Project Number 282910

ÉCLAIRE

Effects of Climate Change on Air Pollution Impacts and Response Strategies for European Ecosystems

Seventh Framework Programme

Theme: Environment

D24.7 Final report to the GA on networking activities

Due date of deliverable: **30/09/15** Actual submission date: **30/09/15**

Start Date of Project: **01/10/2011** Duration: **48 months**

Organisation name of lead contractor for this deliverable :
NERC

Project co-funded by the European Commission within the Seventh Framework Programme		
Dissemination Level		
PU	Public	x
PP	Restricted to other programme participants (including the Commission Services)	☐
RE	Restricted to a group specified by the consortium (including the Commission Services)	☐
CO	Confidential, only for members of the consortium (including the Commission Services)	☐

1. Executive Summary

During the Final ECLAIRE meeting in Edinburgh, the co-ordinator Mark Sutton presented a report on networking activities to the participants of the General Assembly, which covered the following topics (relevant slides have been copied below, for information):

- The ECLAIRE key messages which were emerging
- The ECLAIRE information delivery path – highlighting the links between the science developed in the components and the end users.
- Outreach activities within the EU, including the work with the Foresight Expert Panel: JHEB *Junction of Health Environment & Bioeconomy* (Future H2020) and green week articles, etc.
- International outreach activities, such as making the links with the UNECE Convention on Long Range Transboundary Air Pollution (CLRTAP), UNEP and OECD.
- Development of the Ammonia Guidance for CLRTAP and associated Framework Code, which also supported the revision of the NEC Directive.
- Work on the ‘Nitrogen on the Table’ report, which highlights the influence of food choices on nitrogen emissions and the environment.
- Relevant articles in the media.
- Steps towards a future ‘International Nitrogen Management System’ (INMS), a science-policy support system for the global nitrogen problem and the ‘Towards INMS’ project proposal which is currently under development.
- Visualising the linkages between International Nitrogen Policy Frameworks.

2. Objectives:

To provide a verbal report to the General Assembly on the networking activities undertaken in the project.

3. Activities:

A report in the form of a powerpoint presentation was given to the final meeting, general assembly audience, in Edinburgh, September 2015.

4. Results:

Presentation was made (see relevant slides from the presentation, below).

5. Milestones achieved:

There were no associated milestones.

6. Deviations and reasons:

There were no deviations.

7. Publications:

There were no publications directly relevant to this deliverable.

8. Meetings:

The presentation was made at the 5th and final General Assembly, which was held in Edinburgh, 1st-4th September.

9. List of Documents/Annexes:

Relevant slides are copied below, in Annex 1.

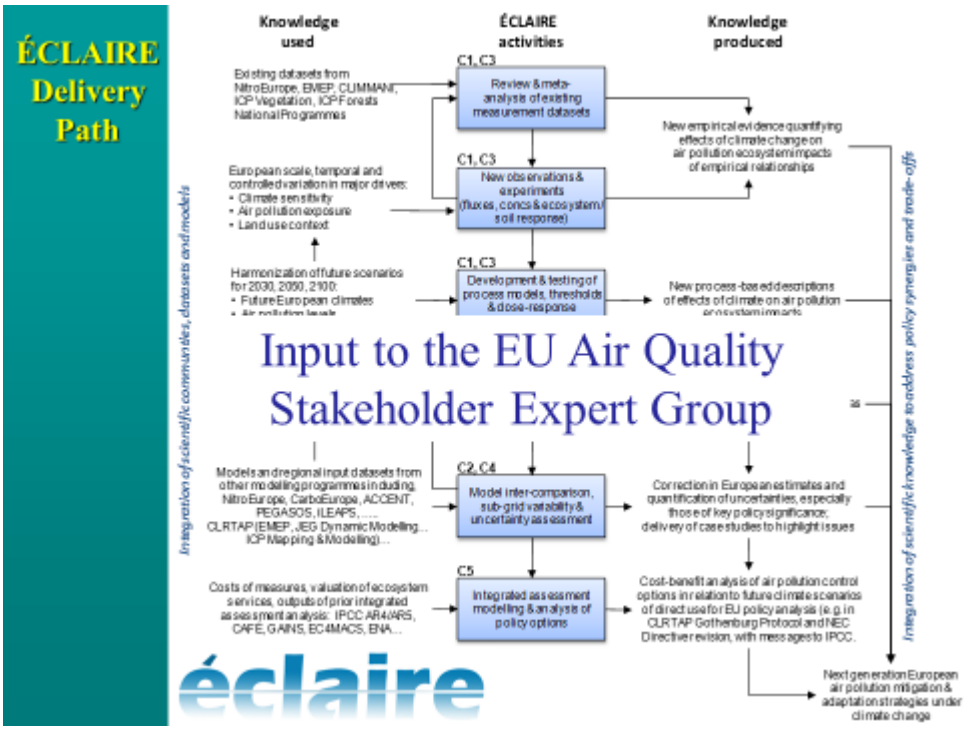
Annex 1: Relevant slides presented at the 5th GA.

Annex

ECLAIRE Key message

"The emerging message is that climate change will worsen the threat of air pollutants on Europe's ecosystems:

- Climate warming is estimated to increase the emissions of many trace gases, such as ammonia (NH_3), soil emissions of nitrogen oxides (NO_x) and important biogenic volatile organic compounds (BVOCs). These effects would increase ground-level concentrations of NH_3, NO_x and ozone (O_3), particles ($PM_{2.5}$) as well as atmospheric nitrogen deposition.
- Climate warming may increase the vulnerability of ecosystems towards air pollutant exposure or atmospheric deposition. Such effects may occur as a consequence of combined perturbation, as well as through specific interactions, such as between drought, O_3, N and aerosol exposure."



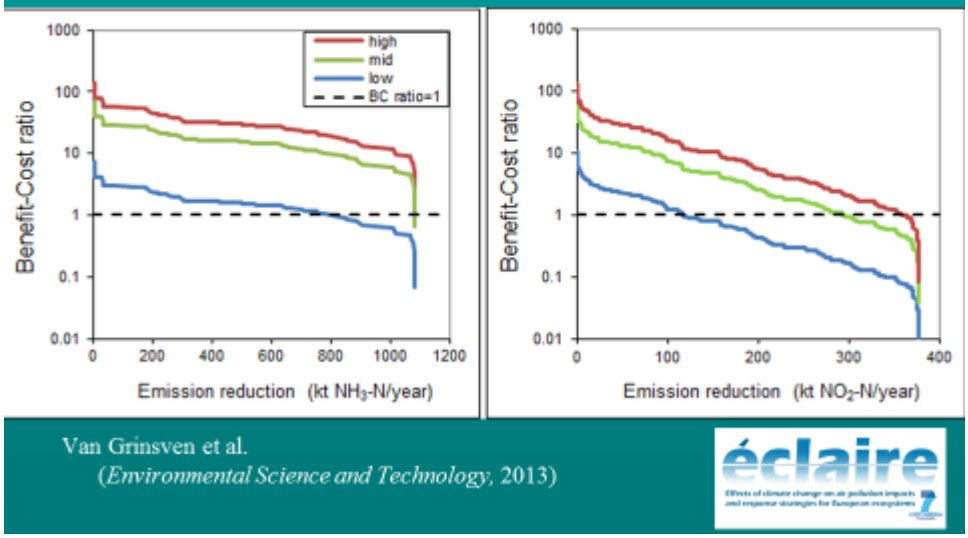

MENU FOR A
BETTER ENVIRONMENT
50%
Forum on Fertilizers
and Nutrients for Growth
fertilizers europe
Join the debate
Chair
Britta Reimers MEP
Vice-Chair
Julie Girling MEP
The EU Year of "Air Quality"
From Parliament Magazine
• Green Week &
• EU Parliament Forum


ECLAIRE Team provided UNECE Ammonia Guidance
Plus revised Framework Code to support NECD revision
Options for Ammonia Mitigation
Guidance from the UNECE Task Force on Reactive Nitrogen
éclaire
Effects of climate change on air pollution impacts and response strategies for European ecosystems
TFRN
LRTAP


Full report to be launched in the summer
Executive Summary out already
Nitrogen on the Table
The influence of food choices on nitrogen emissions and the European environment.
Special Report of the European Nitrogen Assessment
TFRN
LRTAP


THE TIMES
Leading articles
THE TIMES
Eat Less Meat
A vital message is buried in a new report on climate change
Westhoek et al., 2014

EU benefit-cost ratios for NH_3 and NO_x mitigation

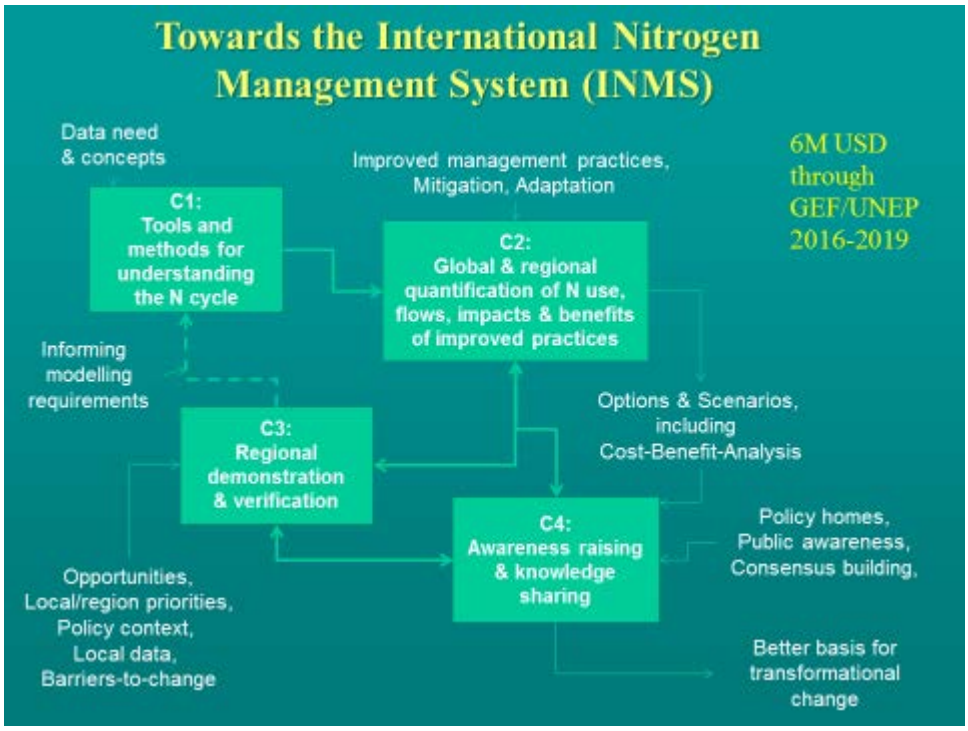


Van Grinsven et al.
(*Environmental Science and Technology*, 2013)

Toward the International Nitrogen Management System (INMS)

- Initiative with United Nations Environment Program (UNEP)
- Toward a global science-policy support framework for nitrogen, addressing multiple co-benefits
- Engage with countries, industry, civil society in cooperation with UNEP, LRTAP, Marine Conventions FAO etc
- Linking the economic, environmental, food and energy benefits of better *Nitrogen Use Efficiency*

- **ECLAIRE scientists taking the lead**
- **What should the EU contribution look like?**


Towards the International Nitrogen Management System (INMS)
Data need & concepts
Improved management practices, Mitigation, Adaptation
6M USD through GEF/UNEP 2016-2019
C1: Tools and methods for understanding the N cycle
C2: Global & regional quantification of N use, flows, impacts & benefits of improved practices
Informing modelling requirements
Options & Scenarios, including Cost-Benefit-Analysis
C3: Regional demonstration & verification
C4: Awareness raising & knowledge sharing
Policy homes, Public awareness, Consensus building,
Opportunities, Local/region priorities, Policy context, Local data, Barriers-to-change
Better basis for transformational change


Linking International Nitrogen Policy Frameworks
Climate: UNFCCC
Air Quality: LRTAP + regional
Biodiversity: CBD
Policy Arena for Nitrogen UNEA,OECD..
Marine: GPA + regional
Stratosphere: Montreal Protocol
Overarching Goals including
Economy Wide Nitrogen Use Efficiency
More food and energy with less pollution
www.inms.international
INMS
International Nitrogen Management System
(Science Support Process linking threats & benefits)
éclaire
gef
UNEP
Towards INMS