



This presentation was held within the project ADVANCE, which has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under the grant agreement no 308329.



Planbureau voor de Leefomgeving

Data needs on energy demand/transport in ADVANCE

Detlef P. van Vuuren



More detail on energy demand needed.

- In order to answer whether more rapid energy efficiency improvement is realistic, we need more insight what is behind
 - (either outside the models – or in the models)
- For instance, in IMAGE attempt to describe energy demand using bottom-up indicators:
 - Transport – on the basis mode split + pkm/tkms
 - Residential sector – on the basis of explicit energy functions (heating, cooling, warm water, lighting, appliances)
 - Industry – using specific productions t steel, t cement, t chemical products.
- Very similar activities going on in other model groups.



Essential element of this: DATA!!!!

- Bottom-up data on:
 - activity levels (e.g. p km per mode, worldwide)
 - energy use per service unit (e.g. energy use for cars)
 - Energy use for different technologies (e.g. energy use for currently sold new car; future cars)
 - Relevant prices and taxes
 - Costs information (different factors)
- In IMAGE case, we end up also with data from independent sources (inconsistencies): overall energy use, pkms/fkms, model split, technology efficiency, prices)



Role of ADVANCE/IAMC:

- Develop data sets of more detailed data than energy consumption and share them across community members
 - Individual groups may submit data and use data.
- In first instance, be more modest:
 - Build meta database (on internet) on available data at various organisations:
 - › ‘Real’ data suppliers
 - › Data created as IAM input (sometimes by itself model output)
 - › Data left at providing organisation.

- ADVANCE demand group could maybe take the lead and explore proof of concept for 1-2 sectors.