Deutsche Post DHL was the first globally operating logistics company to set itself a CO₂ efficiency target



Example: Customer CO₂ Emission Summary

Multinational Express Company A

Based on our detailed analysis of your company's shipping data by weight, zone, and mode, we have determined that your estimated carbon dioxide emissions resulting from Company A shipping equates to:

791.57 Metric Tons of CO₂
0.92 CO₂ (lb) per rated lb.

- Our World Resources Institute (WRI) consistent methodology includes industry standard CO₂ fuel burn factors, utilities, and transportation specific operational metrics to break out your share of all Company A emissions related to moving packages via Express, Ground, and Freight.
- The analysis is based on historical Express, Freight, Ground, and Home Delivery shipping data for Express account number 1234, Sub-Group 111, for the period 01/01/200X to 12/31/200X.
- Company A transportation services may have multiple routings and incur mode changes based on day of week, volume levels, etc. The CO₂ total identified in this analysis aggregates carbon emissions produced from various routes, modes, and the associated shipment weight.
- Service routing decisions are based on minimizing fuel consumption, maintaining package service commitments, and other operational requirements for the Company A network. Individual customer distribution changes may not impact the Company A network service routings, mode, or frequency.

Example: DHL Carbon Footprint Report


Detailed presentation and calculation based on NTM, CCWG, Econtransit, HBEFA etc.

Detailed Report

Standard Report (Overview)

illustrative

illustrative




Customer Carbon Footprint Report

Customer Name: xyz company
Reporting Period: Year 2009
Reporting Scope:

Contact Person (DHL): John Doe
eMail contact: John.doe@dhl.com
Report Date: June-2010

Customer account	Transport mode	Tradelane		Chargeable weight [kg]	#shipments	CO ₂ [kg]	Comments
xyz company TW	Airfreight	SYD	MIL	5,0	1	60,7	
xyz company TW	Airfreight	SYD	MNL	12.080,0	60	57.947,7	
xyz company TW	Airfreight	SYD	NRT	22.464,0	112	132.908,4	
xyz company HK	Airfreight	SYD	ORD	2.617,0	13	28.610,5	
xyz company HK	Airfreight	HKG	ORD	190,0	1	2.221,0	
xyz company HK	Airfreight	HKG	JFK	12.935,7	65	128.841,1	
xyz company HK	Airfreight	HKG	FRA	1.532,0	8	14.488,6	
xyz company AU	Airfreight	SYD	SCL	711,0	4	5.986,0	
xyz company AU	Airfreight	SYD	SHA	327,0	2	1.947,2	
xyz company NZ	Airfreight	AKL	LHR	896,0	4	4.318,5	
xyz company US	Airfreight	ORD	LHR	10.788,0	54	109.778,0	
xyz company US	Airfreight	ORD	AMS	6,0	1	71,1	
xyz company US	Airfreight	JFK	LEJ	15.415,0	77	85.197,4	
xyz company US	Airfreight	JFK	MAD	14.941,0	75	170.725,8	
xyz company CA	Airfreight	YVD	FRA	2.070,0	10	25.149,3	
xyz company CA	Airfreight	YVR	LAX	134,0	1	1.370,8	
xyz company CA	Airfreight	YVR	JFK	39,0	1	178,4	
Total				97.150,7	487,5	769.800,5	


The calculation is based on the product of transport work (tkm) and specific emission factors (g CO₂/tkm).
 The emission factors are based on official sources (HBEFA, Econtransit, CCWG, NTM and others)



Customer Carbon Footprint Report

Customer: Smith Industries
Reporting Period: 01.01.2008 - 01.01.2009
Reporting Scope: Asia Europe
DHL Contact: John Doe
Date: 26.03.09





Customer Carbon Footprint & Transport Work

CO ₂ Emissions (in tons)	Transport Work (in 1,000 tonkm)	Total Footprint
164 94%	219 22%	 175 tons CO₂
8 5%	700 72%	
0 0%	0 0%	
3 2%	54 6%	
175 Total	973 Total	

Customer Carbon Emissions per Transport Work

(compared to consumptions of different transport modes)

Transport Distance emitting 1 Ton of CO₂:

- 10 tons  50 - 250 km
- 10 tons  1,200 - 2,000 km
- 10 tons  2,500 - 8,000 km
- 10 tons  1,600 - >10,000 km

Carbon Neutral Transport

DHL provides a certified carbon offsetting to its customers. If a customer chooses to offset his emissions, a fixed cost per ton CO₂ is charged to the customer in order to reinvest it into climate improving projects. The offsetting process is certified by an external company (SGS, Switzerland) and the customer gets a certificate for his environmental contribution.

Calculation Method & Source Data

The calculation is based on the product of transport work (tonkm) and specific emission factors (g CO₂/tonkm). The emission factors are based on official sources (HBEFA, Econtransit, CCWG, NTM and others)

Additional Comments

Example: DHL Express Carbon Footprint Report

Externally verified by certification firm (based on ISO 16064)

Example on communication



- ✓ Detailed, comprehensive quarterly and annual Carbon Footprint reports
- ✓ Report that provides a breakdown of customers CO₂ emissions across product, trade lane, account number and specified period of time
- ✓ The calculation approach, methodology and report are verified by an independent third party Société Générale de Surveillance S.A.
- ✓ The Carbon Footprint Report service is offered in conjunction with international outbound /inbound and domestic Time Definite shipments

Example: Carbon Footprint Analysis Report

Multinational Express Company B

Carbon Footprint Analysis Report

Request Number:	00058	Report Date:	Apr 15 2009
Customer Name:	Customer Y	Region:	Southeast
Analysis Time Frame:	February 2009		

Mode	CO2 Emissions (Metric Tonnes)
Air Transport	1371.22
Facilities	138.67
Ocean Transport	5.28
Rail Freight Transport	0.18
Road Freight Transport	10.07
Total CO2 Emissions from Global Network*	1525.42

* Transportation portion of calculation may include non carriers

Calculation methodologies:

- Weight and distances are used in combination with GHG Protocol conversion factors.
- "Great Circle Distances" for global Air transport and "Road Distances" for ground transportation are used to determine distance for weight and distance based calculations.

Example on communication

Development

- ▶ Developed in consultation with reputable NGO's, environmental organizations, universities, and interest/trade associations

Verification

- ▶ The program has been granted "Verified" status by a leading organization as to the science and math involved in the certification process

External praise

Statements of support from:

- ▶ Business for Social Responsibility (BSR)
- ▶ Sustainable Packaging Coalition (SPC)

External verification of transport emission calculations is already here but needs strengthening

Drivers:

- ▶ Measuring and reducing environmental impact of transport services
 - ▶ National targets, Corporate targets, Customer requests
- ▶ Reporting corporate footprints
- ▶ Customer reporting (Transport buyer)
 - ▶ Consignment / product level / account level
- ▶ Performance reporting vs. industry norms e.g. NTMe2cap

Reporting standards

- ▶ *WEF Consignment-Level Carbon Reporting*
- ▶ *GHG protocol*

Assurance standards

- ▶ ISO 14064

Our point of view:

- ▶ Credibility is key for success in the market:
 - ▶ Robust methodology
 - ▶ Robust tools
 - ▶ Internal controls of processes, data and systems
 - ▶ External verification
 - ▶ Successful communication of the above
- ▶ Previous reporting standards not specific enough to allow for meaningful comparison
- ▶ Applied assurance standards too generic, not providing enough guidance

Reduced risk and increased value.

Data quality continues to be a significant issue for reporters and report users. In this context, it is not unusual for large companies to issue restatements of sustainability disclosures. In a 2011 study, found that 1/3 of the 250 largest global companies had issued a restatement of non-financial information.

Market Development within Sustainability Assurance

The reporting and verification of non-financial data is quickly becoming more harmonized with that of financial data

		Pre- 2003	2003 - 2013	2013 - 2020
Supplier	Type of supplier	<ol style="list-style-type: none"> 1. NGO's 2. CSR Consultants 3. Big Four, 4. Certification firms 	<ol style="list-style-type: none"> 1. Big Four, 2. Certification firms 3. NGO's 4. CSR Consultants 	<ol style="list-style-type: none"> 1. Big Four, 2. Certification firms 3. CSR Consultants
	Value propositions	<ul style="list-style-type: none"> • Data accuracy audit • System validation 	<ul style="list-style-type: none"> • Organizational performance audit & recommendations 	<ul style="list-style-type: none"> • Integrated assurance • Credibility for commercial assertions
	Engagement focus	<ul style="list-style-type: none"> • CSR reports • Management systems 	<ul style="list-style-type: none"> • Sustainability reports • Carbon accounting 	<ul style="list-style-type: none"> • Integrated reports • Sustainability communication
Customer	Buying role	<ol style="list-style-type: none"> 1. CSR 2. External affairs 3. Corporate marketing 	<ol style="list-style-type: none"> 1. CSR 2. CSO 3. External affairs 4. CFO 5. Marketing 	<ol style="list-style-type: none"> 1. CFO 2. External affairs 3. CSO, 4. CSR 5. Marketing
	Objectives	<ul style="list-style-type: none"> • Credible environmental reporting leadership 	<ul style="list-style-type: none"> • Credibility • Compliance, management advice 	<ul style="list-style-type: none"> • Support management decisions • Credibility
	Key audience	<ul style="list-style-type: none"> • CSR community • SRI investors 	<ul style="list-style-type: none"> • Public stakeholders • ESG investors • Board members 	<ul style="list-style-type: none"> • Board members • Management • Investors • Customers

Evolution

Tomorrows transport footprint verification will increase credibility

Coming

Reporting standards

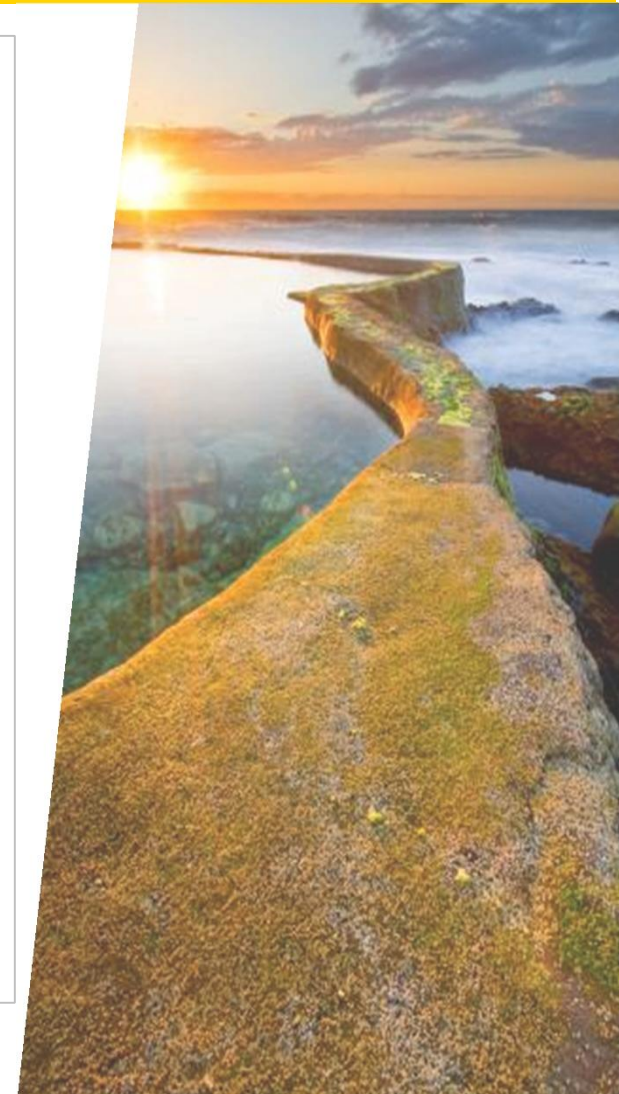
- ▶ EN 16258 (*WEF Consignment-Level Carbon Reporting, GHG protocol*)
- ▶ Grenelle 2 (FR)
- ▶ Others...

Assurance standards

- ▶ ISAE 3000 / ISAE 3410, RevR 6 (SE)
 - ▶ Limited assurance (non financial data)
 - ▶ *Reasonable assurance (financial data)*
- ▶ Sector specific “supplements” – verification manuals, checklist etc – e.g. Grenelle 2 & CEN

Auditors

- ▶ Independent auditors, specializing in audit of non-financial information



Thank you!



EY

Building a better
working world