Carbon footprint of freight transport

From 2011-06-01 to 2014-11-30, closed project

Project details

<table>
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<tr>
<th>Total cost:</th>
<th>Topic(s):</th>
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<tr>
<td>EUR 2 836 460</td>
<td>SST.2010.1.1-1. - Carbon footprint of freight transport</td>
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<tr>
<th>EU contribution:</th>
<th>Funding scheme:</th>
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<tr>
<td>EUR 1 993 909</td>
<td>CP-FP - Small or medium-scale focused research project</td>
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<th>Coordinated in:</th>
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<td>Germany</td>
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Objective

With foreign direct investments still on the rise and on-going globalization of production and distribution activities, supply chains are often of international nature, encompassing a wide range of various transports and handling elements. The current transport system is powered by 95% petroleum products and is accountable for about 23% of the global energy related CO2 emissions. The potential for achieving a measurable impact by improved transportation processes within supply chains on the worldwide scale is therefore huge.

In the past, carbon footprint calculation obligations did not exist in the sector of transport and logistics, neither on national nor on international levels. Approaches were taken by individual organizations and corporations to develop methods, tools and databases for emission calculations. These approaches vary hugely though, and today a wide range of different methodologies and tools are applied by the various players to calculate their CO2 emissions often focusing on a specific mode of transport. Furthermore different databases are used to calculate emissions with some calculations being based on data measured by individual companies and organizations, others being based on default data provided by public sources (e.g. HBEFA, COPERT 4). Various calculation tools apply different indicators and have different application scopes, often making comparison of the results impossible. In order to analyse the efficiency and effectiveness of different supply chains however, such comparability is required: comparison on shippers' level, on transport mode level, on shipment level, on carrier level, on product level as well as over time are needed in order to identify best practice and improvement possibilities as well as to analyse the impact of amendments to existing processes. Based on this background, the COFRET project's main objectives are to

> review existing methodologies for the calculation of carbon footprint and greenhouse gas emissions (GHG) of freight transport and logistics in the context of supply chains and to evaluate their compatibility with the European standard EN 16258
> identify and prioritise gaps as well as ambiguities in calculation guidelines within the EN 16258 standard regarding coverage of freight transport and logistics in the context of supply chains, supported by the means of real-life case studies
> suggest possible approaches to achieve comparability for the calculation of emissions along supply chains, with a special focus on the identified gaps and ambiguities;

The COFRET approach will comply fully with the European standard EN 16258, published in 2012. The added value of COFRET is that it provides transparency on existing carbon footprint calculation methodologies and that it provides suggestions for next steps needed in order to achieve a global alignment of calculation principles and comparable reporting as part of a process to support global alignment of standardisation.

Related information

Report Summaries

Periodic Report Summary - COFRET (Carbon footprint of freight transport)
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