MEET

Methodology for Calculating Transport Emissions and Energy Consumption

Funding: European (4th RTD Framework Programme)
Duration: Apr 1996 - Jun 1998
Status: Complete with results

Background & policy context:

EU Member States are required to report their annual emissions according to various international obligations. In addition, environmental policy-making requires reliable estimates of emissions for current and future technologies. This is particularly important for the transport sector, where demand has been growing strongly alongside rapid developments in vehicles and fuels.

Objectives:

MEET aimed to provide a basic, Europe-wide procedure for evaluating the impacts of transport on air pollution. This would include comprehensive and up-to-date information on emissions rates and traffic characteristics, as well as methods of calculation.

Related Projects:

- CANTIQUE - Concerted Action on non-technical measures and their impact on air quality and emissions.
- COMMUTE - Common methodology for multi-modal transport environmental impact assessment.
- MESUDEMO - Methodology for establishing a database on transport supply, demand and modelling in Europe.
- SCENARIOS - Scenarios for Trans-European Network.
- STREAMS - Strategic Transport Research for European Member States.
- TRENEN II - Models for transport, environment and energy - strategic transport policy analysis.

Parent Programmes:

FP4-TRANSPORT - Specific research, technological development and demonstration programme in the field of transport, 1994-1998

Institute type: Public institution
Institute name: European Commission; Directorate-General for Energy and Transport (DG TREN; formerly DG VII)
Funding type: Public (EU)
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Key Results:

MEET has compiled a comprehensive catalogue of methods, emissions factors and functions, for use in estimating pollutant emissions and energy consumption from transport. It covers all current vehicle technologies for all different types or classes of road vehicles, as well as rail, shipping and air transport. For road transport, cold start extra emissions, evaporative losses, road gradient and vehicle load effects
are addressed. In addition, guidance is given concerning the emissions behaviour of future vehicles and fuels. Data are also provided on the pollutant emissions associated with energy production.

Examples of the use of the methodologies are given for:

- road and rail transport, (a set of aggregated emissions factors have been calculated for use in simple strategic-level assessments);
- comparisons of passenger and freight journeys using different modes of transport.

All the technical reports can be downloaded from, http://www.inrets.fr/infos/cost319/index.html.

Policy implications

The results from MEET are being incorporated in the COPERT3 methodology and the EMEP/CORINAIR Atmospheric Emission Inventory Guidebook. These tools are provided by the European Environment Agency to help Member States in reporting emissions according to their obligations under the UNECE Convention on Long Range Trans-boundary Pollution, the UN Framework Convention on Climate Change and the EC Monitoring Mechanism of Community CO2 and other Greenhouse Gas Emissions.

The interim results have also been incorporated in the TREMOVE model of the EU transport sector, developed under the Auto-Oil II Programme. This is being used to assess the most appropriate vehicle and fuel standards in order to meet EU air quality objectives in a cost-effective way.

In a third policy arena, MEET is contributing to the pilot study of the traffic and emissions levels on the Trans-European Transport Network. This study is a building block to establish a Strategic Environmental Assessment methodology for taking into account high-level environmental policy objectives when decisions are made on individual infrastructure projects that will enhance the European transport system.

Documents:

meet.pdf (Final report)

STRIA Roadmaps: Other specified
Transport mode: Multimodal transport
Transport sectors: Freight transport
Transport policies: Environmental/Emissions aspects