Global Warming and Transport Promote Sustainable Development of Transport

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Transport Division
United Nations Economic Commission for Europe (UNECE)
Transport is estimated to be responsible for:
- 13% GHGs
- 25% CO$_2$ from fossil fuel combustion

Transport Division perspective with ideas for ITC consideration:
- World Forum for Harmonization of Vehicle Regulations (WP.29)
- Other SBs to ITC

Annex reflects views of Proff. Rothengatter
IMPACT OF THE WORLD FORUM

• Increase Vehicle’s Safety and Environmental performance
• Countries and Regional organizations represented (>50)
• Application of UN vehicle regulations by countries
• EU is replacing Directives by reference to UNECE Regulations and applies more than 100 Regulations
• Endorsement by Transport Ministers (ITF)
• Tokyo Ministerial Conference (G20 +) Environment and Energy in Transport encouraged countries to lower carbon use and pollution in transport through the World Forum
• Vehicle manufacturers shall comply with UN regulations
• Regulations reduce trade barriers
World Forum Strategy

From Fossil Fuels to $H_2$ and Electric Energy

A. Short term (2015)
   - Energy efficiency by engine technology, TPMS, rolling resistance ....
   - Use of sustainable bio-fuels

B. Mid-term (2015-2025)
   - Plug-in hybrid vehicles in the market

C. Long term (2025-2040)
   - Electric and Hydrogen vehicles in the market

Sustainable and cost-effective generation of electricity and $H_2$ production
Current Developments

- Environmentally Friendly vehicles
- Hydrogen and Fuel-cell vehicles
- Energy efficiency measures
  - use of alternative energy sources (bio fuels/gas)
  - engine management (stop-and-go function)
  - intelligent transport systems
  - tyre-pressure monitoring systems
  - tyres with low rolling resistance
- Development of market fuel quality standards
Vehicle emissions regulations (cars)

Reduction > 95% of classic pollutants (CO, NOx HC) and > 85% of particulates
UNECE WP.29 is pursuing

- Assessment of CO$_2$ emissions
  - UNDA technical assistance project
  - Develop standard methodology for evaluating CO$_2$ footprint of land transport
  - Develop a Mathematical model for Governments to provide scientific basis for sustainable transport policies
- Round table of global warming and transport
Other SBs, THE PEP and Secretariat

- UNECE shall continue to play a proactive role with Governments other stakeholders in an integrated approach
- ITS, eco-driving
- Road Transport: infrastructure and traffic management
- Transport Trends and Economics: internalization of costs
- Hinterland Connexion Seaports: efficient hinterland transport
- Rail Transport: freight oriented networks, effectiveness of the EU approach to increase modal share of rail transport
- Inland Water Transport: environmental technical prescriptions for inland vessels
- THE PEP: sustainable urban transport, including alternative modes of transport
- UNECE session: Economics of global warming
  - The annexed study will be presented
Expectations from ITC

- Support the UNDA project initiative
- Support the planned World Forum’s Round Table
- Support the World Forum’s work-programme
  - Accelerate the development of test cycles and common measurement methodology for vehicle emissions including CO$_2$
  - Development of market fuel quality standards
- Encourage other related SBs to act as a forum to exchange best practices in Global Warming and Transport