

Modelling the Transport Sector Fuel Demand, Reconciling Bottom-Up and Top-Down Approaches

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The *World Energy Outlook 2000* provides projections to 2020 of energy demand and supply for fourteen regions, using the IEA's World Energy Model (WEM). The projections are based on the "Reference Scenario" which takes into account only the policies in place. In order to make projections for the reference scenario, the IEA has developed a new framework for the transport sector in parallel with the aggregated econometric fuel demand model of the WEM. The transport sector is split into different transport modes, with activity and efficiency determined independently in each mode. This allows analysts to consider alternative sectoral policies and to highlight changes in technologies (e.g. improvements in new vehicle fuel efficiency), in pricing (e.g. additional carbon taxes) and in demand (e.g. urban demand management or the development of high-speed rail). This presentation sets out the key economic assumptions and policies and measures for the alternative policy cases, then, using the new framework, estimates their effect on fuel demand and CO₂ emissions in three regions (OECD Europe, OECD North America, and OECD Pacific).