TRANSPORTATION AND CLIMATE POLICY
Asilomar Conference Center
Pacific Grove, California
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«Transport and GHG Emissions»

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Secretary General
International Transport Forum

www.internationaltransportforum.org
www.cemt.org
ECMT ➔ International Transport Forum

• Transport Ministers set up a Global Forum for Transport with
  – Ministers
  – Industry
  – Civil Actors

• All modes, all OECD/ECMT Countries and invitations to China/Brazil & India

• One theme per year
  – 2008: Climate Change
  – 2009: Globalisation

• One place: LEIPZIG
Transport and Global Warming

STRUCTURE

• A rapidly changing context

• Transport’s role

• What is being done

• Challenges
Transport and Global Warming

A rapidly changing context
• Global warming top of political agenda
  (G8, EU, UN, nationally, …)

• Post Kyoto framework: many new targets and commitments
Ambitious post Kyoto GHG reduction targets:

**France:**
- National objective for a 25% reduction from 1990 by 2020 and a 75-80% reduction by 2050 (GHG’s)

**Germany:**
- Offered 40% reduction below 1990 if EU adopts a 30% reduction (GHG’s)

**United Kingdom:**
- National objective for a 20% reduction from 1990 by 2010 and 60% from 2000 levels by 2050 (CO2)

**California:**
- State objective for a 80% reduction from 1990 by 2050 (CO2)

**NE and Mid-Atlantic States (USA):**
- GHG emission reduction to 2005 levels by 2009-2012 and a further 10% by 2015-2018
Transport and Global Warming

*Transport’s Role*
Transport and GHG Emissions

- Transport sector responsible for significant share of CO$_2$ emissions
Transport's Percentage Share of CO2 emissions from fuel combustion

World
- Other Sectors: 8%
- Residential: 18%
- Manufacturing Industries and Construction: 18%
- Energy Industries: 5%
- Road: 18%
- Aviation: 3%
- Navigation: 2%
- Other Transport: 1%

OECD
- Other Sectors: 14%
- Residential: 6%
- Manufacturing Industries and Construction: 23%
- Energy Industries: 43%
- Road: 23%
- Aviation: 3%
- Navigation: 2%
- Other Transport: 1%

Other ITF
- Other Sectors: 9%
- Residential: 4%
- Manufacturing Industries and Construction: 8%
- Energy Industries: 57%
- Road: 16%
- Aviation: 0%
- Navigation: 0%
- Other Transport: 4%

Source: ECMT (IEA data)
Transport and GHG Emissions

- Transport sector responsible for significant share of CO$_2$ emissions
- Road transport main contributor; aviation growing fastest
- Growth in transport sector CO$_2$ emissions shows little sign of slowing or reversing
World Motorization: WBCSD Projections

Source: IEA
Increased congestion in hub airports

Air Passenger Traffic expected to double over the next 20 years

World Air Traffic Outlook

Air Freight Traffic expected to triple over the next 20 years

Sources: Airbus for passengers, Boeing for freight
Data

Forecast using Persistence

Million Metric Tons

container tons, approx.
reefer tons
dry bulker tons
chemicals tanker tons
gas carrier tons
gas carrier tons
oil tanker tons
total tons

source: Corbett, 2007
Transport and Global Warming

What is being done?
Transport and GHG Emissions

• ECMT survey of existing transport-sector GHG reduction policies in OECD/ECMT countries
## Analysis of policies identified

<table>
<thead>
<tr>
<th>Category</th>
<th>Policy Details</th>
<th>No. of policies</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demand</strong></td>
<td>Urban planning to discourage sprawl; Road pricing; Logistics optimisation.</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Fuel efficiency</strong></td>
<td>Tax differentiation to promote EFVs; Vehicle efficiency regulations/agreements; Driver training; Car pooling; Logistics management, route planning / guidance.</td>
<td>31% 16%</td>
</tr>
<tr>
<td><strong>Carbon intensity</strong></td>
<td>Biofuel targets and tax incentives; Hydrogen fuel cell R&amp;D; Incentives for CNG buses.</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Modal split</strong></td>
<td>Targeted subsidies for public transport.</td>
<td>28%</td>
</tr>
</tbody>
</table>
ITF Transport Sector Emissions:
Potential Impact of Current Policies

The 400 transport measures adopted so far should save 700 Mt CO₂ in 2010

Source: ECMT & IEA
New Transport actions being proposed/discussed

Internationally:

• EU
  – Vehicle emissions standards
    120-130 gm/km to replace voluntary agreement
  – Bring aviation into EU Trading Scheme
  – New biofuels target

• ICAO
  – Discussions on aviation in autumn

• IMO
  – Shipping CO2 discussion (technical)

• G8 Mandates
New actions being proposed/discussed

Nationally:

- **New strategies being drawn up**
  - UK, Germany, France

- **Japan has interesting measures**
  - Top runner
  - Regulations for HGVs
  - Specific target for transport
Transport and Global Warming

Some Challenges
Policy Challenges for Transport

- Introduce Cost-Effective Measures
  - Studies show abatement costs higher in transport
UK Marginal abatement cost curve 2020

Source: UK – Department of Trade and Industry
Policy Challenges for Transport (cont.)

• Do Cost-Effective Things Now

(component regulations i.e. low rolling resistance tyres, low resistance lubricants, fuel efficient lighting, air conditioning, information feedback and driver training)
Policy Challenges for Transport (cont.)

• Biofuels (Round Table - June 2007)
  – Costly, uncertain GHG savings, environmental side effects
  – Niche market
  – Use certification
  – Avoid volumetric targets
  – Link support to performance
Policy Challenges for Transport (cont.)

• Between Modes
  – Charges, taxes, regulations, trading all being discussed
  – Need more understanding on these different instruments and their effects

• Nationally and Internationally
  – Give countries freedom to act
  – But avoid distortions
  – And avoid race to bottom
Policy Challenges for Transport (cont.)

• Industry
  – Present clear incentives and framework to industry
  – For cars, is there to be a political consensus to downsize?

• Consumers
  – Information on actions
CO2 Emissions form the UK Economy: 168.3 mtc/yr
includes International Aviation and Shipping (NETCEN 2004)

Average UK per Capita CO2 Emissions in 2005: 1.16 tonnes
(Source: Defra)
Leipzig, May 2008

- Ministers, Industry leaders and others to discuss Transport and Climate Change
- Inputs and preparation
  - Online debates
    - Biofuels
    - Tradeable permits
    - Instruments generally
  - Country measures to be updated
  - Specific events:
    - Ecodriving Seminar
    - Round Table on Fuels for Transport
    - Round Table on Instruments