



New Energy Indicators for Transport: The Way Forward

28 and 29 January, 2008

WORKSHOP SUMMARY

The IEA Energy Technology and R&D Office, and the International Transport Forum (ITF) held a joint workshop on *New Energy Indicators for Transport: The Way Forward*, 28-29 January 2008.

This two-day workshop examined the quality and coverage of energy-related transportation indicators and data currently available from national governments and other sources around the world. A primary objective was to create a stronger network amongst analysts and data collection agencies to better share data and become more fully aware of what data is available and what gaps exist, and how these might be filled.

The workshop was well attended and featured excellent presentations and lively discussions regarding critical issues in transport such as:

- Travel patterns, structure and modal shares at the national and urban level;
- the growth in vehicle ownership and the resulting numbers of vehicles on the road in different regions;
- the evolution of new car and stock average fuel economy;
- trends in freight efficiency, particularly the logistical efficiency in the trucking sector;
- measurement of and trends in fuel prices around the world.

Noting that “we cannot master what we cannot measure”, several participants pointed out the need to define transport and the importance of collecting information on a comparable basis at the international level, and some noted a significant gap in terms of quality of the information collected at the international level on transport. It also noted that there are similar problems with data on other energy end-use sectors of the economy.

According to many of the contributors to the workshop, the IEA and the ITF should focus primarily on setting common standards for measuring and reporting parameters. This should build on existing work such as the UNECE, Eurostat and ITF [*Glossary of Transport Statistics*](#).

Most of the participants also agreed that effort should be devoted to getting more information into the public domain on data available today (e.g. publishing articles in the scientific literature on the IEA MoMo database). Improving the transparency of the data and modeling involved in this and other work would facilitate international comparisons. They also welcomed IEA/ITF initiatives aimed at achieving improved understanding and access of information on the evolution of energy consumption patterns in transport, well represented in the IEA publications such as [*Energy Use in the New*](#)

[Millennium](#) and [Oil Crises & Climate Challenges](#) and the increasing availability of ITF datasets on the Web.

It was generally recognised that the most reliable data available on transportation energy use and CO₂ emissions are those concerning the amount of fuel consumed, published on a yearly basis for a very large number of countries by the Agency in a number of [statistical publications](#).

Participants noted that many existing data uncertainties can, and should be reduced. Information on the number of vehicles in circulation and data on the year of registration, for instance, could be derived from administrative sources (with limited costs).

Other uncertainties could be reduced with the use of appropriate surveys, like those carried out in France or in the UK for the freight sector, as highlighted in some of the presentations. Fuel economies were also addressed and one presentation, focusing on Japan, showed clearly how reliable estimations can be, once a good collection system is in place and a clear methodology is defined. However, important issues remain when figures from different countries are compared, notably because existing fuel economy tests for new vehicles vary between regions (e.g. US, Europe and Japan).

Some of the presentations covered the issue of fuel prices at the pump, which seem to be broadly covered, even if the data quality could be improved. A number of participants stressed the need to know more on fuel and vehicle taxation, even if other participants noted that information on vehicle taxation can be very complex to collect, given the wide variety of fiscal instruments used and the limited room for standardization.

Participants noted a rising demand for data, but they also remarked that this is very rarely coupled with the willingness to fund research to gather information. Some participants suggested solutions that could help bridge this lack of funds, such as the possibility to obtain proprietary data from some freight operators in exchange for benchmarking them against the average for the sector. That is, by offering a service in exchange for a set of data with a guarantee to preserve confidentiality by only publishing aggregate data. Third parties generally enjoy more trust than government agencies in their ability to preserve confidentiality.

Overall, fuel economy, freight-related data and detailed information on developing countries were identified as the most problematic areas in terms of availability of information. For freight because data on only part of the total transport task is collected.

The IEA and ITF will follow up with a plan for increasing their co-operative efforts (together and with other agencies) to identify, collect, and analyze critical indicators data in order to better assess transport, energy and environment related issues.

Ongoing efforts to collect available information will be continued, and an informal network of collaboration (starting from all the participants in the Workshop) will be set up in the forthcoming weeks. The aim will be to share information on publicly available data sources in order to help speed up the research of information. On a more formal level, the IEA's input to the G8 summit in Japan in July 2008 will include a recommendation that member and non-member Governments should work more closely with the IEA to improve the consistency and scope of data collection for monitoring energy use and efficiency improvements across all end-use sectors, including transport. Similarly, the ITF will include such a recommendation in the materials prepared for their Ministerial meeting in Leipzig in May 2008.