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EU Transport GHG: Routes to 2050?

Environmental assessment policy

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Partners

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Overview of presentation

1. Introduction and existing legislation
2. Current practice
3. Climate impacts in EIA and SEA
4. Carbon price in CBA
5. Role in long term GHG reduction policy
6. Conclusions/discussion/questions

Existing legislation

- Assessment frameworks in infrastructure and spatial planning:
 - Environmental impact assessments (EIA): impacts of single (infrastructure) projects
 - Cost benefits analysis (CBA): social cost and benefits of single projects
 - Strategic Environmental Assessments (SEA): assessments of plans, programmes and policies (e.g. development of entire regions)
- Aims:
 - making environmental impacts part of the decision making process
 - reporting these in a transparent way
- CBA expresses all impacts in a single unit: social cost and benefits
- GHG emissions just one element

Current practice: GHG emissions in EIA and SEA

- Climate impacts are assessed
- Cumulative effects of additional projects are not sufficiently considered
- Climate impacts in SEA's usually limited to obvious impacts
- Rarely specific requirements on GHG emissions
- Need for further guidance and assessment tools
- GHG impacts usually play no or a minor role in comparing various options

Current practice: Climate change in CBA

- Shadow prices of GHG emissions:
 - Values used in member states vary a lot (2005): € 8 – € 196 per tonne of CO₂
 - HEATCO recommends: values increasing over time from about € 25 (2010) to € 85 (2050) per tonne of CO₂
- Key issues regarding estimates:
 - High level of uncertainty in damage costs
 - Not all possible damages included in the available estimates
 - Undecided debate on using avoidance costs instead of damage costs
 - Huge variation in avoidance cost estimates (target, fuel price, etc.,)
- Application in CBA's:
 - CO₂ cost relative small compared to other cost, particularly infrastructure and congestion cost.
 - CO₂ emissions over the whole lifetime should be included

Future GHG reduction by environmental assessment policy

- Ensure that all long term GHG impacts are fully included, also all long term impacts on transport volumes
- Apply higher shadow prices
 - To reflect precautionary principle
 - Long term impacts should be weighted with higher shadow prices
 - Should always be based on sound cost estimation
- Introduce specific conditions:
 - Do not allow plans to result in an overall increase in GHG emissions
 - Allowing some types of compensation
 - Requires a clear definition on which emissions should be included, how they should be calculated and how there could be compensated for.

Main conclusions

- EIA, SEA and CBA could help to shape long term demand trends
- All long term GHG impacts to be included
- Higher shadow prices may be appropriate
- Introduction of specific GHG conditions could help to curb demand growth

Questions for the discussion

- What role do you see for environmental assessment frameworks to play in meeting long term GHG emission reduction targets?
- Which of the policy approaches seems most appropriate and why?