

Task Force on Reactive Nitrogen

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

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Lead country: Denmark

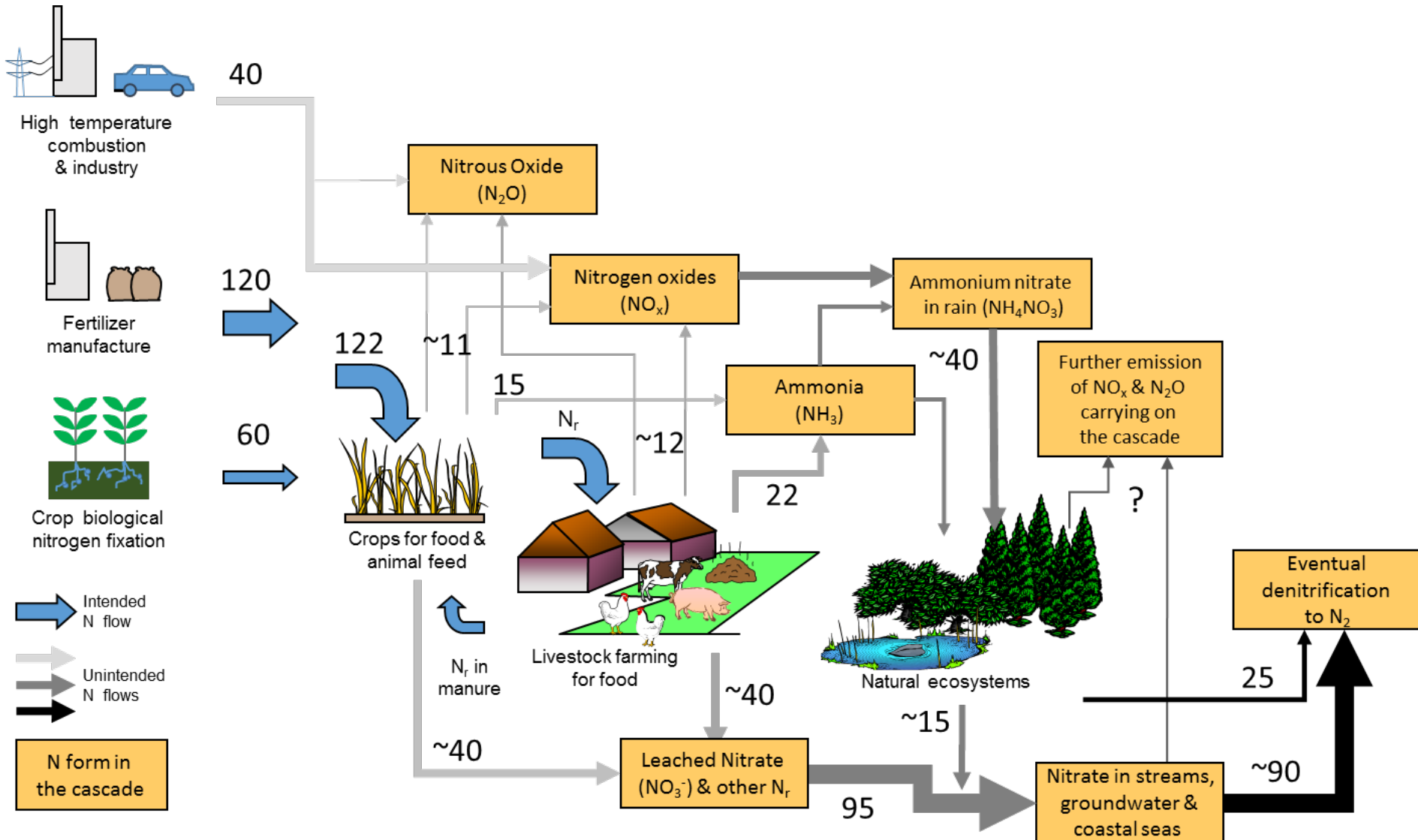
WGSR 57, Geneva

22 May 2018

TFRN Goal (EB decision 2007)

“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”

Reactive Nitrogen in the Environment



Global flows summarized: *Indian Nitrogen Assessment, 2017*

4 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**

EPMAN - Revised Framework Code

Options Ammon

Guidance from the
Reactive Nitrogen



United Nations Economic
Framework Code for
Agricultural Practices
Ammonia Emissions



TFRN LBTAP
International Technical Group of Experts

National Code of Good Agricultural Practice for Ammonia Abatement

Only 10 out of 25 countries have recommendations to reduce NH₃ emissions, but not all comply with the requirement to publish a national code.

Most of them include recommendations in their general good practices codes

EPMAN – is at a second stage

Way forward on Framework Code:

- ASSIST countries to establish their own Codes (NAC)
- Updates of the FC
- Visual copies of the FC chapters intended to help farmers in countries that do not have their own national code.
- The publication of the Ceilings Directive (2016/2284/EU), although affecting only the European countries, is creating pressure on the publication of the NACs, and will necessarily urge the need for assistance to the countries by the TFRN

EPNB – Nitrogen Budgets

work towards a second stage

- Co-chairs Wilfried Winiwarter IIASA-AUS, and Markus Geupel, UBA-DE
- EPNB-16 in Berlin, May 2-3, 2018
- Guidance document (UN-ECE) as a framework exists (see www.clrtap-tfrn.org)
- Detailed instructions (annexes) still incomplete; e.g. for energy and waste.
- Application to Germany (DESTINO project) identifies improvement potential
- Country support (beyond Germany) is essential to proceed further

EPNF is at a second stage

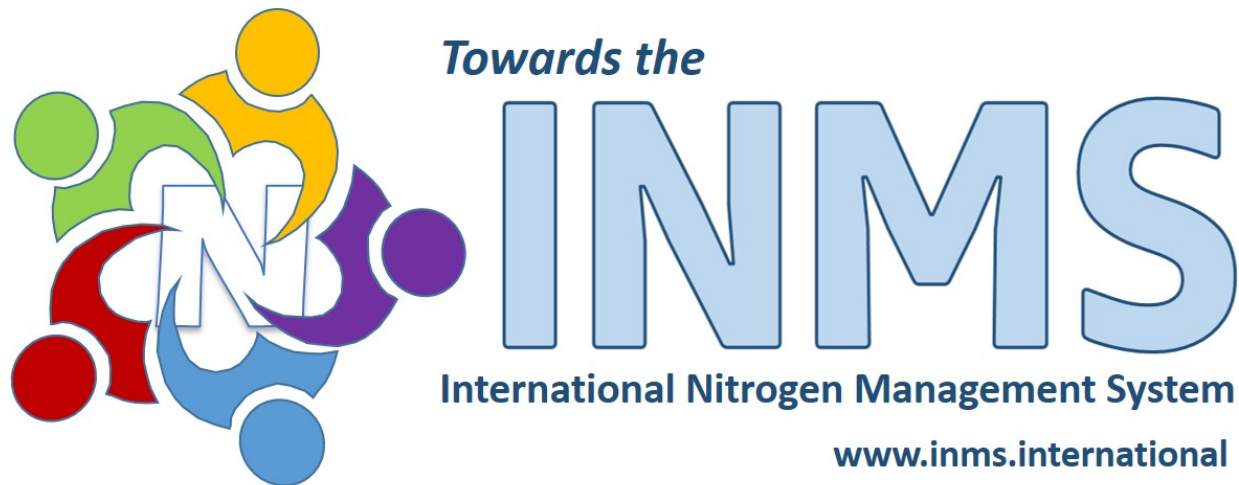
- Co-chair Adrian Leip, EC-JRC, with Susanna Kugelberg, UN-WHO, Copenhagen as new co-chair.
- Food system approach (from a nitrogen perspective) with focus on:
 - Food production technological efficiencies and mitigation options
 - Food chain losses/waste and opportunities for improvement
 - Consumption (health) issues and way forward
- Food system and nutrient governance

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

TFRN progress report and workplan for 2018–2019

- Provide support to Parties in the implementation of their National Ammonia Codes (NACs);
- Document “Towards joined-up nitrogen guidance for air, water and climate co-benefits” in collaboration with EU
- Establishing the links of N with other elements in the formation of secondary pollutants
 - E.g. the role of N in formation of PM2.5
- Include circular economy concept into the N management (see further INMS actions)
 - E.g. capture of N from NO_x and from waste treatment processes at accessible prices, and with potential to supply as nutrients



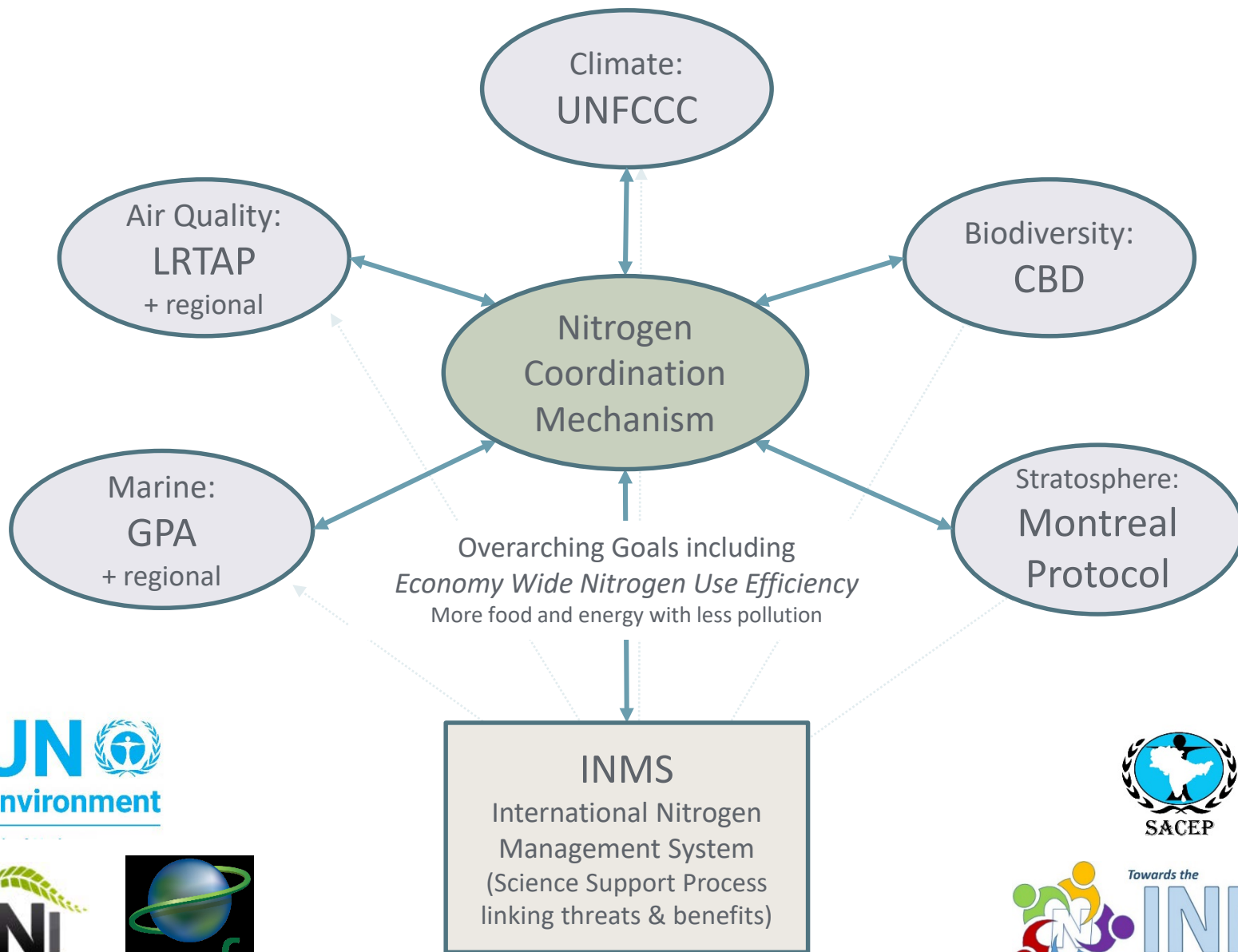
- INMS now established to bring scientific evidence together to inform policies and the public on the multiple benefits and threats of reactive nitrogen
- UNEP and INI have launched this global international process with funding from the Global Environment Facility (GEF) for the project “*Towards INMS*”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



Joint UNECE air convention and UNFCCC-SBSTA workshop

- In relation to the UNECE submission to the UNFCCC agriculture process (“Koronivia Process”) we propose to have a joint workshop between the UNECE Air Convention and the Subsidiary Body for Scientific and Technological Advice (SBSTA) of UNFCCC on air quality climate interactions in agriculture.
- We call for such a workshop as reflected in the document submitted to UNFCCC, to be included in the TFRN workplan.

Developing the Policy Arena for Nitrogen



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 and the Task Force on Reactive Nitrogen.**
- **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

The five key threats of excess Nitrogen

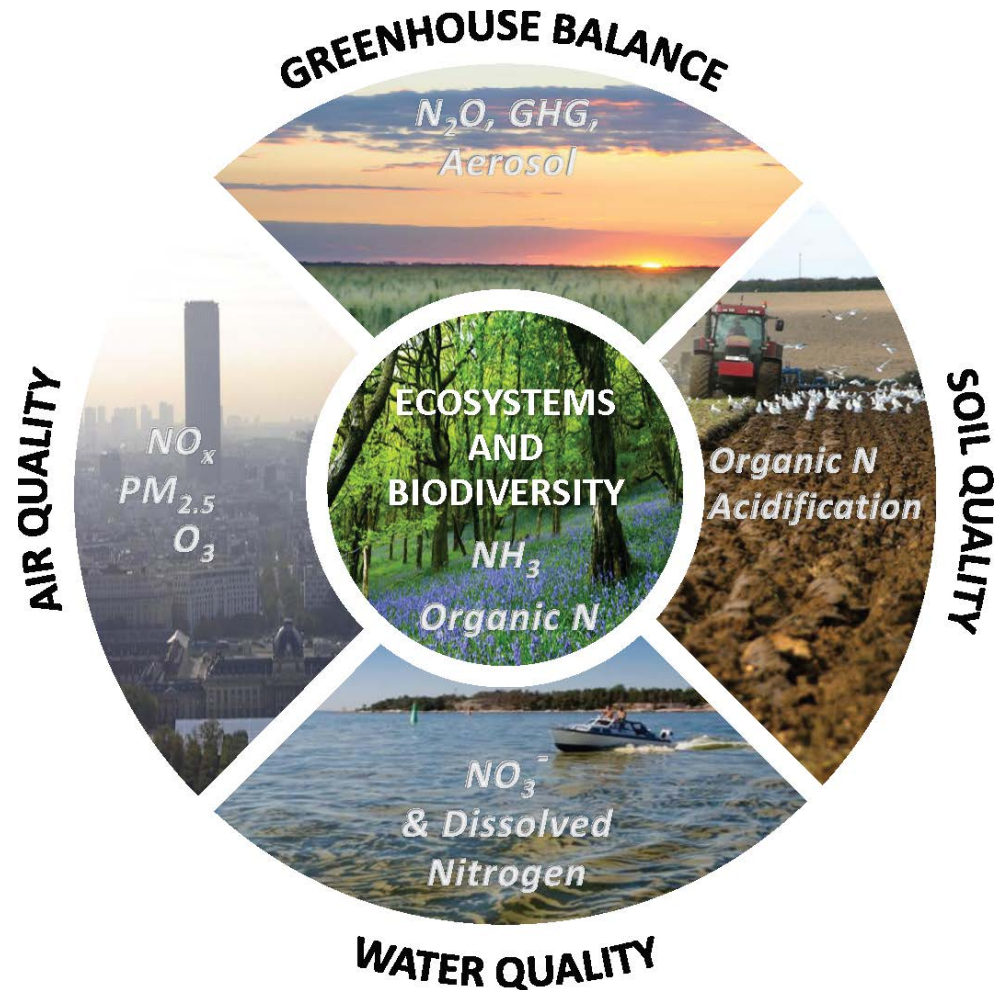
Water quality

Air quality

Greenhouse balance

Ecosystems

Soil quality



Note

- Although it is only a European issue, it may be important to mention that the Emissions Ceilings Directive is putting a tremendous pressure into the publication of the NACs

Linking International Nitrogen Policy Frameworks

Recognizing
Planetary
Boundaries

Maximizing
Co-benefits

