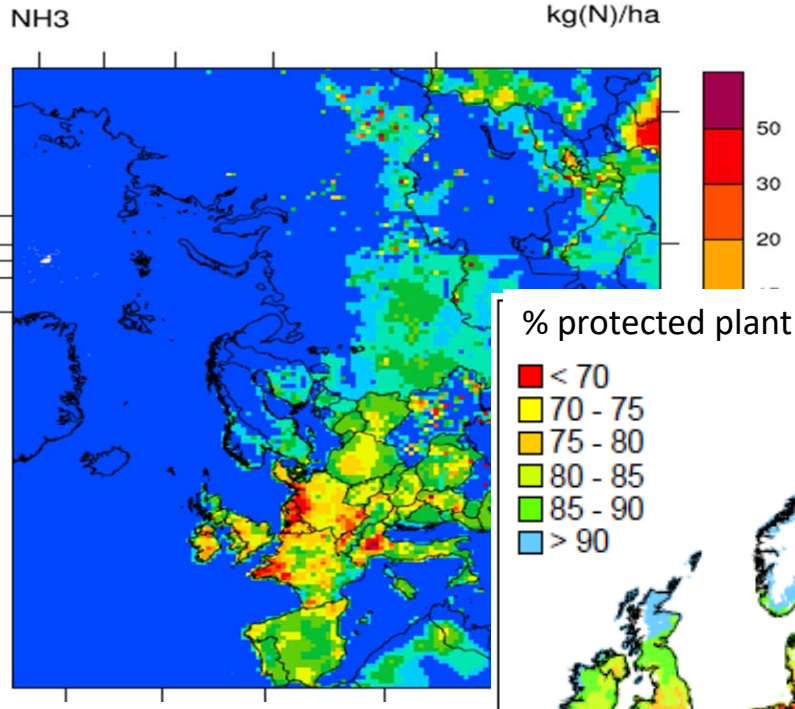
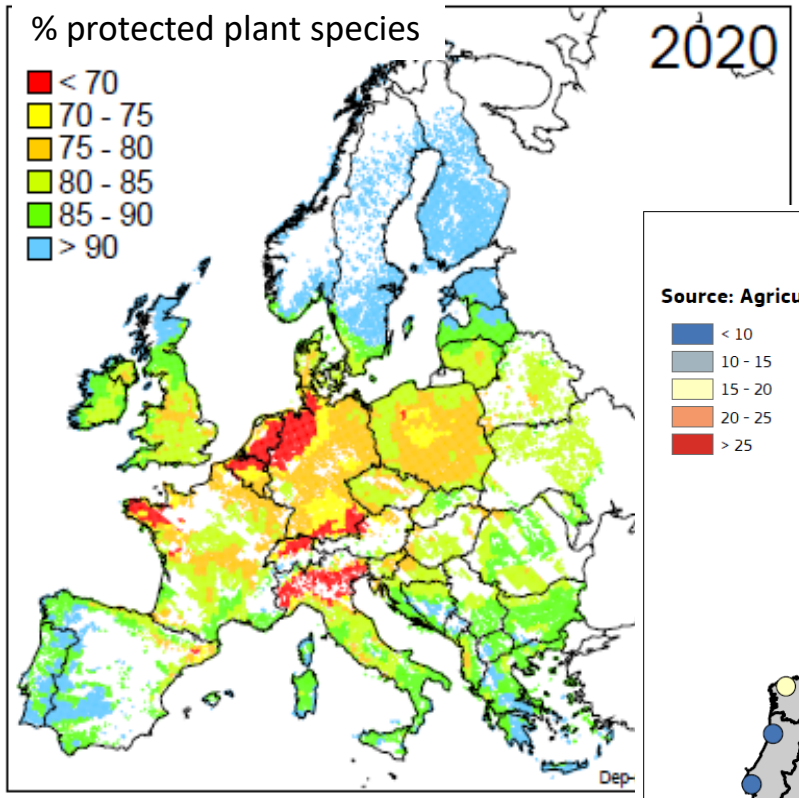
Ammonia Assessment Report 2020

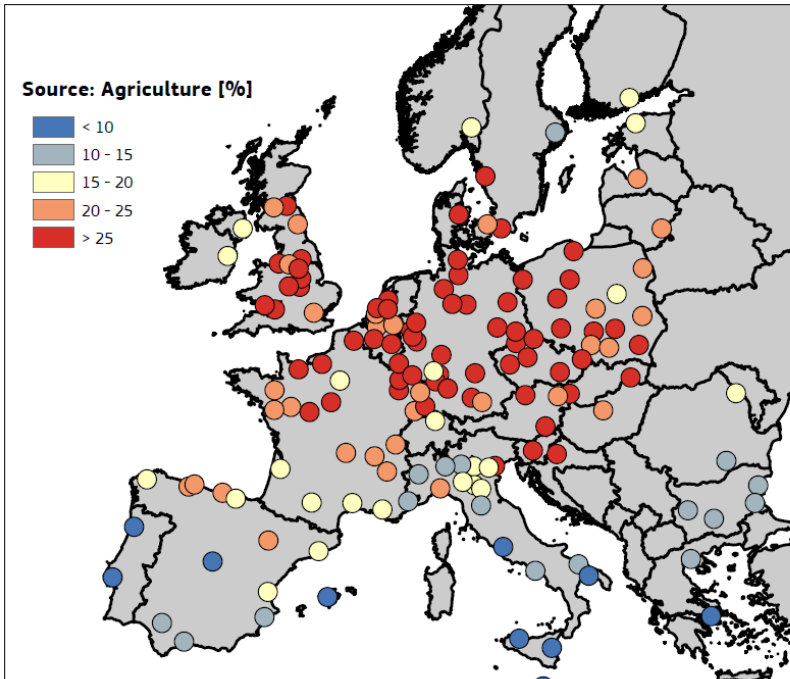
Rob Maas @TFIAM – 21 April 2020

How can we increase attention for ammonia policy?
What are the costs of inaction?

Large differences in emission densities, ecosystem effects and contribution to PM-exposure

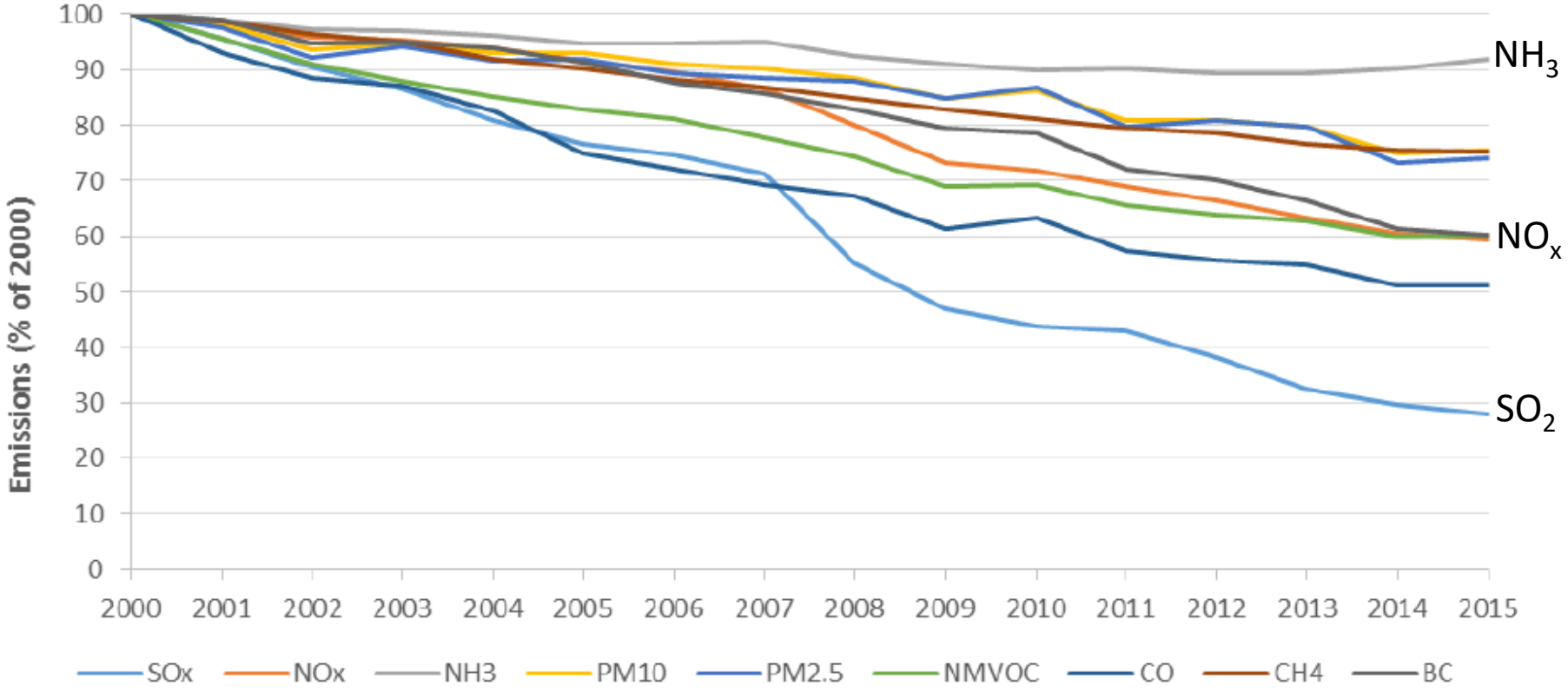






Since 2000, only modest reductions in ammonia emissions

Figure 1: Development in EU-28 emissions, 2000-2015 (as % of 2000 levels) [Source EEA]



How much ammonia reduction is needed?

Further emission reductions of ammonia would be required to prevent the exceedance of WHO-guideline values for particulate matter concentrations as well as avoiding the exceedance of critical loads of ecosystems.

In areas with a high density of livestock emission reductions of 30-50% would be required to meet long term targets for health and ecosystem protection.

Economics of ammonia policy

Total MFR abatement costs in the EU:

€ < 6 billion per year

Total damage due to European agricultural ammonia in 2030:

€ 60 billion per year

= 20% of the value agricultural production in the EU

Meat and dairy would have to be 40-50% more expensive to cover the true price

Status of the process

- Review by experts from TFMM, ICP M&M, TFRN (end 2019)
- Review by TFIAM – April/May 2020
- Text on Ammonia issues in NA to be added
- Annex on priority research questions to be added
- Review by EMEP-SB/WGE (Sept 2020)
- Submission to WGSR/EB – Dec 2020

Research questions

1. Which existing and new non-agricultural ammonia sources can become significant?
2. What is the influence of NOx and SO2 reductions on SIA formation, ammonia concentrations and transboundary fluxes?
3. What is a feasible resolution for deposition modelling and how can this best be supported by measurements?
4. ….