Workshop 1: Energy-Efficient Technology - 1/2

• Guarded optimism: 30% reductions in road transport CO$_2$ emissions available at low cost; 50% reductions at reasonable cost longer term.

• Attaining these reductions requires intervention, including a fuel economy standard.

• New business models, e.g. leasing, can accelerate the market penetration of advanced efficient cars, spreading the cost of better fuel economy over time.
• Differentiation of car ownership taxes is a quick way of steering vehicle choices to more fuel efficient rather than more powerful models.

• Achieving the full emissions potential of electric vehicles is dependent on how the electricity is generated.

• OECD countries must show a lead but efforts to reduce emissions should not be limited to the OECD. Public policies to promote and fund technology collaboration with developing economies required.
Workshop 2
Changing Behaviour in Passenger Transport
Economic and Political Framework

• Governments have to address travel behaviour as well as technology if CO₂ emissions are to be reduced below current levels.

• Although daily travel behaviour is determined by habit, it does change when people change jobs or houses or buy cars.

• The long-term (>5yrs) impact of policies to change behaviour can be twice the short-term impact.
Empirical Evidence

- Reducing car use in cities by up to 20-30% is possible through a combination of measures.
- Parking management, charging or limiting car access to city centres, reducing congestion in public transport, work well.
- The main consumer response to fuel price increases is to increase fuel economy rather than decrease car travel.
Policy Packages

- Policies should be comprehensive, consistent and cover all tiers of government, with integrated cross-sectoral planning.
- Involving citizens in the planning process can lead to spontaneous behaviour change.
- Voluntary policies only have a limited effect – enforceable regulations (e.g. parking restrictions) are also needed.
- Road pricing may be easier to introduce when coordinated between competing cities.
- Many behavioural policies result in more competitive and attractive cities.
Workshop 3

Reducing CO₂ Emissions in Goods Transport
Situation and trends

• Freight transport is responsible for one third of the carbon footprint of transport and is growing
• Decoupling from GDP is difficult but not impossible
• Although firms plan their logistics efficiently there still is a potential to reduce carbon emissions individually and through cooperation
  – DHL aims to cut CO$_2$ emissions 30% by 2020 compared to 2007
Potential Actions

• Technology – engines, aerodynamics, tyres
• Ecodriving
• Improving logistic operations – planning, load factors, consolidation
• Modal shift
• Improved logistics
  – Consolidation of supply chains
  – Cooperation of forwarders, haulage companies and shippers
Policy Strategy

• Ideal: global CO₂ emission trading system
  – Distribution of emission allowances per capita
  – Market deciding on least cost strategies
  – Aviation, maritime and inland waterways (subject to international agreements)

• Alternative strategy
  – Taxes, charges, standards, regulations, investment in alternative modes
  – Supporting voluntary actions: Carbon certificates (ISO 14064), Carbon auditing
Policy Instruments

• Short-term measures
  – Voluntary agreements, ecodriving, reinforcing business strategies to save energy and fuel, transfer of best practices
  – “Top Runner“ fuel economy regulation

• Longer-term measures
  – City road pricing
  – Extension of interurban road pricing
  – Vehicle technology innovation
Workshop 4
Transport CO$_2$ Emissions in Emerging Economies
As developing countries grow, transport activity will grow. This should be welcomed but steered to take a more sustainable path.

Air quality, safety and congestion are priorities; addressing them will also curb CO₂ emissions.

Curbing CO₂ requires:
- Demand management in the cities
- Ending fuel subsidies ($14 billion in Indonesia)
- Auto fuel economy regulation and tax incentives
Demand management in cities requires
- Land use planning integrated with transport plans
- Quality public transport – bus, BRT, rail
- Charging for road space essential through:
  - Parking charges with enforcement
  - And/or road pricing

International Finance Institutions can assist with
- Investment in public transport
- Technical assistance for:
  - Institutional capacity building
  - Fuel efficiency regulation
  - Fuel efficiency testing, labelling and information
Cars

- Ownership growing rapidly
- Small vehicles, relatively good fuel economy
- Technology for improvement different from OECD
  - Idle stop-start cost effective in congested cities
  - Small short range electric cars longer term

Curbing car emissions growth requires

- Regulatory standards for fuel efficiency
- Differentiated standards and taxes to discourage increase in power and weight as incomes grow
- End to fuel subsidies