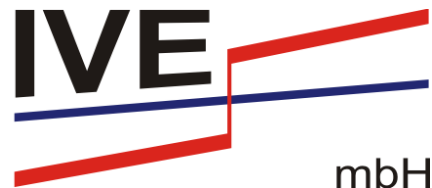




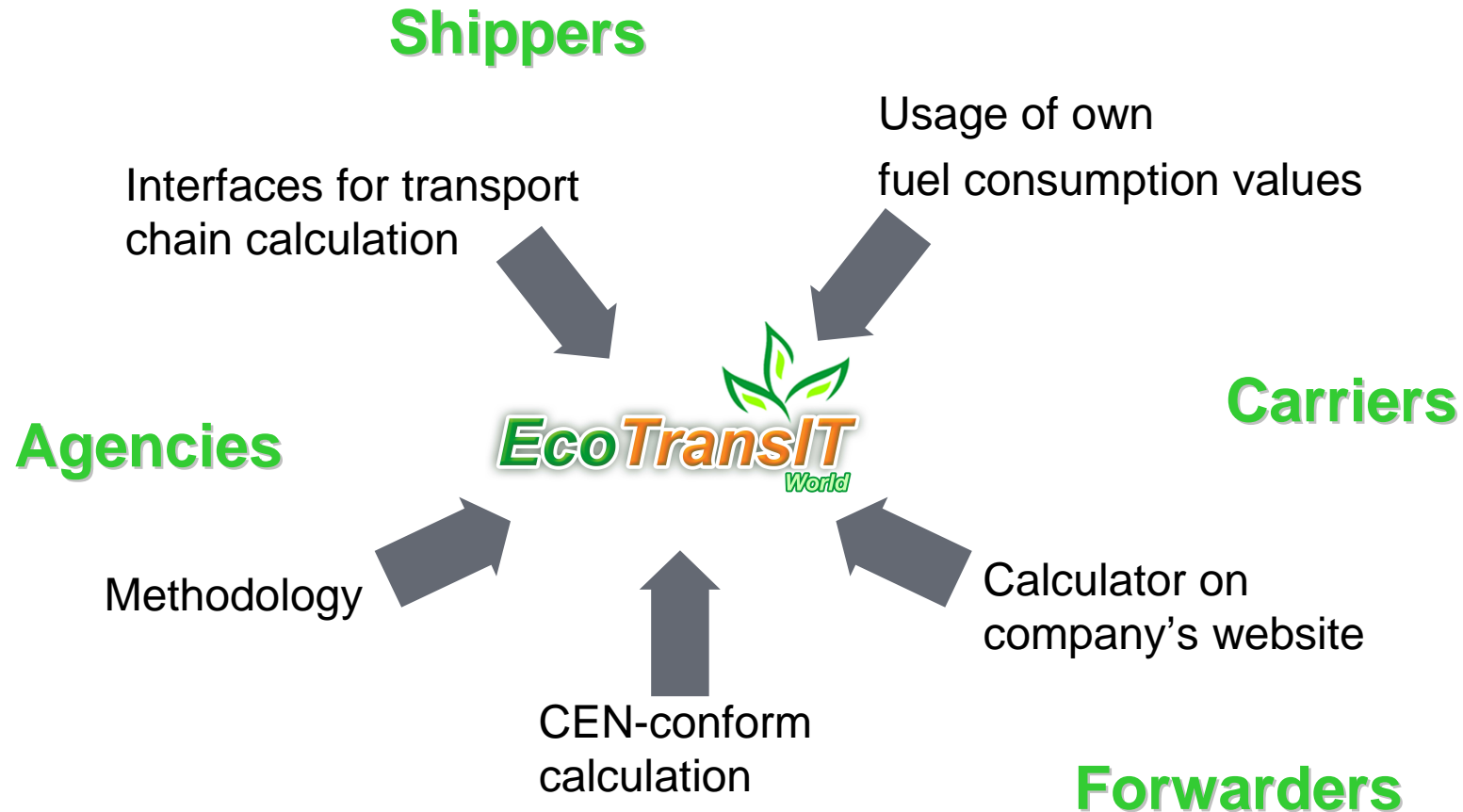
EcoTransIT World Consortium:

How to make the best use of the tools for company purposes?



Ralph Anthes
IVE mbH project manager





Business solutions

EcoTransIT World structure and features



- EcoTransIT is divided in stand-alone modules
 - Calculation module: EcoTransIT World server (or Backend)
 - Configuration modules: Website, business solutions (or Frontend)

Configuration modules (Frontend)

2004	Website www.ecotransit.org
2009	Calculation of simple transport lists (no via points)
2010	New www.ecotransit.org front-end, standard business solutions, calculation with two via points
2011	Calculation of any transport chain

Calculation module (Backend)

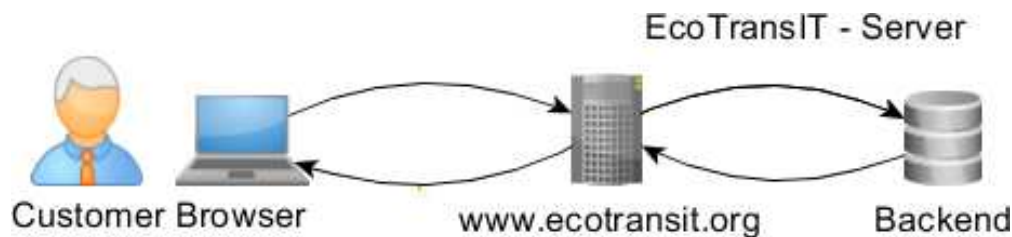
2008	Flexible load and empty trip factor, EURO 5
2009	Usage of GIS networks for the routing
2010	Redesign of the calculation (incl. TTW, WTT), global coverage with EcoTransIT World, Update emissions factors
2011	Business solutions enhancements, like t/TEU, better location identification
2012	100% CEN adaption, EURO 6, own consumption factors, predefined train types, update emission factors

Business solutions

Single transport via website



Method	Input	Output	Year	History
Via Website for single calculations	HTML forms	Table, graphs, pdf	2004	~8.000 calc/day



The screenshot shows the 'CALCULATION PARAMETERS' section of the EcoTransIT website. The interface includes the following fields and options:

- Input mode:** Extended (dropdown)
- Freight:** Amount: 100, Unit: Items, Type: average goods, Define handling: -
- Origin:** City district (dropdown), Please press ENTER to confirm (input field), On-site rail track available (checkbox)
- Transport Chain 1 (TK 1):** Type of transport: Truck, Vehicle type: 24-40 t, Emission standard: EURO-V, Load factor: 60%, EIF: 20%, Ferry routing: normal
- Transport Chain 2 (TK 2):** Type of transport: Train, Train weight: 1000 t, Emission standard: electrified, Load factor: 60%, EIF: 50%, Ferry routing: normal
- Destination:** City district (dropdown), Please press ENTER to confirm (input field), On-site rail track available (checkbox)

Buttons for '+ VIA', '+ TRANSPORT CHAIN', 'CALCULATE', and 'RESET' are visible at the bottom of the form.

Business solutions

Many transports via csv-upload



Method	Input	Output	Year	History
Via Website for single calculations	HTML forms	Tables, graphs, pdf	2004	~8.000 calc/day
Via Website for many calculations	csv-File upload	pdf-File	2009	~15.000 calc/day



The screenshot shows the 'Massenkalkulation' (Mass Calculation) interface. At the top, there are navigation links: 'Jobliste', 'Job erstellen', 'Währungskurs', and 'Abmelden'. The main form includes the following sections:

- Zusätzliche Berechnungsangaben:** A summary box showing 'Anzahl der Berechnungen: 1446' and 'Anzahl der Einzelrelationen: 0'.
- Artikel:** A dropdown menu set to 'Durchschnittsgut'.
- LKW:** Fields for 'Transportart' (24-40 t), 'Schadstoffklasse' (EURO-V), 'Beladungsgrad' (60), and 'Leerfahranteil' (20).
- Zug:** Fields for 't' (1000) and 'Elektro'.
- Beladungsgrad:** A field set to 60.
- Leerfahranteil:** A field set to 60.
- Datei:** A text input field with a 'Durchsuchen...' button.
- Layout Report:** A section for report configuration.
- Sprache:** Radio buttons for 'de', 'it', 'fr', and 'en'.
- Logo:** Radio buttons for 'SBB CFF FFS Cargo' (selected) and 'SBB Cargo'.
- Kundenname auf dem Report:** A text input field.
- Kompensation:** A section with several checked checkboxes: 'Relationen im Anhang auführen', 'Kompensationsangebot Anzeigen', and 'Dieselfaktor für Rangieren und Zustellen hinzufügen'.
- Kompensationspreis für Projekte:** Radio buttons for 'In Entwicklungsländer' (selected) and 'In der Schweiz'.
- Währung:** Radio buttons for 'CHF' (selected) and 'Euro'.
- Buttons:** 'Durchsuchen...' and 'Datei senden'.

Business solutions

Many transport chains via csv-upload



Method	Input	Output	Year	History
Via Website for single calculations	HTML forms	Table, Graphs, pdf	2004	~8.000 calc/day
Via Website for many calculations	csv-File upload	pdf-File	2009	~15.000 calc/day
Standard transport chain (2 via)	csv-File upload	csv-File	2010	~ 45.000 calc/day



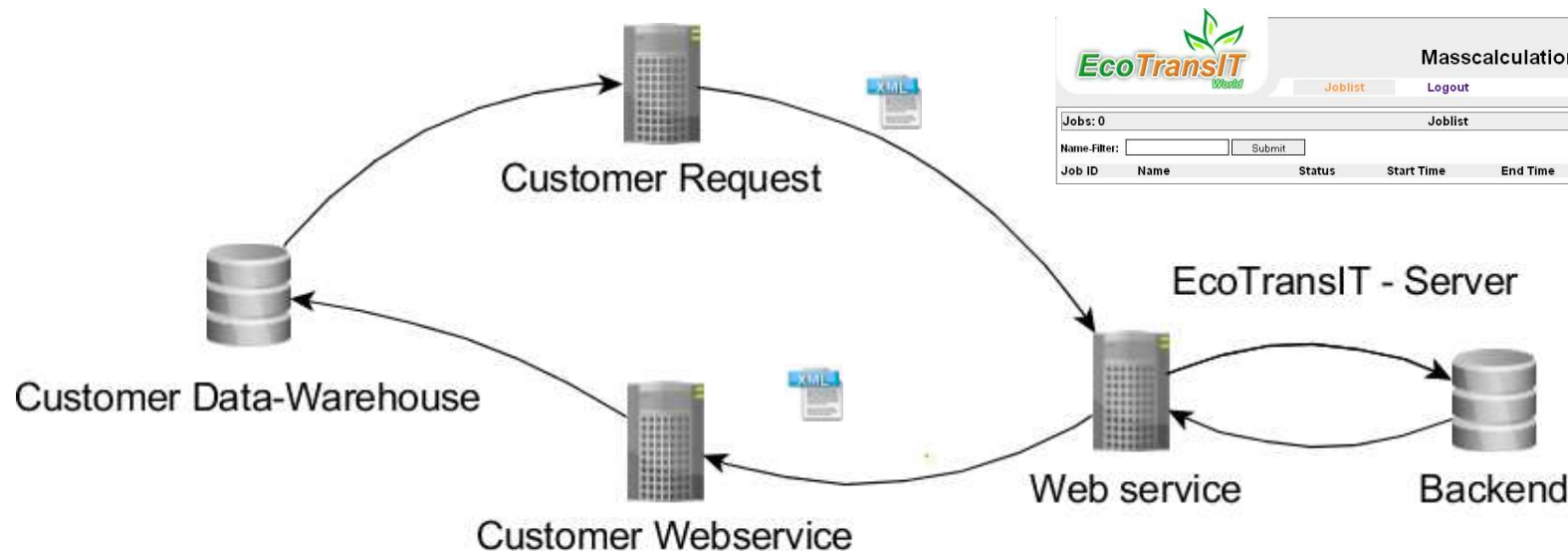
The screenshot shows the 'Masscalculation' interface. At the top, there are navigation links: 'Joblist', 'Create job', and 'Logout'. On the right, it displays 'Calculation count: 74' and 'Relation count: 0'. Below this, there are 'Additional calculation parameters' including 'Type of goods' (set to 'average goods') and 'Intermodal transfer type'. The main part of the interface is divided into three sections for 'Leg 1', 'Leg 2 (Mainhaul)', and 'Leg 3'. Each leg has a set of input fields for 'Transport type', 'Emission type', 'Load factor', 'Empty trip factor', and 'Consideration of ferries'. There are also checkboxes for 'Belly Freight' and 'Passage Utilization', and a 'Speed reduction' field. At the bottom, there is a 'File:' input field with a 'Durchsuchen...' button and a 'Submit file' button.

Business solutions

Many transport chains via web service



Method	Input	Output	Year	History
Via Website for single calculations	HTML forms	Table, Graphs, pdf	2004	~8.000 calc/day
Via Website for many calculations	csv-File upload	pdf-File	2009	~15.000 calc/day
Standard transport chain (2 via)	csv-File upload	csv-File	2010	~ 45.000 calc/day
Any transport chain	Web service (xml)	xml	2011	~150.000 calc/day

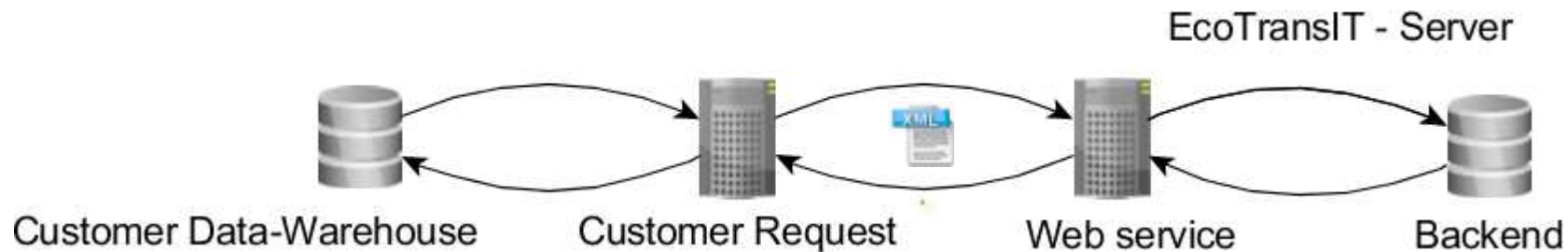


Business solutions

Single transport chain via web service



Method	Input	Output	Year	History
Via Website for single calculations	HTML forms	Table, Graphs, pdf	2004	~8.000 calc/day
Via Website for many calculations	csv-File upload	pdf-File	2009	~15.000 calc/day
Standard transport chain (2 via)	csv-File upload	csv-File	2010	~ 45.000 calc/day
Any transport chain	Web service (xml)	xml	2011	~150.000 calc/day

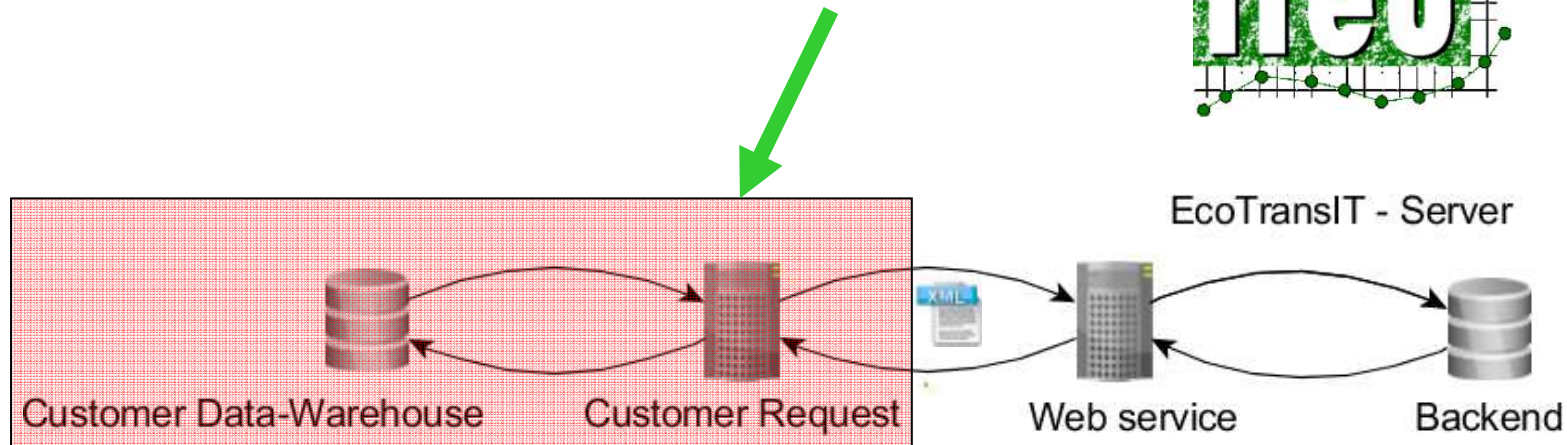


Business solutions

Methodic support inclusive



- Methodic support inclusive
 - Environmental institutes are always included as sub-contractor
 - Verify the result e.g. against CEN-norm
 - Offers consulting solutions for the customer part



Business solutions

What is needed for the calculation



CALCULATION PARAMETERS

Input mode: Standard

Freight: Amount: 100, Unit: Tons, Type: average goods

Origin: City district

Choose main transport mode: Multiple choice possible

- Truck (checked)
- Train
- Airplane
- Sea ship
- Inland ship

Destination: City district

CALCULATE RESET

Minimum needed calculation information

Business solutions

What is needed for the calculation



- The calculation needs at least:
 - Cargo weight
 - Origin, destination (unique identification)

- Other values can be given (load factor, emission class, fuel consumption, etc)

- Missing information will be filled up
 - Standard values of EcoTransIT World
 - Pre-defined values

Business solutions Website integration



Calculator in the company design

Company Business

Über uns | Presse | IR | Karriere | Flotte | Produkte & Dienste | Büros | Lokale Infos | News | Online Business

Übersicht | Management | Philosophie | Nachhaltigkeit | Unsere Auszeichnungen | Stiftung | Geschichte

Qualität & Umwelt | **EcoCalc** | Auf einen Blick | Modernste Schiffstechnik | An Bord | Container | An Land | Politik | Zertifikate

EcoCalc

Mit dem Hapag-Lloyd EcoCalc können Sie sich die Emissionen Ihres Containertransports für die gesamte Transportkette vom Start- bis zum Endpunkt anzeigen lassen. Wir bieten Ihnen eine umfassende Auswertung der folgenden Emissionsarten:

- Kohlenstoffdioxid (CO₂)
- Stickoxid (NO_x)
- Schwefeldioxid (SO₂)
- Feinstaub (PM₁₀)

Bitte füllen Sie folgende Felder aus. Die mit einem * gekennzeichneten Felder müssen mindestens ausgefüllt sein, damit die Emissionen berechnet werden können.

Versandort	BERLIN, GERMANY (DEBER)	▼
Ladehafen*	HAMBURG, GERMANY (DEHAM)	▼
Löschhafen*	NEW YORK, NY, UNITED STATES (USNYC)	▼
Empfangsort	PHILADELPHIA, MS, USA (USPKX)	▼
Ladungsvolumen* 10	TEU	▼

Sehen Sie Ihr Ergebnis weiter unten. **Berechnen**

Hapag-Lloyd EcoCalc Methodik

Die Methodik des Hapag-Lloyd EcoCalc berücksichtigt die verschiedenen Abschnitte der Transportkette. Die einzelnen Abschnitte werden wie folgt berechnet:

Für den Seeteil werden die Kohlenstoffdioxidemissionen nach der Methodik der **Clean Cargo Working Group** errechnet. Die Basisdaten zur Kalkulation liefert Hapag-Lloyd für alle eigenen Containerschiffe sowie alle eingesetzten Längzeit-Chartererschiffe. Die Stickoxid-, Schwefeldioxid- und Feinstaubemissionen des Seeteils werden nach den Methoden von **EcoTransIT World** errechnet.

Für den Vor- und Nachlauf werden sämtlich dargestellte Emissionen (CO₂, NO_x, SO₂ und PM₁₀) ebenfalls nach den Methoden von EcoTransIT World errechnet.

In den einzelnen Abschnitten der Transportkette wird jeweils von Volllastung ausgegangen.

Von	Nach	Transportmittel	Distanz in km	CO ₂ in kg	NO _x in kg	SO ₂ in kg	PM ₁₀ in kg
BERLIN, GERMANY (DEBER)	HAMBURG, GERMANY (DEHAM)	Zug	300	486,35	0,45	0,39	0,04
HAMBURG, GERMANY (DEHAM)	NEW YORK, NY, UNITED STATES (USNYC)	Seeschiff	6.452	5.096,85	200,31	120,61	17,74
NEW YORK, NY, UNITED STATES (USNYC)	PHILADELPHIA, MS, USA (USPKX)	Truck	1.904	1.722,20	25,73	0,40	1,70

Iframe solution, the content of the red square comes from EcoTransIT World

Business solutions

New Customers



- Every customer has different request
 - Every new customer creates new features
 - The development is always geared to the customers needs
- New customer
 - Specification of the customer needs
 - Collection of new developments and usage of existing modules

Initial individual module

New or extended interfaces

Integration of special cases

Consideration of Customers design

Usage of existing modules

Calculation module

Standard business solutions

Already developed modules

Business solutions

Methodic support inclusive



■ Realized business solutions

- Nearly all having a individualism solution
- Different customer having different needs
- Calculation module (EcoTransIT World-Server) is always the same



Join EcoTransIT World Business solutions...



Flexible – Reliable – Multimodal



<http://www.ecotransit.org>

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