

# **Task Force on Reactive Nitrogen**

**Good practices to strengthen the  
implementation of air pollution-related policies,  
strategies and measures**

Co-chairs: Tommy Dalgaard, Cláudia Marques dos  
Santos Cordovil, Mark Sutton

Lead country: Denmark

ICP Modelling and Mapping meeting

21 April 2021

# **TFRN Goal (EB decision 2007)** **and revised mandate (decision 2018/6)**

*“the long-term goal of developing technical and scientific information, and options which can be used for strategy development across the UNECE to encourage coordination of air pollution policies on nitrogen in the context of the nitrogen cycle and which may be used by other bodies outside the Convention in consideration of other control measures”*

# The five key threats of excess Nitrogen

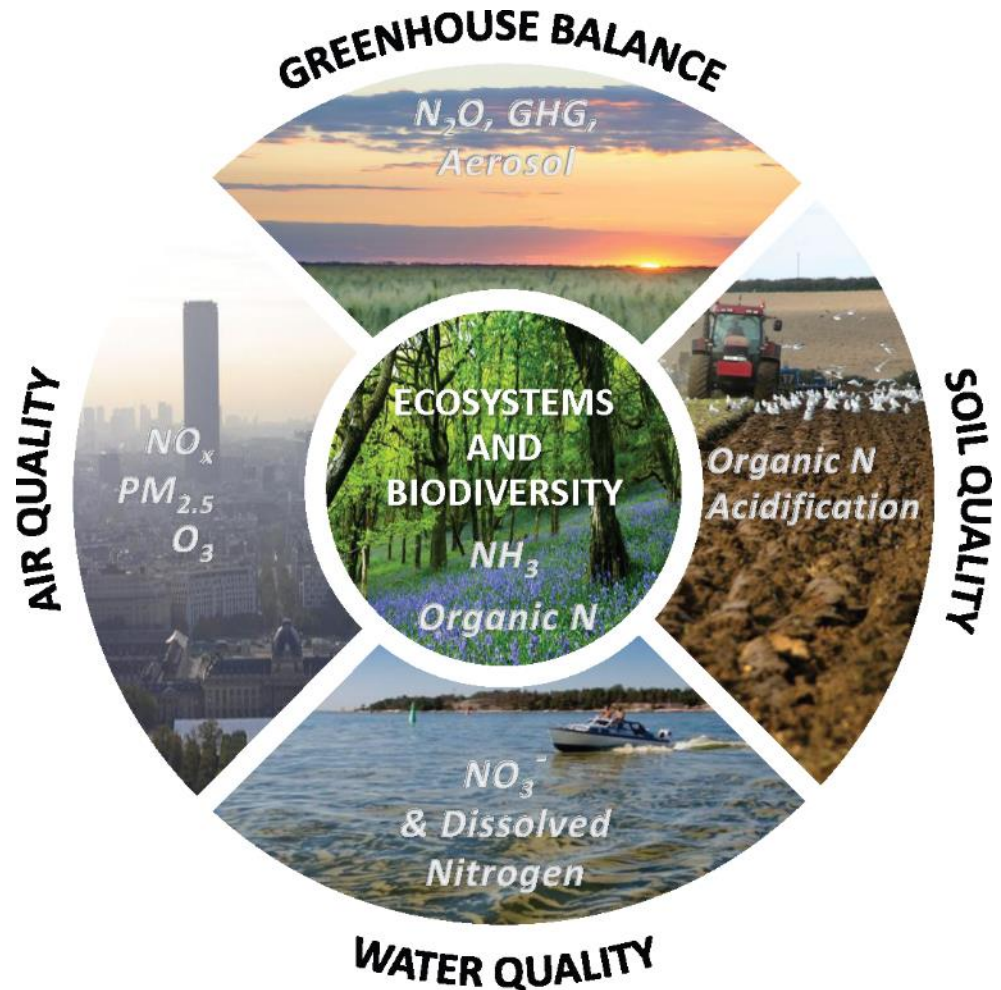
**W**ater quality

**A**ir quality

**G**reenhouse balance

**E**cosystems

**S**oil quality



# The four TFRN expert panels

- EPMAN - Expert Panel on **Mitigating Agricultural Nitrogen**
- EPNB - Expert Panel on Nitrogen **Budgets**
- EPNF - Expert Panel on Nitrogen and **Food**
- EPN-EECCA - Expert Panel on Nitrogen in **EECCA countries**

# Recent development

- Adoption of the **UNECE Guidance Document on Integrated Sustainable Nitrogen Management**.
- Official document (EN-FR-RU)
- Adoption at Executive Body December 2020  
ECE/EB.AIR/2020/6–  
ECE/EB.AIR/WG.5/2020/5

# How can the Draft Guidance Document support parties to the Geneva Air Convention?

- Complements the Ammonia Guidance, which is still valid
- Supports parties in managing the many impacts of wasted nitrogen for multiple societal benefit
- Illustrates how action on air pollution has co-benefits for climate, water, biodiversity, health, economy
- Identifies *24 principles* to help parties understand and tailor solutions
- Summarizes *76 measures* and their performance for abatement of different N forms
- Illustrates how to develop *Packages of Measures* to improve coherency

# Future Opportunities

## The Guidance Document is advisory

- Provides options to support Parties
- Future opportunity to develop supporting e-tools

## The Guidance Document can support parties as they consider future ambitions

- UN Environment Assembly Resolution ([UNEP/EA.4/Res.14](#))
- [Colombo Declaration](#) (Oct 2019) ambition to halve nitrogen waste, offering global saving of \$100 billion annually
- Better nitrogen management as a contribution to post-COVID economic recovery & 2030 Sustainable Development Goals
- Can inform review of the Gothenburg Protocol



- INMS now established to bring scientific evidence together to inform policies and the public on the multiple benefits and threats of reactive nitrogen
- UNEP and INI have launched this global international process with funding from the Global Environment Facility (GEF) for the project “*Towards INMS*”
- \$6M cash + \$60M partner contributions



# EPMAN – Revised, “living” Framework Code



# EPNB – Nitrogen Budgets

- Co-chairs Wilfried Winiwarter IIASA-AUS, and Markus Geupel, UBA-DE
- Guidance document (UN-ECE) as a framework exists (see [www.clrtap-tfrn.org](http://www.clrtap-tfrn.org)) incl. detailed instructions (annexes)
- Successful application to Germany (and other countries like Denmark) have identified potentials

# EPNF – nitrogen and food

- Co-chairs Adrian Leip, EC-JRC, and Susanna Kugelberg, UN-WHO
- Food system approach (from a nitrogen perspective) with focus on:
  - Food production technological efficiencies and mitigation options
  - Food chain losses/waste and opportunities for improvement
  - Consumption (health) issues and way forward
- Special issue under preparation.

# Nitrogen on the Table

The influence of food choices on nitrogen emissions and the European environment

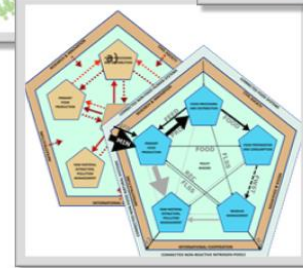
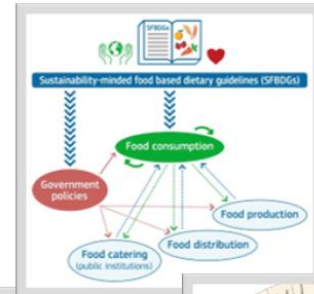


Special Report of the  
European Nitrogen Assessment



# Appetite for Change

Food system options for  
nitrogen, environment & health



2<sup>nd</sup> Special Report of the  
European Nitrogen Assessment  
on Nitrogen & Food



# EPN-EECCA at a second stage

- Linking Convention activities with other conventions at global-scale
- INMS partnership with GEF and UNEP
- special link of this Expert panel to the East-Europe demonstration region funded by INMS

# Revised mandate for permanent activities

- **Development and publication of guidance documents on preventing and abating ammonia emissions from agricultural sources (ECE/EB.AIR/120) - National Ammonia Codes (NAC)**
- **Dissemination of the ECE Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions (ECE/EB.AIR/129) and the related publication and work with national focal points to support its implementation.**
- **Periodic update the ECE Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions (ECE/EB.AIR/129) and the related NAC publications, through work with national focal points to support its implementation.**
- **Provide technical information on making and using nitrogen budgets**

- Provide **technical information on the effects of human diets on nitrogen use and emissions and the associated synergies between environment, agriculture, health and diet.**
- **Provide nitrogen-use indicators** (e.g., nitrogen-use efficiency) related to multiple indicators of environmental quality, including **water quality.**
- **Provide support** to the Implementation Committee, **coordinated with other relevant bodies, in particular, the Task Force on Emission Inventories and Projections, the Task Force on Techno-economic issues**
- **Encourage ratification and implementation of the Convention and its protocols among the target countries,** in particular the EMEP Protocol, the Gothenburg Protocol, the Protocol on Heavy Metals and the Protocol on POPs, and facilitate information exchange and cooperation