Parallel Workshop 1 – Methods to determine the CO₂ emissions from inland navigation

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Strasbourg, April 12th, 2011
Figures of different studies for the CO₂-intensity (CO₂ emission factors) of inland navigation (g/tkm)

- Ghent University, Belgium, 2010
- IFELI/TREMOL, Germany, 2010
- VCI, Germany, 2010
- CEFIC, Belgium, 2010
- DST, Germany, 2009
- TTI, USA, 2009
- STREAM, Netherlands, 2008
- OECD/ITF, France, 2008
- PLANCO, Germany, 2007
- ADEME/VNF, France, 2006
- Haskoning, Netherlands, 2004
- INFRAS, Germany, 2004
- Shift, Netherlands, 2003
- EUB/GL, Germany, 2001
Standardization of a common methodology for the calculation, declaration and reporting on energy consumption and GHG emissions of transport services

Marc Cottignies, ADEME

Main messages of presentation

- Complexe exercise horizon 2012
- First step with limited scope - No emission values
- Methodology for transport companies
- Input asked on CEN enquiry drafts www.enquetes-publiques.afnor.org
- FR legislation planned to inform on carbon footprint for each transport service (in force mid 2013)
Presentation 2: CO₂ chemical transport

Measuring and managing CO₂ emissions of European chemical transport

Jos Verlinden, CEFIC

Main messages of presentation

- Corporate CO₂ reduction incl. transport due to increasing pressure from policy makers and general public
- Most companies still in the learning phase but growing awareness
- No silver bullet to reach CO₂ targets: combination of actions and intensive collaboration among all public and private stakeholders necessary
- Raising logistics efficiencies and reducing costs in most cases = carbon reduction
- Work for CO₂ footprinting with available values from literature
- Need for more detailed IWT emission factors & validation of values
Monitoring and assessment tool for CO₂ emissions in inland transport

Romain Hubert, UNECE

Main messages of presentation

- Web assessment tool worldwide
- No new methodology, based on selection of existing methodologies
- Transport policy convertor for impact calculation
- Creation of capacity building workshops
Presentation 4: Environmental performance

Environmental performance of inland navigation in comparison with other modes

Eelco den Boer, CE Delft

Main messages of presentation

- Policy support study for modal shift, therefore including detouring and pre- and end haulage
- IWT important carbon reduction mode, but this strongly depends on the specific link, scale of transport and vehicle utilization
- Road transport on the heels of IWT or better regarding air pollutants
Calculation of CO$_2$ emissions for a comparison of transport modes

Frank Trosky, PLANCO Consulting

Main messages of presentation
- Policy support study for modal shift
- Uni-modal approach comparing each mode
- Beware of averages: lot of determining factors
- Do not forget the other greenhouse gases
- Vessel size and size of the waterway are most important factors for ecological efficiency
- IWT important carbon reduction mode
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Main conclusions

- Broad range in CO₂ factors due to different parameters, values and methodologies
- Current approaches still have limited scope due to knowledge gaps
- It is a complex field in development
- Industry often uses an activity-based approach, while a fuel consumption-based approach is more accurate
Need for 3 types of methodologies:

- Assessment of fuel consumption by ships (based on real values/EEOI)
- Carbon footprinting for logistics decision-making (multi-modal) and sector decision-making (intra-modal) - CEN standard
- Method for policy development and decision-making

EU level expert exchange, research and neutral validation needed for more detailed and accurate IWT emission relevant data and emission factors which are generally accepted through scientific and stakeholder validation.