SALTSJÖBADEN 3

Air Pollution - Climate - Sustainability

Gothenburg March 12-14, 2007

WG 6

Stationary sources (& road transport)

27.3.2007

Chair: Suzie Baverstock, BP

Rapporteur: Alec Estlander, SYKE

Some 25 delegates, 15 countries

SYKE

Work structure

- Hot topics session
- Introductory session
- Discussion themes:
  - Synergies Air - Climate
  - Technology and innovation policies
  - Non-technical measures
  - Modelling development
  - Cost calculations
  - Remaining hot topics
- Conclusions and recommendations

Hot topics session

- Participants asked for key discussion topics.
- Sorted into six categories (see previous slide).
- Typical issues: Synergies/pitfalls, costing issues, technology development, modelling needs, etc.

Introductory session: EU regulatory and policy framework

- Existing air quality regulatory frame in the EU is wide
- Air quality, emission ceilings, fuel quality and industry-specific directives.
- IPPC directive being developed into key directive (~50,000 installations).
- CAFE strategy => ambient air directive (coming).
- Commission energy communication Jan 2007.
- Summit on energy gave new directions, firm commitments (with burden sharing to come).

EU Regulatory Framework

- Discussion: The CAFE process unique: cost-effects.
- Conclusions: Much legislation in place already, better internal coherence requested (like the CAFE process is aiming for). Small domestic sources not covered.
- Recommendations: 1) Directive development should be aimed at better coherence (EU). 2) Review control of emissions from biofuels (EU). 3) New energy policy effects on CAFE scenarios, especially baseline, to be clarified (PRIMES & MSs). 4) Additional info on how IPPC effects are included in RAINS (IIASA) and is being implemented (MSs).

Synergies: Air - Climate

- Conclusions: **Climate change new driver** for air quality issues since Saltsjobaden2. **Health** is the other key driver. Action needs to be framed in economic terms. Incentivise large scale demonstration plant for new technologies. Communication needs to be improved. Energy efficiency, CCS and demand side management, are clear **synergy** areas. Biofuels and some end-of-pipe technologies are areas with **pitfalls.** These need to be **quantified** further. A lot of the technology exists but changes in consumption patterns/lifestyle changes are also necessary. Instruments for this are needed.
- Recommendations: 1) **Combine** the efforts of the air pollution & climate change communities, especially within government, and **communicate** the possibilities in positive terms to decision makers and the public (MSs). 2) **Longer term visions and goals** (2020 and beyond) would improve industry forward planning, and motivate necessary changes (EU, MSs). 3) Investment policies targeted at the great **opportunities for forerunners** in the area, with government support included (MSs).

Technology development and innovation policies

- Conclusions: 1) EGTEI technology work to be tied in with work on CC emission scenarios and technologies. In addition to technologies also system solutions should be included. The EGTEI work plan is going to be distributed. 2) Proactive industrial policy is needed for innovations, with support from governments to create the right conditions and obtain financing.
- Recommendations: 1) MSs and CC experts to participate actively in the EGTEI work. Technologies and also system changes should be included in studies (research community).
- 2) New proactive industrial policies could be designed in MSs/EU.
- 3) Involvement of top management and politicians required for “man to the moon type” projects for technological breakthroughs (MSs, EU & industry).

Non-Technical Measures (NTMs)

- Discussion: Based on outcomes from 2005 conference in Gothenburg. The importance of NTMs is increasing as other controls come in.
- Conclusions: Many NTMs are well known, but the overall costs and benefits are still uncertain. Also the NTMs need a lot more transparent, visible communication to be accepted.
- Recommendation: Further studies and tests, with good information practices, on NTMs are needed (MSs). Workshop on those NTMs which, despite negative costs, are still not implemented (EB & Cion).

Modelling developments

- Discussion: Much progress achieved, on all scales!
- Conclusions: 1) National modelling complements international modelling. High resolution modelling needed for analysis of effects on microscale level. EU measures and local ones can be included in these.
- 2) Look at RAINS/GAINS review for model improvement needs, building on experience with uncertainty management, (e.g. systematic biases).
- 3) Quantification of economic welfare impacts is needed (employment, competitiveness, income levels, etc.).
- Recommendations: 1) Model reviews important. Especially the PRIMES model needs further scrutiny (research community).
- 2) Policy makers need to consider uncertainties in the setting of ceilings.
- 3) Welfare impact calculations to be developed (research community).
- 4) Encourage greater integration of NTMs into RAINS, establish other NTM modelling capabilities (IIASA & modelling community).

Cost calculations

- Discussion: Both costs and benefits to be discussed
- Conclusions: Knowledge of costs and benefits still incomplete. But the exercises so far, like CAFE, are promising. Willingness-to-pay important area for studies. Ex-post evaluations requested.
- Recommendations: 1) Benefit calculation needs still to be developed, needs R&D activities. Not everything can/needs to be monetised.
- 2) Communication on costing needs to be enhanced (All).
- 3) Use also other cost indicators e.g. electricity price effects (All).
- 4) MSs to participate in EGTEI work

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Other hot topics

- Issues: 1) Industry needs to take the lead. 2) Mobile sources not covered thoroughly in group. EURO 5 & 6 was developed before CAFE results. 3) Further research on PM characteristics and health effects. 4) Effects of abatement techniques on PM characteristics and consequent health effects not always tested ahead of introduction.
- Conclusions: Support simultaneous decision making process for emission limit values, NECs and AQ standards.
- Recommendations: Improve science-based decision making. Toxicological assessment/screening of new abatement techniques etc. ahead of introduction.

Overall conclusions

- Key issue: Integration of Climate & Air Quality policies

- Conclusions: End of pipe air quality measures and legislation already mature. Few sources not controlled. Emphasis now on climate, and how climate policies benefit/influence air quality.
- Recommendations: More cooperation between Air Quality policies and Climate policies, at all levels. More cooperation between FCCC & CLRTAP on scenario and technology development to exploit win-wins and avoid pitfalls.