

# **INMS Component 4: INA awareness raising, process and complementary products**

Dr Clare Howard, UKCEH, UK

*First e-briefing for the Nitrogen Working Group of the  
United Nations Environment Programme*

# Overview

- Role of Component 4 within INMS
- INA process
- Parts A & E of the INA
- Maximising Engagement

# Role of Component 4 within INMS

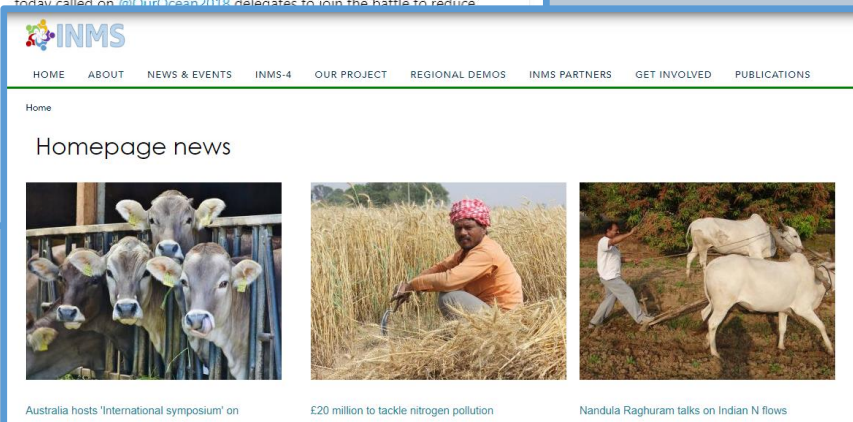
## Internal and external communication



## Training & Education



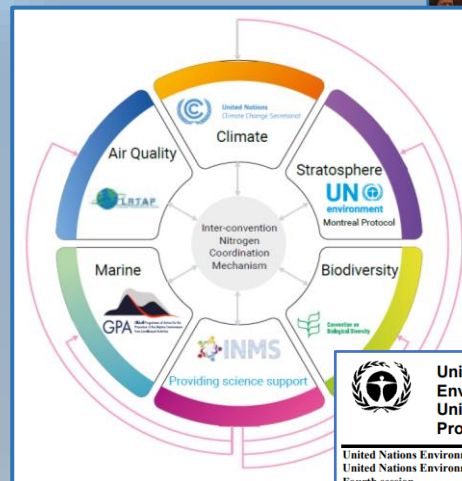
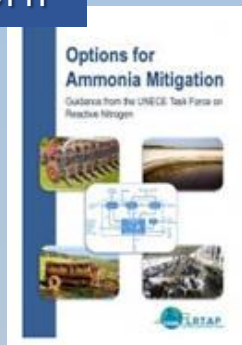
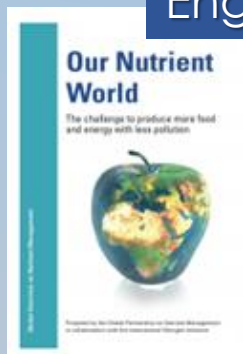
## Global and regional policy engagement




# Role of Component 4 within INMS

Long-term sustainability

Maximising Engagement



 **United Nations Environment Assembly of the United Nations Environment Programme**

---

United Nations Environment Assembly of the United Nations Environment Programme  
 Fourth session  
 Nairobi, 11-15 March 2019

**Sustainable nitrogen management\***

*The United Nations Environment Assembly,*  
*Recognizing the multiple pollution threats resulting from anthropogenic reactive nitrogen, with adverse effects on the terrestrial, freshwater and marine environments, contributing to air pollution and greenhouse gas emissions, while acknowledging the benefits of nitrogen use for food and energy production,*

Providing access to data and tools



Summary	Measure description	Measure Efficiency	Costs	Rets and Further Info	Autho
	<b>Aim of Measure</b> The application of... leads to reduced am...	<b>Nitrogen Spec</b> Ammonia Nitroge	<b>Climatic Zone</b> All climates	<b>Geographic</b> Global	<b>Sector:</b> Agriculture (livestock)
<b>Validation status:</b> Awaiting content					

Data Catalogue

Shared input, model outcomes and access to measurements

# International Nitrogen Assessment

Stakeholder Engagement	Drafting & Harmonisation	Review & Analysis	Launch & Maximising Engagement
NWG, Editors CLA & Authors INMS Scientists	Virtual process, drafting and engagement	Editorial & External	Hard & e-copy, video, summaries
Summer 2020 /ongoing	Summer 2020 /Spring 2021	Spring 2021	Summer 2021

**30 Chapters, Foreword, 2 Summaries, Additional Briefs**

**Part A: The global nitrogen challenge: problem definition**

Setting the scene, putting the nitrogen issue into scientific and global context

**Part E: Grasping the future challenge**

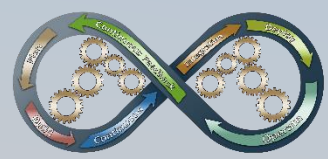
Forward look, what is needed to deliver change? Sustainable Nitrogen Management towards Sustainable Development Goals

# Chapter 2: Nitrogen, environment and sustainable development



**Multi-dimensional nature of nitrogen**  
**Links to threats and other cycles**  
**Nitrogen and limit theories**  
**N towards the SDG's**

# Chapter 3: Nitrogen and food security



**The 4 N revolutions**  
**Importance of N vs other elements**  
**N and nutrition**  
**N inequality**



# Chapter 4: Nitrogen in current national and international policies

**Baseline policies & sharing experiences**

**Barriers and opportunities**

**International context – where is N?**

**Synergies and challenges**



INMS: C1, C2, C3

INMS Dataset on N Policies



# Chapter 5: Towards a holistic response to the global nitrogen challenge

**Current status policy & science - how to move forward?**

**Key themes - identified by community**

**Developing role of the INCOM**

**INA informing INCOM, INMS supporting INA**

B: Tools

C: Flows & Impacts

D: Regional Context

E: Scenarios & Circularity

INMS: C1, C2, C3, C4

INMS Data Portal Models & Output

# Chapter 25: Key actions for better nitrogen management



**Most promising measures**  
**- sector, region, climate**

**Case studies**

**Synergies and packages of measures**

**Defining and listing the 'N Top 10'**

INMS: C2, C3

INMS Measures Database

# Chapter 26: Addressing the barriers to better nitrogen management

**What makes addressing nitrogen pollution so challenging?**  
**Barriers by actor, type and region**  
**How to overcome barriers?**  
**‘Enablers’**



# Chapter 27: Synthesis of possible futures for the global nitrogen cycle



**Nitrogen futures - storylines & SSPs for nitrogen**

**Synthesis and potential outcomes**

**Key actions – what if we don't act?**

**Climate - smart N Management**



# Chapter 28: Goals and Pathways: How to Halve Nitrogen Waste by 2030?



**Halve Nitrogen Waste - ambition and communication**  
**When to act by and how?**  
**Pathways & Regional Context**  
**Clear messages on benefits to ‘Halve Nitrogen Waste’**

INMS: C2,  
C3, C4

INMS Dataset on N Policies

INMS Data Portal Models  
& Output

# Chapter 29: Evaluation of policy options and instruments for better nitrogen management

**What is an effective policy?**

**What has worked well so far? Sectors, nations**

**Full-chain policy Nitrogen Use Efficiency**

**Innovative approaches**



INMS: C2, C3, C4

INMS Dataset on N Policies

# Chapter 30: Nitrogen and public communication

**Goals & Audiences, Stakeholders & Actors**  
**What to communicate & why?**  
**Role of differing approaches**  
**Narrative & key messages – by audience**



# Maximising Engagement

## INA Supporting Datasets and Information

INMS Measures Database

INMS Dataset on Policies

INMS Data Portal Models & Output

Additional resources, maps, graphics, infographics

## Additional Publications & Resources

INA Resources for Education

Published Document

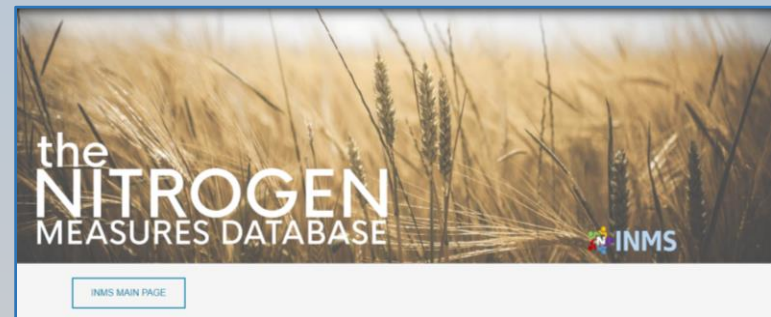
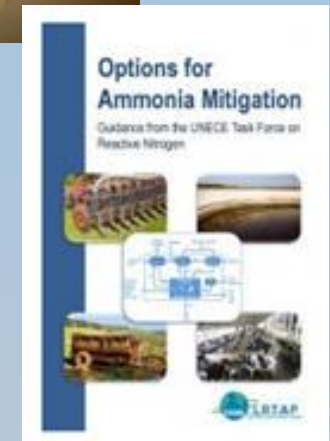
Nitrogen Education Opportunities & Network (NEON)

INA Summary for Business

INA Summary for Civil Society

INA Launch Video

INA Briefing Notes





Thankyou & Questions....

