INFRABEL UIC

UIC ENERGY EFFICIENCY DAYS 2014

ANTWERPEN, 16 - 19 JUNE

COMPANY RELATED BALANCES VS PUBLIC INFORMATION TOOLS

CARBON FOOTPRINT OF ELECTRICITY GENERATION IN ECOPASSENGER AND ECOTRANSIT

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OVERVIEW

1. Basic principles of EcoTransIT (ETW) and EcoPassenger (EP)
2. Problems regarding green electricity
3. Problems regarding provider mixes
4. Decision of the ETW methodology group
5. Conclusions and recommendations

BASIC PRINCIPLES OF ETW AND EP

Credibility

- Sound, transparent and well documented methodology
- Based on official and reliable data
- Methodology and data are well balanced: no preference for a specific transport mode

PROBLEMS REGARDING GREEN ELECTRICITY

Different company strategies – which one is sustainable?

- RECs, GOs and contracts concerning delivery of green electricity from existing power plants only improve the carbon footprint (CF) balance of the company:
  - transfer of CF to other sectors and consumers
  - no or – so far - only small reduction of overall CF
  - future effects of this strategy cannot be quantified now

REDUCTION OF CO_2?

DB says: with green electricity we reduced our CO_2 balance by 750.000 tonnes within one year

DB WELT | Nr. 04 | April 2014

750.000 TONNEN CO_2 EINGESPART

Mit 75 Prozent Ökostrom ist DB Fernverkehr Umwelt-Vorreiter. Zwischenbilanz nach einem Jahr

An den Türen der ICE weist eine grüne Plakette darauf hin: „Unterwegs mit Ökostrom". Seit dem 1. April 2013 fahren alle 4,9 Millionen Bahn-Card-Inhaber, Mitarbeiter von 26.000 Firmenkunden, 37.000 Zeitkartenbesitzer und weitere Kunden im Fernverkehr mit Ökostrom. Unter dem Strich setzt die DB für drei Viertel ihrer Fahrten im ICE, IC und EC erneuerbare Energie ein. Die erforderliche Menge Ökostrom kauft DB Energie und speist ihn in das Stromnetz ein.

Das Fazit nach einem Jahr:

» Bereits jetzt erreicht die DB im Bahnstrom-Mix einen Ökostromanteil von 35 Prozent. Dieses Ziel war erst für 2020 angepeilt (siehe Seite 1).

» Durch den Zukauf von Ökostrom hat allein DB Fernverkehr seine Klimabilanz 2013 um 750.000 Tonnen CO_2 verbessert. „Mit nur noch 14 Gramm CO_2 pro Personenkilometer bieten wir jetzt das klimafreundlichste Verkehrsmittel – sogar vor dem Fernbus", sagt Henning Colsman-Freyberger, Projektleiter grüne

ICE T Baureihe 411 im bayerischen Fürth-Vach

- **Company View:**

  Yes:

  Amount is reported in the company balance according to official accounting rules

- **Global View:**

  No:

  Overall amount of reduction cannot be quantified so far (transfer of CO_2 from DB to other consumers)

PROBLEMS REGARDING GREEN ELECTRICITY

Alternative strategies – more sustainable?

UIC says: Yes

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- Improvement of efficiency of transports has a direct impact on energy consumption (EC) and carbon footprint (CF):
  - no transfer of CF to other sectors and consumers
  - overall reduction of EC and CF

PROBLEMS REGARDING PROVIDER MIXES

- The general usage of provider mixes demands a fully transparent inventory system over all providers and consumers
- If used, provider mixes have to be obligatory for all, e.g. all transport modes, single transports, transfer processes etc.

-> the usage of provider mixes excludes usage of general public consumer mixes at the same time

-> difference to the „rest of the world“ has to be reported

-> framework to fulfill these conditions is not available so far

PROBLEMS REGARDING PROVIDER MIXES

Would a provider mix improve the results of EP and ETW as public information tools?

- Provider mix can differ for each company or user and consequently for each single train, car and lorry

-> in the case of electric vehicles EP and ETW would compare impacts of electricity production and not of transports

-> no useful information about the impacts of transport

DECISION OF THE ETW METHODOLOGY GROUP

ETW Public tool (www.ecotransit.org):
General view, information and comparison

- no usage of company specific provider mixes; usage of official public consumer mixes based on publicly available data

ETW business solutions:
Company view, company related balancing, benchmarking and communication

- companies are free to balance and report CF based on provider mixes, following the rules of EN 16258 (including Renewable Energy Directive 2009/28/EC)

CONCLUSIONS AND RECOMMENDATIONS

- The good reputation of the public versions of ETW and EP is based on the credibility of methodology and data from independent and transparent sources

-> no railway tools!

-> no company tools!

-> fair and transparent balances and comparison
of transport modes,
not of companies - and not of electricity generation

CONCLUSIONS AND RECOMMENDATIONS

- Electricity provider mixes should not be used for general and independent comparisons of transport modes
- Electricity provider mixes can be used by companies for company balances, benchmarking and communication (e.g. business solutions of ETW)
- Companies should be aware of their responsibility, when using strategies with « green electricity »
- Railway companies and UIC should focus on strategies which influence the environmental performance of railway operation directly

CONCLUSIONS AND RECOMMENDATIONS

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Thank you very much for your attention!

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