

# TRANSPORT AND ENERGY

The Challenge of Climate Change



International  
Transport  
Forum

LEIPZIG 28-30 May 2008

**MINISTERIAL SESSION**

**The Challenge of Climate Change**

*Key Messages*

29 May 2008

*The first International Transport Forum was held in Leipzig, Germany from 28-30 May 2008.*

*The following key messages and accompanying cover note from the Finnish Presidency of the Forum were discussed by Ministers of Transport at the Forum.*

*They are supported by Ministers and provide a platform for their future actions.*

*They are being made available publicly as one of the outputs of the Forum.*

## INTRODUCTION BY THE PRESIDENCY

Transport Ministers have met in the International Transport Forum to discuss the energy and climate change challenges for the transport sector. This is a unique occasion as it is the first time that Transport Ministers have come together on such a scale to discuss this important topic.

All 51 International Transport Forum Members were present, and we were pleased that India joined us as special guest.

We have had a productive, lively and rich exchange.

We noted that whilst transport networks and systems vary greatly between our countries, there are many points of convergence among us on the challenges ahead.

We agree that improving energy efficiency and reducing transport emissions are among the greatest challenges facing the sector. And we agree that we need to work more intensively both nationally and together to find the best ways forward. Many ideas and policy approaches have been shared during our discussions, including the ambitious goal to work to decarbonise the transport sector. Policies in the sector to improve efficiency, reduce congestion, manage road traffic and support the development of public transport in cities are very widely shared and will help contribute to our aims.

The subject is complex and circumstances differ among Countries and regions. It is not surprising therefore that there are areas where views on commitments or instruments differ and where further research, analysis and discussion are needed to find appropriate approaches, regionally, nationally and globally. These topics include how best the transport sector can formulate its objectives (e.g., with specific targets), how biofuels can be supported and developed in a sustainable way, and the most effective ways that market-based measures including emissions trading can be applied in the transport sector. Some countries see emissions trading as a robust, cost-effective mechanism for reducing CO<sub>2</sub> emissions from the sector and are ready to implement it.

The attached Key Messages provide guidance for our future actions. We generally support these messages, and will work to implement the policies and measures suggested. We do note that the individual circumstances and starting points are very different across Countries, and these messages are not binding and need to be adapted to individual country circumstances.

We are determined to take this agenda forward, and look forward to working closely together, sharing ideas, research, policy practices and technology.



Mrs Anu VEHVILÄINEN  
Minister of Transport, Finland  
President of the ITF 2008



## KEY MESSAGES FOR MINISTERS

### TRANSPORT AND ENERGY: THE CHALLENGE OF CLIMATE CHANGE

#### Background

Transport is an essential driver of economic development and growth. It facilitates exchange among countries and fosters relations among peoples. Transport activity varies greatly and is growing at different rates in different modes and geographical areas. Transport infrastructure and systems are poorly developed in many parts of the world.

Transport activity is, at the same time, a significant and growing contributor to global climate change. Responsible for 13% of all anthropogenic emissions of greenhouse gases, transport represents an even greater share of CO<sub>2</sub> emissions from fossil fuel combustion at 23% of the world total and 30% of OECD emissions. Transport emissions globally are growing faster than total CO<sub>2</sub> emissions. The sector is 95% dependent on oil and accounts for 60% of all oil consumption. Transport is increasingly exposed to oil price and supply shocks.

#### An Immense Challenge; a Promising Opportunity

Finding the right balance between supporting the economic drivers of trade and mobility and reducing transport's energy intensity and emissions is among the top priorities on most Transport Ministers' policy agendas today. It is indispensable to decouple traffic growth from energy demand and thereby begin to foster the decarbonisation of the transport sector.

A diverse range of policy measures and instruments show significant potential to improve efficiency in and reduce emissions from the transport sector. These policy choices necessarily reflect the specificities of individual Countries, which are approaching these problems from different starting points and under different economic, institutional, social and political circumstances.

If all measures currently proposed by Countries are fully implemented, the projected growth in emissions can be reduced by over a third. Despite this, most indications are that transport emissions will increase by two thirds over the next thirty years unless transforming technologies are developed.

This presents an enormous challenge for the transport sector that carries with it an urgent need for action. Studies and expert discussions show, however, that it is achievable in the long run. And meeting this challenge will also provide promising new opportunities for business and industry.

#### Political Commitment and Action are now Urgent

Whatever the policy mix, strong commitment and determined action to reduce transport's energy consumption so as to reduce CO<sub>2</sub> emissions is now imperative. The broad objective for all Countries should be to reduce transport's dependence on oil and to move towards a low-carbon transport system as soon as possible.

More specific national objectives should also be considered. Some Countries, for example, have set specific targets for energy efficiency improvements in the sector. Others are working towards quantified targets for CO<sub>2</sub> emissions reduction. Countries are urged to continue to exchange experience and good practice to help ensure that the most effective and appropriate policies are implemented in each case.

### **A Strategic Approach is Required**

Countries should aim to develop a broad strategic policy approach – both within and across modes and at all appropriate levels of government -- to significantly improve energy efficiency in transport so as to reduce CO<sub>2</sub> emissions. This approach should be consistent with and contribute to economy-wide climate change mitigation plans.

The approach should be built on packages of policy measures which include: technology development, strengthened research into new technology and fuels, increased use of information technology and integrated mobility management as well as a wide variety of non-technology policy tools with potential to improve economic efficiency and reduce emissions.

All potential instruments - including regulations, economic incentives and consumer information - can be employed to meet the aim of a low carbon transport system. The particular circumstances in countries or regions will determine the choice and appropriate mix of these policy tools.

### **Transport Policies and Measures are Indispensable**

Transport policy measures that encourage behaviour change are essential parts of the packages needed to combat climate change and simultaneously meet other objectives of transport policy. These measures include:

- improved organisation and telematics to optimize the modes and especially the interlinkages between them;
- more effective use of rail, inland waterway and short sea shipping for freight transport;
- enhanced promotion and service quality of public transport and rail, as well as support for non-motorised means of travel such as walking and cycling, especially in cities where the vast majority of people live;
- measures to manage traffic demand and reduce congestion;
- more efficient logistics concepts;
- continued efforts to better integrate land use and transport planning;
- pricing mechanisms to encourage behavioural change and ensure that externalities are taken into account.

Emissions trading applied in different transport modes, notably aviation and maritime shipping, is the subject much particular debate. However, consensus has not yet been reached among all Forum countries as to how this instrument is internationally applied as a climate change mitigation tool.

The application of market-based measures such as emissions trading to address emissions from transport -- in particular from sectors with international scope such as aviation and shipping -- would benefit from further exchange among countries to better understand their use as potential global climate change mitigation tools for the transport sector.

### **Support for Technological Development is Crucial**

Options for addressing the long-term supply of energy for transport must be pursued urgently: these include the development and market uptake of alternative fuels and efficient drive train technologies such as advanced biomass-based fuels, hybrids, electric vehicles and hydrogen and fuel cell vehicles.

Reaching a low-carbon goal for transport will require increased support for research, development, demonstration and innovation. Sharing technology and good practice, as well as setting good examples in government procurement, are among the possible steps to meeting this goal.

In the shorter term, opportunities should be seized to promote the significant fuel-efficiency improvements to existing technology that can be attained through combinations of instruments such as regulations, economic and fiscal incentives and information campaigns designed to encourage consumers to opt for the most fuel efficient technologies. As one example, training in ecodriving and equipment of vehicles with feedback instrumentation to support fuel-efficient driving has been shown to be a promising way forward.

Biofuels can play a useful role in reducing CO<sub>2</sub> emissions in the transport sector compared to fossil fuels. Production of biofuels must be pursued in an environmentally, economically and socially sustainable way. Current work to improve the sustainability of biofuels should be continued and shared, and research to develop second generation biofuels should be further encouraged and prioritised.

### **Action Must be Taken at All Levels of Authority**

A variety of actions locally, regionally, nationally and among countries to mitigate transport CO<sub>2</sub> emissions are needed. These include:

- Systematic consideration of the CO<sub>2</sub> emissions impacts of transport policy and investment decisions;
- A focus on transport policy measures that generate the highest returns in terms of greenhouse gas emissions, account for possible trade-offs with other environmental impacts and are cost effective. Cost effectiveness is essential in order to maximise the impact of policies with the limited resources available.
- Improvements to national data quality, availability, comparability, consistency and analysis in and across countries so that policy actions and their effects are measurable, reportable, and verifiable.

#### *Vehicles*

Progress is being made in the EU, US, Canada and Japan in establishing regulations on fuel consumption from new motor vehicles. This progress needs to be pursued and strengthened if the ambitious aims set out above are to be met.

More specifically, the UNECE's World Forum for Harmonization of Vehicle Regulations (WP.29) is urged to accelerate the work to develop common methodologies, test cycles and measurement methods for vehicles.

#### *Maritime Shipping and Aviation*

It is imperative that emissions from international aviation and maritime shipping continue to be addressed and are included in future solutions to mitigate global climate change. The ongoing work in this direction in the International Civil Aviation Organisation (ICAO) and the International Maritime Organisation (IMO) is a positive step. These institutions are encouraged to expedite their discussions.

#### **The Way Forward**

Transport Ministers must play a proactive role in meeting the energy and climate change challenges facing the sector, working across government and together with all sector stakeholders to implement cost-effective ways to reduce dependence on oil and CO<sub>2</sub> emissions.

Continuing dialogue and exchange is needed so that the ambitious goal of a low carbon future for transport can be achieved.