Joint Transport Research Centre
Round Table 31 January-1 February 2008

Introduction to the discussion

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Outline

- The policy problem and the Round Table discussion
- Special features of road transportation
- Economic mitigation potentials in transport
- Effective policies for GHG mitigation in transport
- Our discussions
- Topics for discussion

The policy problem and the Round Table discussion

- Transport is a major (and growing) contributor to global GHG emissions
- Concern about climate change has led to new policies and policy proposals for the sector
  - All sectors must decarbonise to achieve the EU's 2°C target
- The Round Table focus is on cost effectiveness and overall benefits of policies
  - Problems: externalities of congestion, damage to air quality, crashes & accidents, climate change, noise, vibration
  - Policies and portfolios of policies (emission trading +efficiency standards)
  - Tools (or policy instruments) and any co-benefits in their use

Special features of road transportation

- Highly desired service in all economies, with a central role in economic growth and development: strongly income-elastic
- Responses to relative prices very weak in the short-run
  - but cross-country analyses suggests that price elasticities for fuel demand are much higher in the long-run
- Already heavily regulated technology and behaviour (safety, efficiency, pollution)
- Technology-driven with major impact of IT and potential for non-linear rapid change, as IT costs fall
- Location- and infrastructure- specific, so the activity has limited and slow relocation potential
- Uncertainties about: new technologies, acceptability of new policies (congestion charging, emission permits), behaviour of a complex system in conditions of limited road space and pent-up demand and "irrational" motivations

All sectors and regions have the potential to contribute (end-use based)
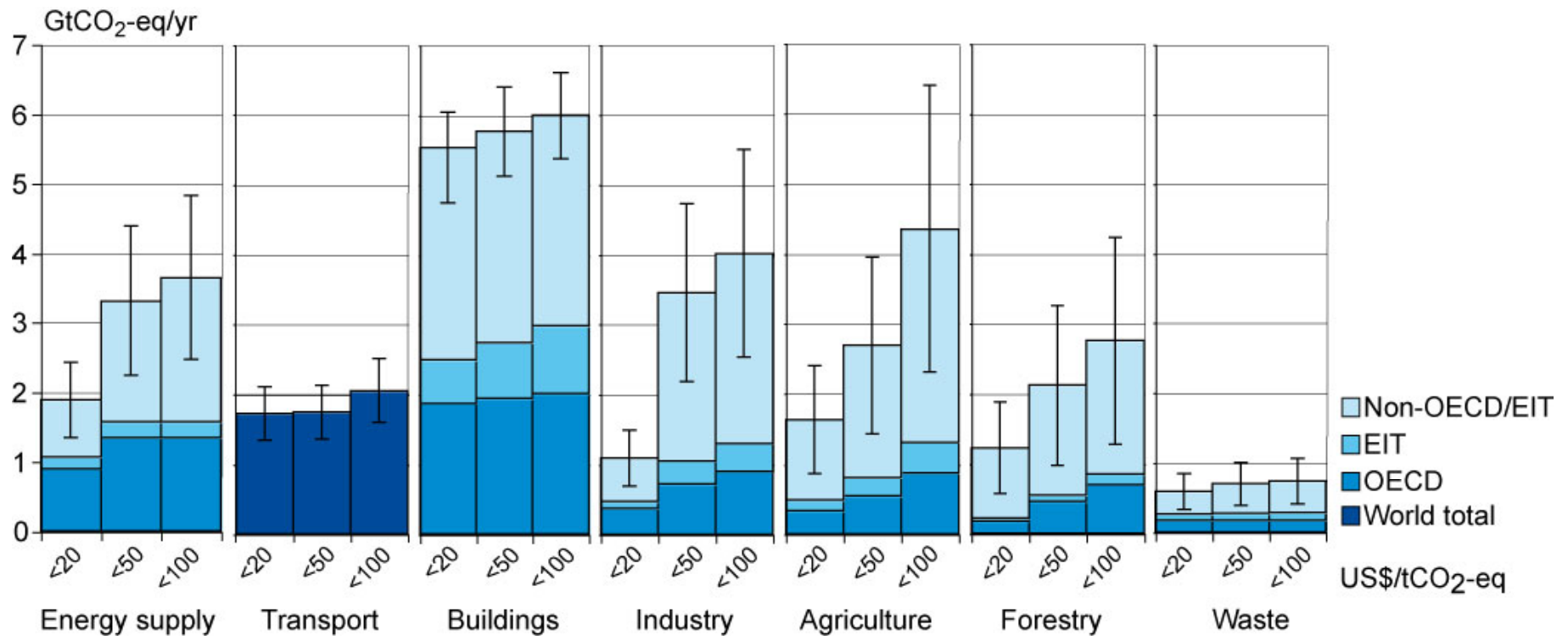
Note: estimates do not include non-technical options, such as lifestyle changes.

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Selected sectoral policies, measures and instruments that have shown to be environmentally effective

Sector	Policies[1], measures and instruments shown to be environmentally effective	Key constraints or opportunities
Transport	Mandatory fuel economy, biofuel blending and CO_2 standards for road transport	Partial coverage of vehicle fleet may limit effectiveness
	Taxes on vehicle purchase, registration, use and motor fuels, road and parking pricing	Effectiveness may drop with higher incomes
	Influence mobility needs through land use regulations, and infrastructure planning	Particularly appropriate for countries that are building up their transportation systems
	Investment in attractive public transport facilities and non-motorised forms of transport	

[1] **Public RD&D investment in low emission technologies have proven to be effective in all sectors.**

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Our discussions

- Aims
  - synthesis and consolidate our collective understanding of the issue
  - learn from research to support good policy design
  - prepare for dissemination of results
- Structure
  - Day 1 morning: traditional measures, i.e. Standards and taxes, assuming GHG action required
  - Day 1 afternoon: proader perspective: objectives, tools & methods
  - Day 2: continued discussion and key implications
- Outside the topic boundaries:
  - Areas already covered in earlier RTs: energy security and oil dependence, biofuel subsidies
  - Areas too complex/controversial/tangential for extended discussions: aviation, modal choice
- "Chatham House" rules: free expression, no attribution

Topics for discussion: Day 1 morning
Effective regulation for GHG mitigation

1. Fuel economy regulation wide-spread: can we learn what makes for effective regulation? How to avoid damaging side-effects and encourage beneficial ones? Convergence?
2. EU proposal on mandatory standards: what are effects on weight and safety?
3. How effective are regulations in managing on-road fuel use and emissions? Test-cycle versus on-road performance indicators – convergence?
4. How reliable are estimates of technology costs and effects of induced technological change?
5. Can credit be given for off-test-cycle component improvements (air conditioners, fuel economy info) in CAFÉ or EU standards? How?

Topics for discussion: Day 1 morning
Policy portfolios for transportation (1): regulation, fuel duties and carbon prices

1. Should fuel-economy regulation be viewed as independent of other tools?

2. Revenue use?

3. Rebound effects in transport and other sectors?

4. Costs of restraining consumer choice?

Topics for discussion: Day 1 afternoon
Policy portfolios for transportation (2): congestion charging, tradable permits and fuel duties; valuation and externalities; methods; burden sharing

- Policy packages: how to deal with interacting transport externalities?

- Social acceptance of various approaches?

- Lessons from the ETS?

- What are the ideal trading partners (consumers, manufacturers,…)?

- Which methods for policy analyses: CGE, CBA, MCA?

- Burden sharing among sectors?