Cross Cutting Group B:

Ammonia policy context and future challenges

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Attendees: 13

Scope

- What is the agricultural and environmental policy context?

- How can scientific understanding help address the future challenges to reduce the negative effects of ammonia?

Policy background issues to be considered

- **Drivers of ammonia abatement**
  - Ammonia is dominating eutrophication, acidification and secondary PM2.5 concentrations in Europe and deserves much more policy attention

- **Ammonia abatement in air pollution policies (NECD, GP, AQD) in relation to other legislation, e.g., CAP, Biomass action plan, IPPC, biodiversity, WFD, etc.**

How well do we know

- Nitrogen effects
- Secondary PM formation and effects
- Emissions and abatement efficiency
- Scope (potential) for abatement
- Agricultural production systems and their evolution
- Pollutant swapping between different air pollutants
- Pollutant swapping between various forms of N

Possible strategy approaches

EMISSIONS

- Reducing nitrogen fluxes at large
- Reducing intensities
- Technical abatement measures
- Economic instruments

IMPACTS

- Target setting (ecosystems and health)
  - Deposition and concentration
  - Temporal scale
  - Spatial scale

Where science can help policy

- Consequences of revised critical levels

- Implications of the 'ammonia gap's'

- Consequences of changed seasonal pattern of ammonia concentrations

- Link European and local scale abatement and effects assessments

- Improve spatial and temporal concentration estimates from models

- Analyse ammonia emission reduction policies in a multi-effect, multi-media, multi-scale framework

Discussion/Recommendations (modelers)

- Explore possibility of considering local biodiversity action plans in larger scale modelling
- Careful evaluation of representativeness of EMEP model results for ammonia concentration
- IAMs need either link or include approach for pollution swapping
- Incorporate finer temporal resolution (where needed and feasible) in IAMs – example: 'seasonal measures'
- What to do with the gap's'? (modelers and policy makers)

Discussion/Recommendations (policy makers)

- Work towards elimination of loopholes in legislation (build in synergies)

- Steer certain processes more actively, 'hint' how to achieve targets

- Promote work on specific components, e.g.,
  - N-cycle and effects, e.g., biodiversity
  - PM health impact assessment, role of speciation
  - Data on management practices
  - …

Future challenges – concerns?

- Support for resolving possible 'impact conflicts' in existing legislation, e.g., animal welfare, organic farming, biomass action plan vs. reduction of impact on ecosystems and human health (from air pollution)

- Revision/update of monitoring strategy in the future?

- Policy sensitivity to the model output is increasing

- Less room for technical measures

- Integration of scales
  (assess relevance and feasibility)