

## Evaluation and Monitoring for the EU Directive on Energy End-Use Efficiency and Energy Services

# EMEEES Working Group "Top-down methods" Report of the main results

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La Colle-sur-Loup, 4 June 2007





## Presentation of two case studies

### 1. Solar water heaters

- Example for residential sector
- Market diffusion indicator from ODYSSEE database is used to evaluate the gross energy savings (solar heaters installed stock)
- Methodology to correct the gross savings from other factors and to link them to policy measures (packages!): econometric regression

### 2. New cars

- Example for transport sector
- Energy consumption indicator from ODYSSEE (l/100 km of new cars) is used
- Econometric modelling for link to policy measures.



## Points of discussion (1)

### General:

➤ Diffusion indicator: can both be used as a top-down and as a bottom-up indicator, depending if it can be linked to one policy measure (bottom-up) or not (top-down).

### Case of diffusion indicators/solar water heaters:

- Lifetime: no need to account in top-down approach, but maybe problems when integrating top-down and bottom-up approach
- Price impact: huge differences between the countries (F/DE). Country specific or EU-wide price elasticities?
- Country specific coefficient of energy saving to account for difference in solar flows: e.g. use of weighted heating degree days
- Some econometric issues: use of absolute values or only variations? Use of absolute prices or relative prices compared to alternative technology, lag term.....



## Points of discussion (2)

### **Case of energy consumption indicators/new cars:**

- Strong data limitations, especially for NMS.
- Autonomous trend is difficult to define: before ACEA agreement, afterwards?
- Definition of trend and baseline: are EU measures part of the baseline or not (discussion in the Art. 16 committee)?
- Some econometric issues: simple econometric modelling for practical reasons or more sophisticated but also more complicated models?
- Should differences in weight and power of cars between the countries be taken into account? Data would allow using such an indicator (l/100 km/kW).



## Conclusions

- Very fruitful discussion which will be considered in the case studies. Main discussion was on the way the econometric modelling is done.
- Additional material will be provided by the participants.
- Country-specific vs. EU-wide factors?
- Simple modelling on purpose or more sophisticated econometric modelling?