



New Energy Indicators for Transport: The Way Forward

28 and 29 January, 2008

A Workshop in the Framework of the G8 Dialogue on Climate Change, Clean Energy and Sustainable Development

Organised by the IEA in collaboration with the International Transport Forum

*IEA Headquarters
9 Rue de la Fédération, 75015 Paris
Métro 6 Passy (then walk across the bridge), RER C - Champ de Mars – Tour Eiffel*

At their 2005 Gleneagles Summit the G8 leaders asked the IEA to provide advice on a clean, clever and competitive energy future. As part of its response, the IEA is developing in-depth indicators to provide state-of-the-art data and analysis on energy use and efficiency developments, which can better inform policy-making. The new IEA publication, *Energy Use in the New Millennium: Trends in IEA countries* is a major output from this work. Using a suite of indicators the report examines how changes in energy efficiency, economic structure, income, prices and fuel mix have affected recent trends in energy use and CO₂ emissions. A key finding is that since 1990, the rate of energy efficiency improvement in IEA countries has been less than 1% per year – much lower than in previous decades and not nearly enough to stem the growth in CO₂ emissions.

The International Transport Forum aims to be the worldwide meeting point for debate on transport, logistics, and mobility. As part of that mission, it engages in, and supports, the collection of systematic data on transport activity. The theme of the 2008 Annual Meeting of the Forum, to be held in Leipzig, Germany, is *Transport and Energy: the Challenge of Climate Change*. This meeting will be enriched by a systematic analysis of past trends of, and future scenarios for, the transport – energy connection.

There is considerable consensus that improving the energy efficiency of both passenger and freight transport is a key challenge in moving towards a more sustainable energy future. Transport now accounts for more than one-third of total final energy use in IEA countries and is one of the most rapidly growing sources of CO₂ emissions. But meeting the challenge requires a fact-based approach. One of the major conclusions from the *Millennium* publication is the need for more consistent, comprehensive and detailed indicators and data to analyse trends in energy use and efficiency developments.

Constructing appropriate indicators to support energy efficiency policy development and evaluation is not straightforward. Transport energy use is impacted by a large number of factors including the overall level of demand, modal composition, vehicle fuel efficiency, fuel type, driving behaviour, traffic congestion, load factor and geography; all of which vary widely both within and between countries. Consequently, aggregate indicators of energy consumption can mask very different trends in different modes. More detailed indicators are therefore required to understand and analyse trends and the impacts of policies.

The purpose of this workshop is to share information about best practices relating to indicators development and use and to help guide the IEA's future energy indicators work as it relates to transport, as well as support the International Transport Forum's work on the connection between transport and energy markets. The workshop will bring together statisticians, analysts and policy-makers who are developing and using indicators to discuss and share experiences on the following topics:

- How are indicators currently being used to support energy efficiency policy development and evaluation relating to transport?
- What kinds of new indicators are needed to better understand the patterns and trends in transport energy use and efficiency?
- What data are needed to support the development of these indicators and what data are missing?
- What approaches can be used to fill these data gaps and achieve data consistency across countries?
- What should be the priorities for the IEA's future indicators work relating to transport and how can the IEA and the ITF work together with governments, analysts and other experts in these activities?

An outline agenda is attached; a more detailed agenda with speaker names will be available soon.



New Energy Indicators for Transport: The Way Forward

28-29 January 2008

- Agenda -

Monday 28 January

8:45 **Registration**
9:00 **Welcome and Introduction**
Stephen Perkins, ITF

Aims of the Workshop
Peter Taylor, IEA

9:20 Session 1: Why do we need Indicators and Supporting Data?

A Call to Coordination and Redoubling of Efforts
Lee Schipper, WRI

What do we have? What do we need?
Pierpaolo Cazzola, IEA
Mario Barreto, ITF

9:50 Session 2: Data and Indicators for Passenger Travel Demand

Passenger Kilometres by Mode, Modal Shares of Travel and Relationship to Data in previous Session, (vehicle kilometres, load factor and travel per vehicle)

The Devil is in the Detail
John Apelbaum, Consultant

Travel Demand Data: Do we know where we're going?
Steve Winkelman, CCAP

Data and Indicators for Passenger Travel Demand – the European Perspective
Andreas Naegele, DG TREN

Questions and Answers

11:20 - 11:40 Coffee Break

11:40

Session 3: Data and Indicators for Light Duty Vehicles: Sales/Stocks

Sales Data by Vehicle Class, Fuel Type; alternative Fuel Vehicles, FFVs, Stock Data, Tracking Retirements; Tracking 2nd hand Vehicle “flows” around the World

Transportation End-Use Model Overview

Dominic Demers, NRC Canada

Data and Indicators for Light Duty Vehicles: Sales/Stocks

Rinki Verma, SIAM India

About Data and Indicators for Light Duty Vehicles

Jonas Noreland, Eurostat

Transport Data for Modeling

Marek Šturc, DG ENV

Transport Sector in Brazil

Carlos Feu Alvim, ECEN Brazil

Questions and Answers

13:30 –14:30 Lunch

14:30

Session 4(a): Data and Indicators for Light Duty Vehicles: Fuel Efficiency

Energy efficiency: tested fuel efficiency data for new vehicles and stock averages; on-road vs. test performance, other vehicle characteristics (size class data, weight data, etc.) vehicles by fuel type (gasoline, CNG, diesel, flex fuel vehicles etc.)

Energy Efficiency Indicators for European Cars - A Researcher’s Viewpoint

Theo Zachariadis, University of Cyprus

Carbon/Fuel Indicators for Light Duty Vehicles in Regulatory Space and Real-World

Feng An, iCET

Fuel Efficiency of Passenger Cars in Japan

Masayuki Sano, JAMA

Questions and Answers

16:00 - 16:20 Coffee Break

- 16:20** **Session 4(b): Data and Indicators for Light Duty Vehicles: Fuel Efficiency**
Fuel Efficiency of Light Duty Vehicles in India: Uncertainties in Transforming Stock
Suman Baidya, DLR (on India)
- International Comparison of Fuel Efficiency**
Takao Onoda, IEA
- Fuel Economy in Mexico**
Iván Islas Cortés, INE, Mexico
- Questions and Answers
- 17:50** **Wrap Up of Day 1**
Introduction to the Way the Dialogue will evolve for Day 2
- 18:15** **Cocktail Reception at the IEA**

Tuesday 29 January

-
- 09:10** **Session 5: Data and Indicators for Road Freight Transport**
Vehicle km of Travel by Mode (Trucks, Rail); Load Factors, Size/Weight Class Detail, Truck Characteristics, new Vehicle Sales and Stock Data.
- Data Deficiencies, Inconsistencies and Opportunities in the Analysis of Freight Transport, Energy and CO₂ Relationships**
Alain McKinnon, Heriot-Watt University
- 3 Approaches of Freight Transport Energy Analysis**
Christophe Rizet, INRETS
- Data and Indicators for Road Freight Transport**
Stefan Larsson, ACEA
- Questions and Answers
-
- 10:40** **Session 6(a): Beyond Road Transport**
- The EX-TREMIS Project**
EXploring non-road TRansport EMISsions in Europe
Angelo Martino, Trasporti e Territorio
- Questions and Answers
- 11:10-11:30* *Coffee Break*

11:30 **Session 6(b): Beyond Road Transport**
Environmental Performance Indicators
Raimondo Orsini, UIC

Meaningful Indicators for Public Transport
Heather Allen, UITP

Questions and Answers

12:30 **Session 7: Fuel Prices**

International Fuel Prices

Sascha Thielmann, GTZ

Fuel Prices and Transport Indicators

Olivier Lavagne d'Ortigue, IEA

Questions and Answers

13:30 – 14:30 Lunch

14:30 **Session 8: Roundtable Discussion:**

The Opportunity of the Setup of a comprehensive international Database, or other possible Efforts to move forward

Chair: *Lew Fulton, IEA*

Short Summary Talks on:

- What do we have, what do we lack?
- Secondary data collection – how to coordinate?
- Harmonization and IEA country v. developing country issues

Open Discussion

Conclusions, Next Steps, Way Forward

17:00 **End of Workshop**