

Welcome to first meeting of Expert Panel on Mitigation of Agricultural Nitrogen emissions (EPMAN)

FAST Conference MILANO, ITALY, 12 November 2008



Task Force on Reactive Nitrogen (TFRN)

Secretariat: Clair Britton

Chairs: Mark Sutton & Oene Oenema

Three expert panels

- EPMAN; Chabtai Bittman & Martin Dedina
 - EPNBB; Wilfried Winiwarter
 - (EPNFood); ?



General objectives of the TFRN:

- >To provide technical information to be able
 - ➤ to develop an integrated vision and approach to abatement of Nr emissions and effects;
 - ➤ to improve coordination on the development of integrated Nr policies;
 - ➤ to search for synergies between policies on air pollution and other policies;



Current activities of the TFRN:

- a) Expert Panel on N balances and budgets
- b) Expert Panel on mitigation of agricultural N emissions
- c) (Expert Panel on protein in diets)
- d) European Nitrogen Assessment (ENA)
- e) Analyse the linkages across Convention, plus Convention Biological Diversity and Marine Conventions
- f) Develop Nr related options for revision of the Gothenburg Protocol



Expert Panel on N balances and budgets (EPNBB)

Objectives

- To provide overviews of existing budgeting approaches;
- To identify weaknesses in current N balances, and provide suggestions for improvements;
- To analyze N flows and to derive key indicators, which may help policy makers to set priorities.



Expert Panel on Mitigation of Agricultural Nitrogen emissions (EPMAN)

Objectives

- ➤ To develop options for a more integrated approach to mitigate Nr emissions from agriculture;
- ➤ To continue work of the former Ammonia Expert Panel;
- To contribute to Gothenburg Protocol revision;
 - Annex IX,
 - Code of Good Agricultural Practice,
 - Guidance Document



Possible contributions of TFRN to the revision of Gothenborg Protocol, as reported to WGSR (1)

To provide technical information related to:

- New insights and information related to NH₃ abatement measures, including possible synergies and trade offs;
- Integrated measures for decreasing NO_X, NH₃ and N₂O emissions to air and NO₃-leaching to water;
- Highlight interactions between the measures in Gothenburg Protocol and Climate Change Policy;



Possible contributions of TFRN to the revision of Gothenborg Protocol, as reported to WGSR (2)

To provide technical information related to:

- the roles of managerial measures and structural measures on NH₃ emissions;
- integrative indicators for N use efficiency in agriculture;
- economic instruments for effective implementation of policies aimed at decreasing N emissions

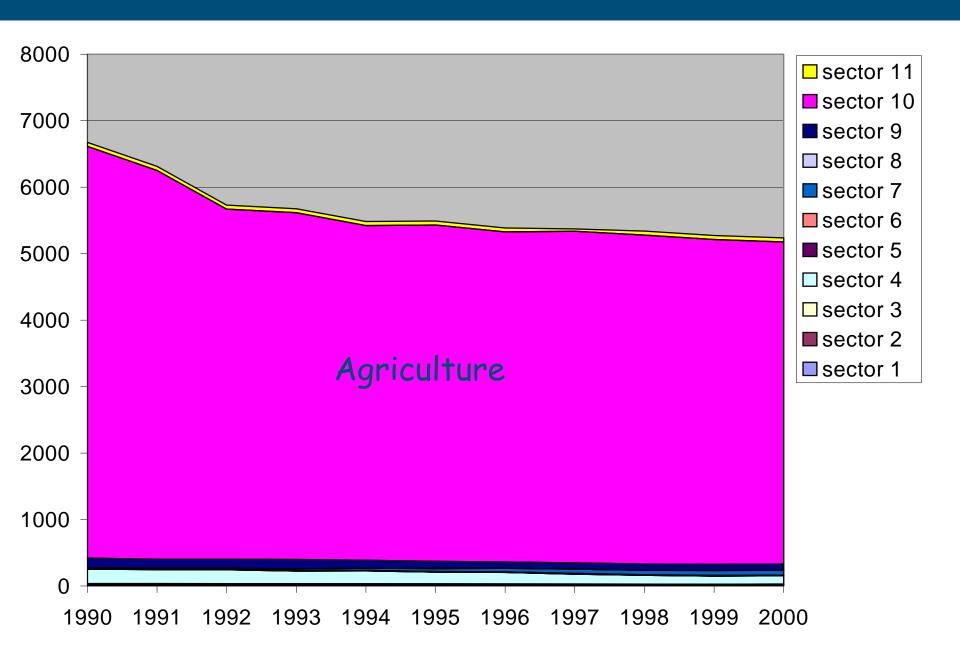
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Review of Gothenborg Protocol (Report of TFIAM/CIAM, 2007)

- Downward emissions trends, but effects are less than initially thought;
- Only modest decreases in NH₃ emissions;
- To achieve objectives, additional measures needed;
- These further measures need to be considered in close conjunction with other policies
- Emissions controls offered by non-technical measures and structural changes in agriculture, need to be considered

Agriculture is main source of NH3





Suggestions of the co-chairs of TFRN to EPMAN

- · Review the three documents & revise where needed:
 - How to invite & encourage farmers to mitigate N emissions;
 - Greater considerations of interactions and synergies of measures as regards the various N species emissions
 - How to arrive at smarter, integrated mitigation strategies
 More emphasis on animal feeding, especially (dairy) cattle (using milk urea as indicator?)
 - Using N balances as N use efficiency indicators?



Outlook

- Recommendations of EPMAN have to be adopted by the TFRN (meeting in Garmisch, Germany, April 2009).
- Recommendations of TFRN have to be adopted by WGSR and the Executive Body (meetings Geneve, September 2009).
- Revision of the Protocol.....