Gebrüder Weiss

Welcome to the ORANGE world

EcoTransIT CO_2 Calculator at Gebrüder Weiss

18 April 2012

Dr. Peter Waldenberger

Agenda

- ➤ **Facts and figures of GW**

- ➤ **Why EcotransIT?**

- ➤ **Use of EcotransIT**
  - ➤ **for land transport**
  - ➤ **for overseas transport**

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EcoTransIT World

4,600
Employees

1823
Date of founding of GW

3,500
Average number of GW trucks on the road on any given day.
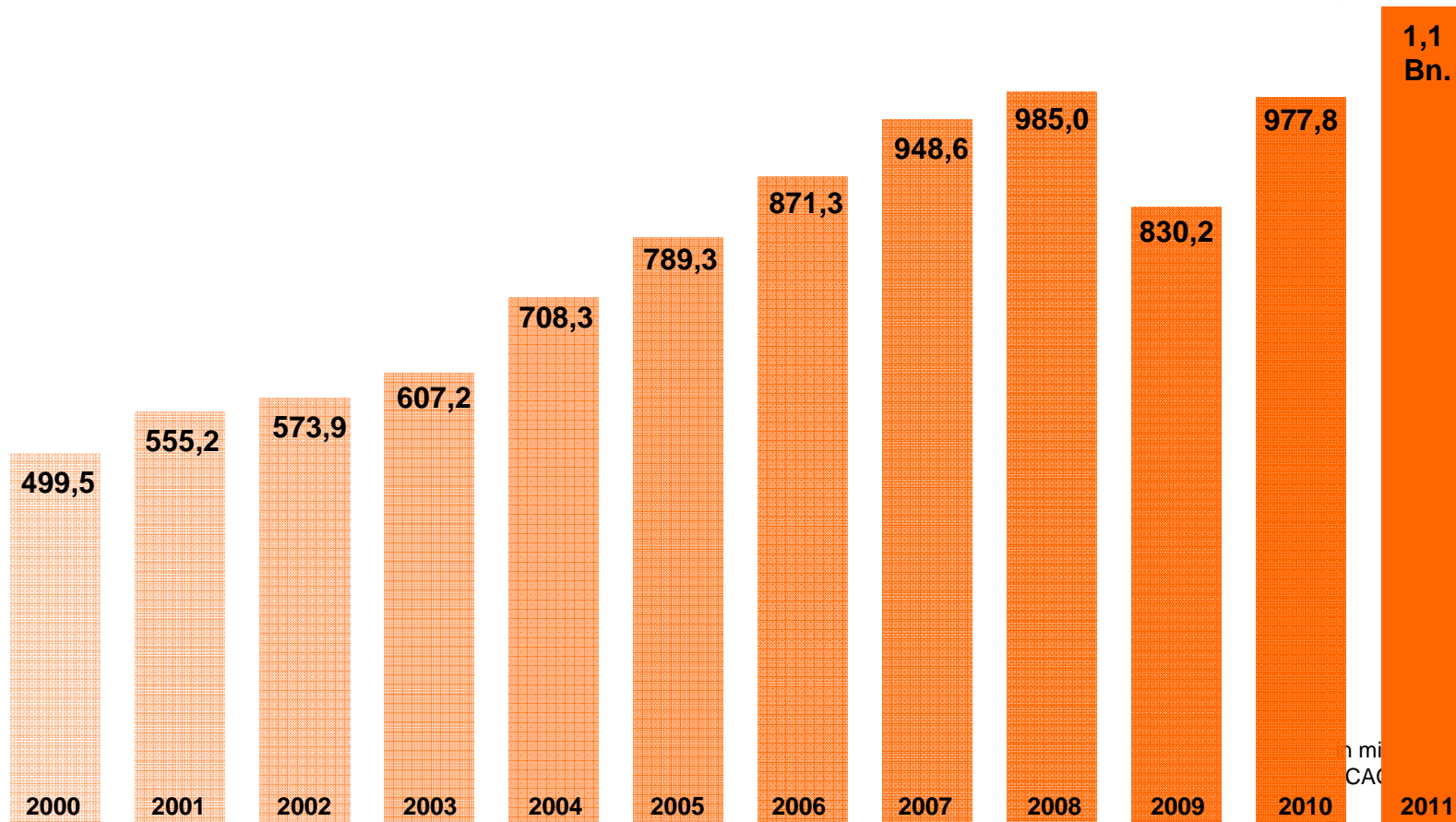
158
GW locations worldwide

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EcoTransIT World

830
Worldwide routes

8,900,000
Consignments forwarded worldwide annually

450,000 m²
Logistics area

Development of net sales

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EcoTransIT World

Year	Value
2000	499,5
2001	555,2
2002	573,9
2003	607,2
2004	708,3
2005	789,3
2006	871,3
2007	948,6
2008	985,0
2009	830,2
2010	977,8
2011	1,1 Bn.

EcoTransIT
Co2 calculator

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➤ **GW joined EcoTransIT in 2011**

➤ **GW decision in favour of EcoTransIT:**

    ➤ Proven tool with a long track record

    ➤ Sound scientific background (Öko-Institut and IFEU)

    ➤ Bulk data processing is possible

    ➤ Consortium massively involved in CEN standard development

➤ **Planned output from EcoTransIT:**

    ➤ CO_2 emissions on customer and transport-specific invoices

    ➤ On customer basis for all shipments

    ➤ At the branch level

    ➤ At the vehicle level

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- ➢ **GW deliver transport data at the consignment and long leg position with a secured interface to EcoTransIT**

- ➢ **Initial data stored in EcoTransIT (emissions at the vehicle level) will primarily be average values; GW improve continuously the data quality)**

- ➢ **Why average values?**

  - ➢ GW has exact consumption data available only to a partial extent (e.g. partners)

  - ➢ This is allowed by the CEN standard

  - ➢ This is currently common practice

- ➢ **Schedule:**

  - ➢ Completion of high-level IT design   End of February 2011

  - ➢ Completion of programming   End of May 2011

  - ➢ Tests and debugging   End of September 2011

  - ➢ Go live at branch level   Starting November 2011

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➤ **GW can provide reports as Excel File to customers**

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Erstellungsdatum:		06.03.2012										Gebrüder Weiss		
2	Berichtszeitraum:		01.01.2012 - 06.03.2012										Transport und Logistik		
3	Erstellt von:		Sutterluety Christian												
4															
5	Bericht erstellt für:		SCHOELSE01												
6			Customer												
7			CH 9475 Sevelen												
8															
9												Entfern.	Primärenergieaufwand[MJ]		CO2-Emi:
10	Sendungs- datum	GW Job Nr.	Auftrag Nr.	Absender	Abs Land	Abs PLZ	Empfänger	Empf Land	Empf PLZ	Gewicht [kg]	[km]	Well-to- Tank	Tank-to- Wheel	Well-to- Wheel	Well-to- Tank
11	01.02.2012	2540293152	FEBER 2012	Customer	CH	9475	diverse Kunden Europa	CH	9999	20337	67	240,01	788,00	**1028,01**	9,77
12	11.01.2012	2518221136	87257	Customer	CH	9475	SAMPLEX AG	CH	5012	98	201	9,62	31,57	**41,18**	0,39
13	16.01.2012	2520158748	.	Gebrueder Weiss AG	CH	9423	Customer	CH	9475	624	53	16,08	52,78	**68,86**	0,65
14	17.01.2012	2520589769		VEROSOL FABRICS B	NL	7151 HZ	Customer	CH	9475	360	775	71,79	241,53	**313,32**	2,83
15	20.01.2012	2521117461	378022	Customer	CH	9475	MORREKS ÄRIGRUPP O	EE	11317	179	2139	68,61	232,47	**301,08**	2,69

➤ **GW can also provide results via interface to customers**

CO2 calculation
example overland transport

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1.9 ton Consignment from CH-3186 to SI-6210 via Pratteln (Basel), Altenrhein, Ljubljana

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Pick-up
Consignor via Pratteln
to Altenrhein
Distance: 289 km
CO2: 96 kg Well-to-Wheel

Long leg
Altenrhein to Ljublana
Distance: 565 km
CO2: 50 kg W-to-W

Delivery
Lju. to Consignee
Distance: 80 km
CO2: 57 kg W-to-W

Calculation for Long Haul

Algorithm for Long Leg Calculation

- **One calculation for each long leg**

- **Chargeable weights of all consignments on a long leg are added up**

- **Vehicle type (e.g. 24-40t), emission standard (e.g. EURO V), load factor and empty trip factor are determined**

- **Data set for the long leg is created and submitted to EcoTransIT**

- **Emission results from EcoTransIT are distributed among the consignments depending on the chargeable weight of each consignment**

- **Results are saved for each consignment for each long leg**

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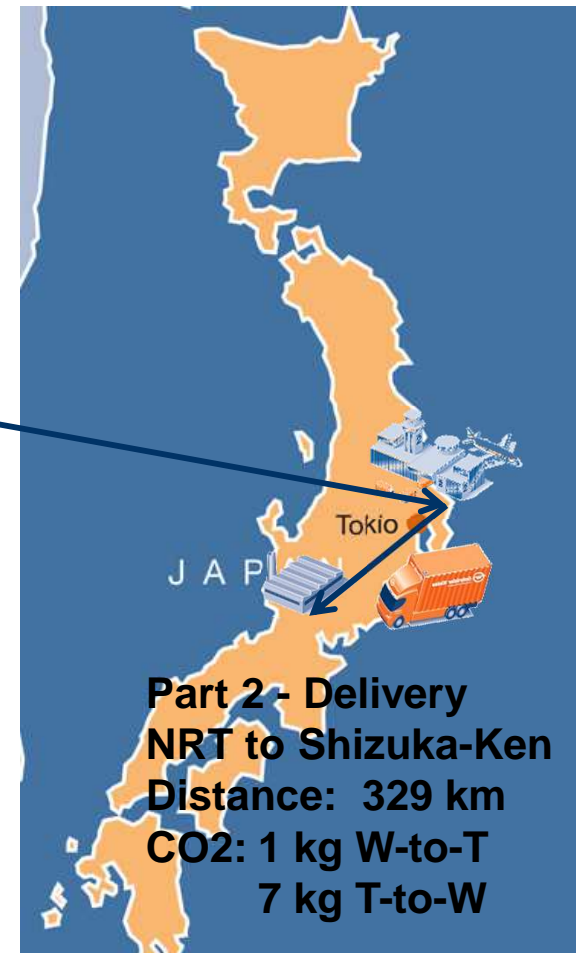## Algorithm for Pick Up / Delivery

- **One calculation for each consignment**

- **Weight of the consignment, vehicle type (e.g. 24-40t), emission standard (e.g. EURO V), load factor and empty trip factor are determined**

- **Data set for the pick up / delivery is created and submitted to EcoTransIT**

- **Emission results are saved independently for pick up and delivery**

Consignment 0.16 ton from CH-9475 to JP-430 Shizuoka via Wolfurt (HOH), Zurich (ZRH), Toyko-Narita (NRT)

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Part 1 — Pick-up, Air transport
From CH-9475 via HOH and ZRH
to Toyko-Narita
Distance: 10,198 km
CO2: 114 kg Well-to-Tank
790 kg Tank-to-Wheel

Part 2 – Delivery
NRT to Shizuka-Ken
Distance: 329 km
CO2: 1 kg W-to-T
7 kg T-to-W

Calculation for Air / Sea Freight

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Algorithms for air and sea freight:

- **Same rules apply as for road freight**

- **Plane and ship types are selected by EcoTransIT depending on airports, ports and routes**

- **Load factor and empty trip factor are determined by EcoTransIT**

- **Long hauls are calculated for each consignment independently**

Thank you for
your attention!

GW moves