Für Mensch & Umwelt



3rd INMS Meeting Edinburgh

Scientific activities on the way towards a nitrogen strategy in Germany

Markus Geupel
German Environment Agency
Section II 4.3 "Air Quality & Terrestrial Ecosystems"

Wrap up of last my last information at INMS-2

2 IMPORTANT NITROGEN REPORTS IN 2015

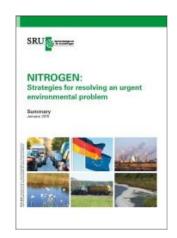
- Reactive Nitrogen in Germany (German Environment Agency)
- https://www.umweltbundesamt.de/publikationen/reactive-nitrogen-ingermany
- Nitrogen: Strategies for resolving an urgent environmental problem (German Advisory Council for the Environment)
- Link
- Recommendation to the Ministry for the Environment and the Government to find integrated solutions, to formulate a "Nitrogen Strategy"

FEDERAL MINISTRY FOR THE ENVIRONMENT IN 2015 STARTED PROCESS

• 2016: Dialogue activities with other stakeholders and ministries









New development since INMS-2

1ST NITROGEN REPORT OF THE FEDERAL GOVERNMENT

- June 2017: Publication of the first Nitrogen-Report of the Federal Government
- Lead: Ministry for the Environment, together with Agriculture, Economics, Transport et al.
- Summarizes the environmental and health Problems related to nitrogen emission
- Doesn't formulate neither concrete measures nor fix dates until when a solution is needed.
- States that an action program is needed and should be elaborated under the lead of the Ministry for the Environment
- https://www.bmu.de/publikation/stickstoffeintrag-in-diebiosphaere/





Scientific activites at UBA: Update of NNB

RESEARCH PROJECT SCIENTIFIC SUPPORT OF AN INTEGRATED NITROGEN STRATEGY

- 10/2016 08/2018
- INFRAS (Zürich), University of Giessen, Karlsruhe Institute of Technology

Task 1:

Update of the nitrogen database for Germany

- First application of the EPNB Guidance document on national nitrogen budgets of the CLRTAP
- http://www.clrtap-tfrn.org/epnb
- Workshop on "The German Nitrogen Budget" back-to-back with EPNB-16 to be held in Berlin 2nd – 3rd May 2018
- Feedback of the German experience with the application of the EPNB Guidance document to the EPNB

Scientific activites at UBA: Development of an integrated nitrogen target

RESEARCH PROJECT SCIENTIFIC SUPPORT OF AN INTEGRATED NITROGEN STRATEGY

Task 2:

Development of an integrated nitrogen target for Germany

- For communication purpose in addition to existing sectoral concentration limits
- Effects based approach
- Six related areas of protection, with different target values
- Calculation of maximum emissions in relation to the overall compliance with target values
- Combination of different nitrogen species to a overall ceiling of nitrogen emission → no weighting
- Regional integration
- However it is debated, that a theoretical compliance with the integrated nitrogen target wouldn't guarantee compliance with all target values everywhere in Germany

- 50 mg /l NO₃ Groundwater
- Critical Level NH₃ 3µg m⁻³
- 40 μg m⁻³ concentration limit NO₂
- N₂O targets from the German climate acton program
- Critical Loads
- Max. N loads to coastal ecosystems

Scientific activites at UBA: Development of an action plan

RESEARCH PROJECT TO SET UP AN INTEGRATED NITROGEN ABATEMENT PROGRAM

- 12/2017 08/2020
- Adelphi Berlin, INFRAS (Zürich), University of Giessen, Environment Research Centre Leipzig

Task 1: Review of legislative framework in Germany

suggestions for better options and better coherence between different regulative areas

Task 2: Inventory of measures

 Collection of characteristics of cross-sectoral measures and instruments, including specific costs and abatement potential

Task 3: Preparation of a cost-benefit analyses for Germany

- Complementary research on cost rates (Choice experiments) and if possible CBA for different scenarios of measures
- Important step as in GER together for their implementation, new legislative instruments have to be assessed with respect to the costs related to the measures

Further activites at UBA: Preparation of INI 2020



We expect it to be a win-win event for German politics and international nitrogen management

Umwelt **6**Bundesamt

Thank you for your attention!

Markus Geupel

markus.geupel@uba.de

