



Global Warming and Transport Promote Sustainable Development of Transport

71st ITC session

Agenda item 10 - Informal Document No. 9

Geneva, 24 - 25 February 2009

Transport Division

United Nations Economic Commission for Europe (UNECE)



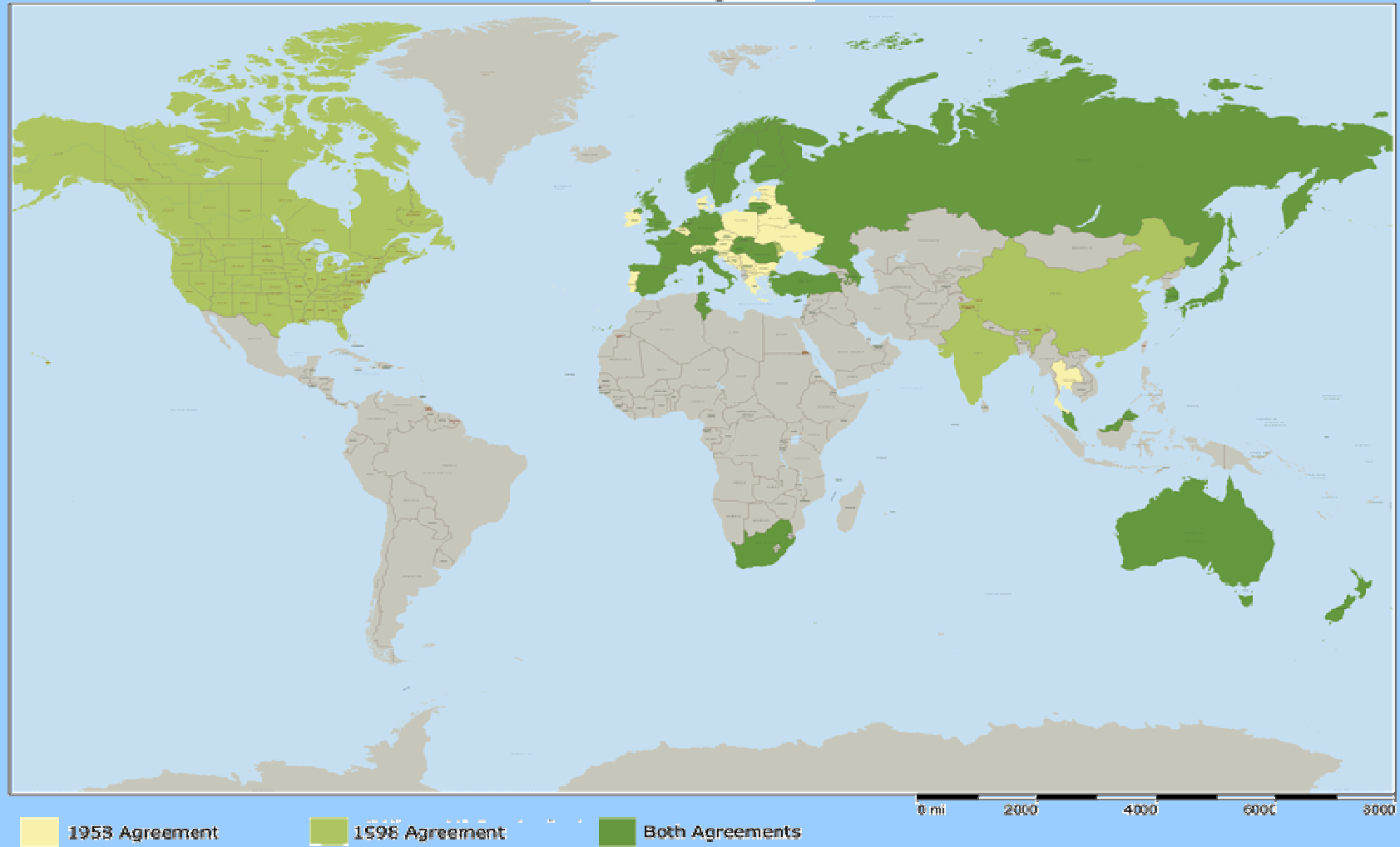
Economics of Global Warming and Transport – Role of the UNECE

- Transport is **estimated** to be responsible for:
 - 13% GHGs
 - 25% CO₂ 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



World Forum WP.29 -1958 and 1998 Agreements

Vehicle Regulations





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 H₂ 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 H₂ production



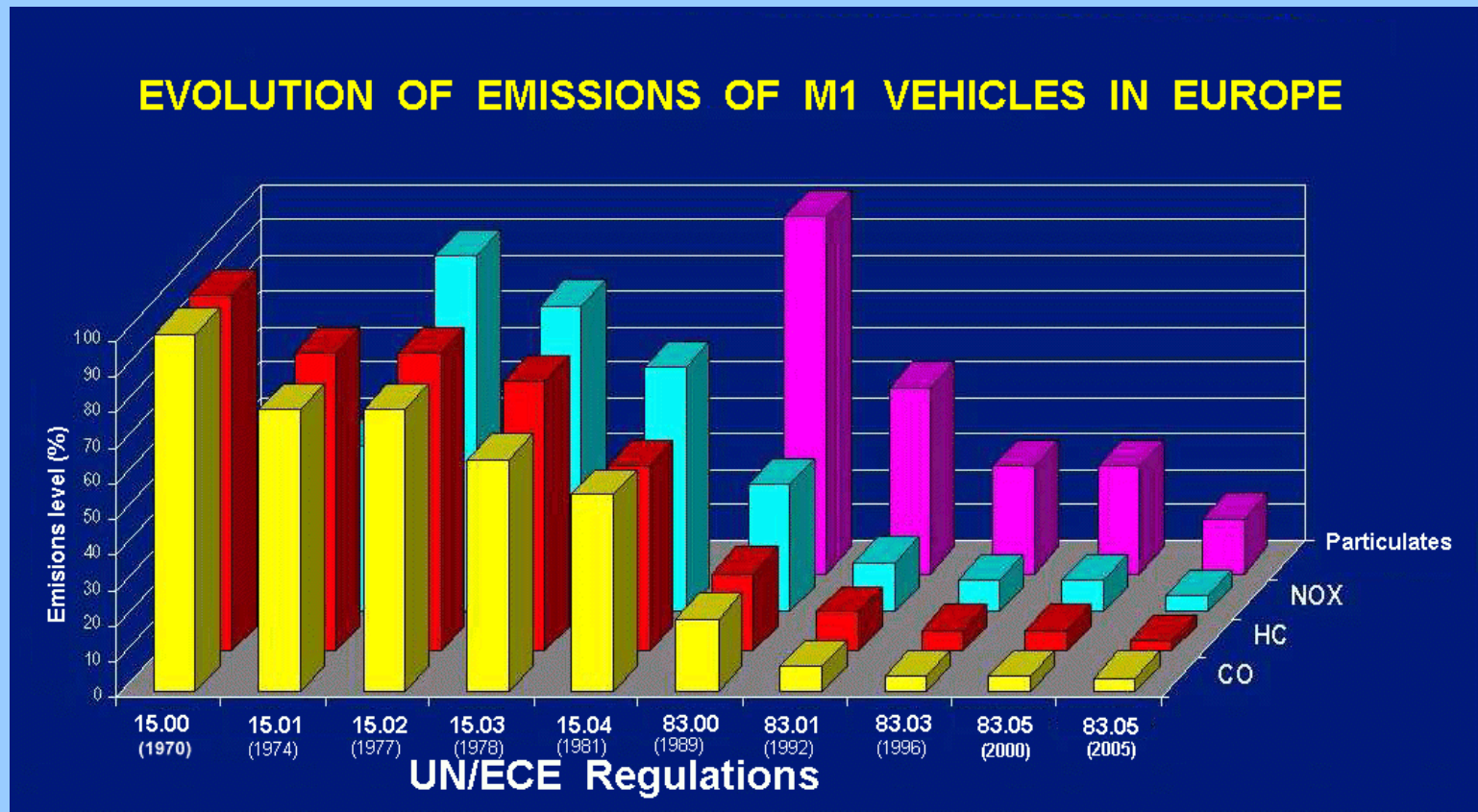
Current Developments

- 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, NO_x HC)
and > 85 % of particulates





UNECE WP.29 is pursuing

- Assessment of CO₂ emissions
 - UNDA technical assistance project
 - Develop standard methodology for evaluating CO₂ 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 CO₂
 - Development of market fuel quality standards
- Encourage other related SBs to act as a forum to exchange best practices in Global Warming and Transport