



Addressing the Nutrient Challenge: the EU perspective

Conference "Resource Efficiency in Practice - Closing Mineral Cycles - Effectively Addressing the Nutrient surplus in Europe"

Brussels, 18 November 2014

Claudia Olazábal

**Head of Unit - Agriculture, Forests & Soil
DG Environment, European Commission**

Pilot Projects

Pilot Project voted by the European Parliament

Pilot Projects (PP) is an initiative 'of an experimental nature designed to test the feasibility of an action and its usefulness'. A **PA** could be the follow up

Project "Resource Efficiency in Practice – Closing the Mineral Cycle"

Nutrients

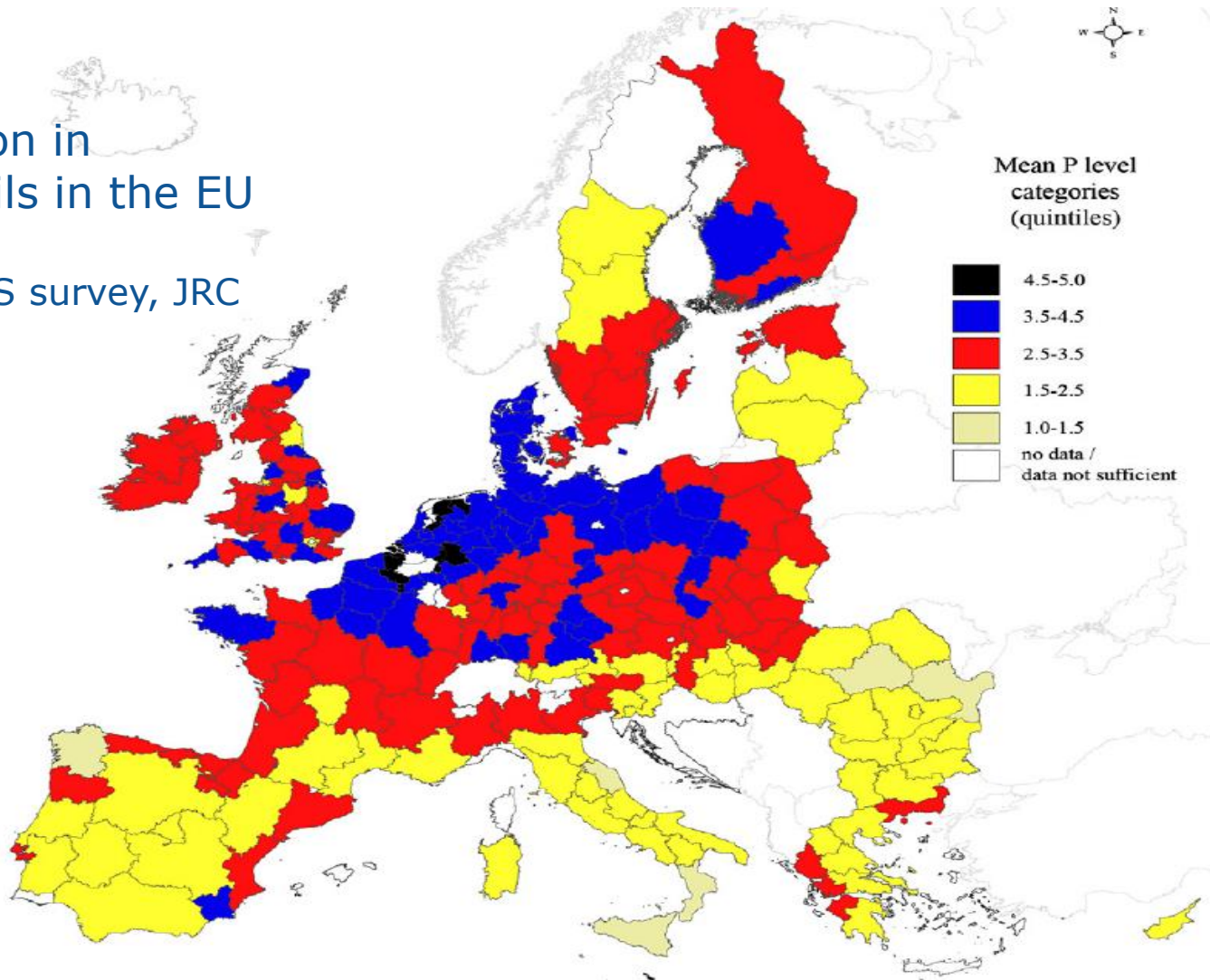
- **Inputs of nutrients are critical in farming systems**
- **However, a surplus nutrients in excess of immediate crop needs can lead to nutrient losses, representing not only a possible cause of economic inefficiency in nutrient use but also a source of potential harm to the environment, through water pollution or air pollution, notably ammonia or greenhouse gas emissions and negative effects on biodiversity**
- **Eutrophication is one of the key threats to reach "good ecological status" for EU surface waters**



Nutrients in the EU – Some facts (2)

Phosphorus
concentration in
cropland soils in the EU

Source: LUCAS survey, JRC



Indicators

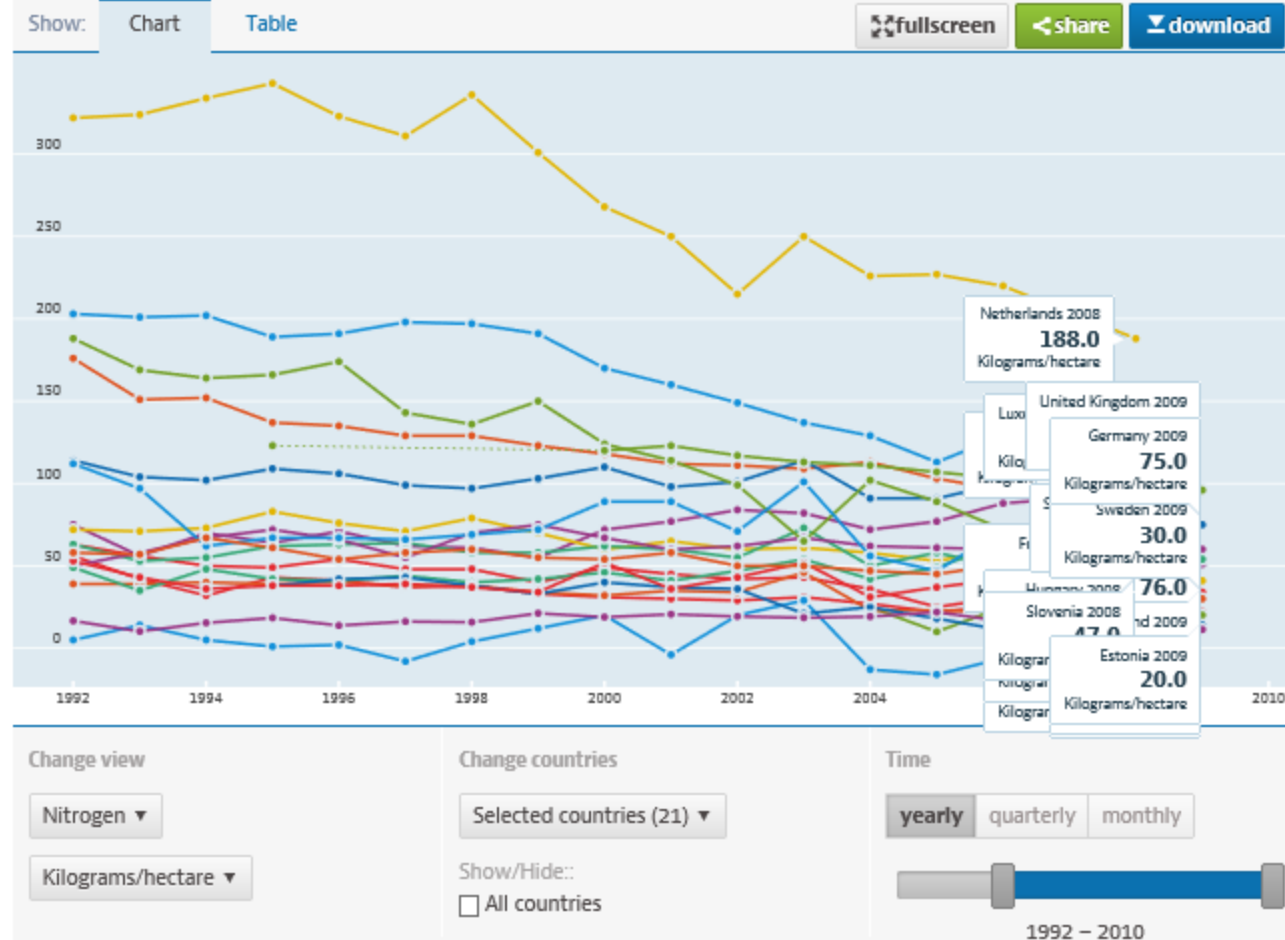
Nutrient balance

Agricultural land area

Nutrient balance

Nitrogen, Kilograms/hectare, 1992 - 2010

Source: Agri-Environmental Indicators : Environmental Performance of Agriculture 2013



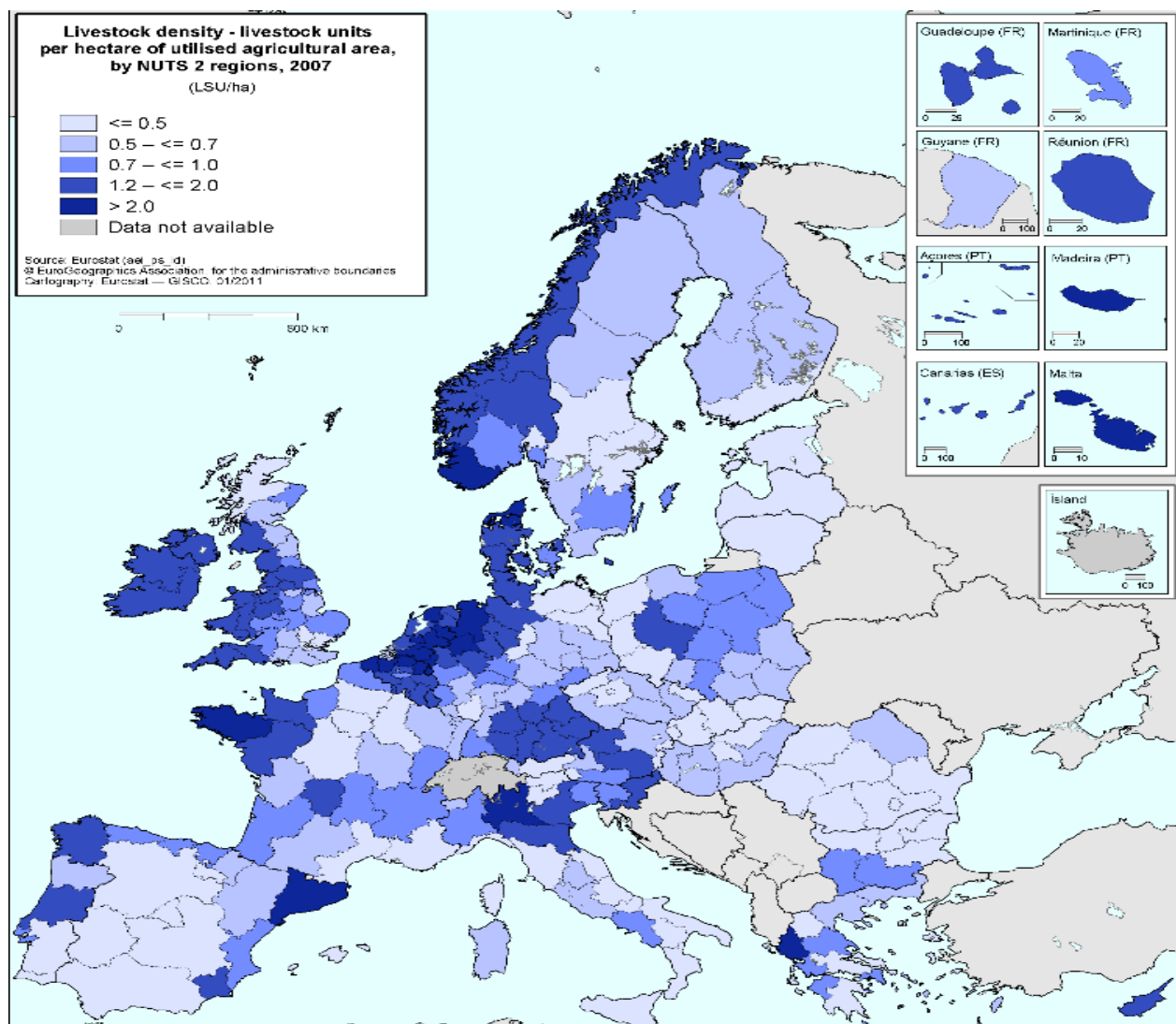
Definition of
Nutrient balance

Related publications

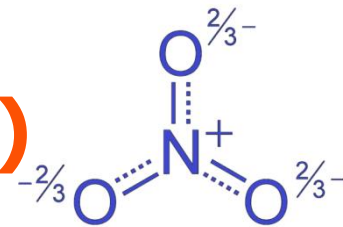
Nutrients in the EU – Some facts (3)

Livestock density
(LU per ha of UAA, 2007)

Source: Eurostat



Nitrates Directive (91/676/EEC)



OBJECTIVE: reduce water pollution caused by nitrates from **agricultural sources** and prevent further such pollution

Monitoring

Identification of polluted waters (or waters at risk of pollution)

Identification of Nitrate Vulnerable Zones (NVZ)

Codes of Good Agricultural Practice (voluntary)

Action Programmes (mandatory)

Reporting

KEY MEASURES: **closed periods, storage requirements**, rules for **land application under certain conditions** (water-saturated, frozen or snow-covered ground, near water courses, on sloping ground), limitation of land application (**balanced fertilization**), max application standard of **170 Kg N/ha/year** from livestock manure, etc.



European
Commission

Legislation relevant to nutrients

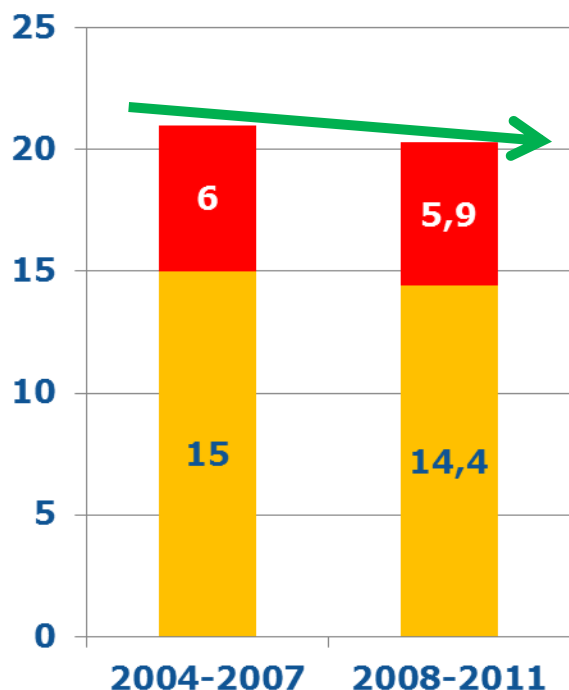
- **Nitrates Directive**
- **Water Framework Directive**
- **Urban Waste Water Treatment Directive**
- **Marine Strategy Framework Directive**
- **Air Quality Package**
- **Fertilisers regulation**



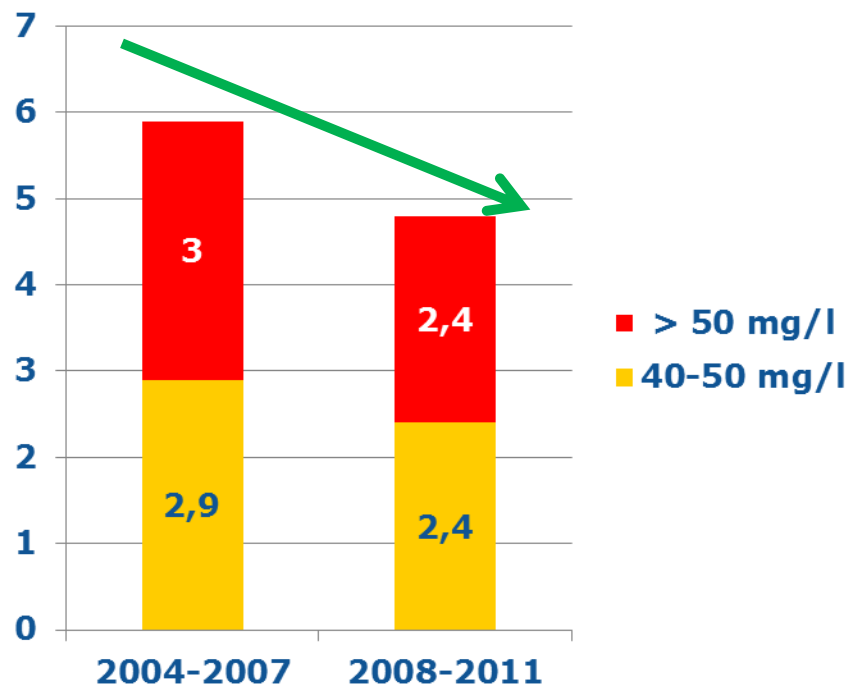
State of implementation of the Directive:

- Average water quality has been improving in groundwater and surface waters. Quality of Action Programmes improved
- **Challenges remain** in the most intensive areas and for the implementation of some measures

% of **groundwater** stations exceeding 40 and 50 mg/l nitrates



% of **surface water** stations exceeding 40 and 50 mg/l nitrates



Sustainable Use of Phosphorus

- **Phosphorus: a vital resource currently used inefficiently**
- **Geographical imbalance of resources and use**
- **Significant environmental impacts across its life cycle**
- **2011 "Roadmap for a resource efficient Europe" – COM(2011)0571 – called for further research in order to identify ways to reduce our dependence on mined phosphate**
- **A "Consultative communication on the sustainable use of phosphorus" – COM (2013) 517 was carried out in 2013, with wide recognition of the importance of the issue from stakeholders**
- **A Communication on Circular Economy (COM/2014/0398) was published in 2014**

Conclusions

- Nutrient management is a key **environmental priority**
- **Successful policy approaches** have been developed, yielding results (e.g. reduction of nutrient inputs, decrease of average nitrate levels)
- **Co-benefits** in relation to other policies (ammonia emissions, greenhouse gases reduction, resource efficiency, etc.)
- **Challenges** still remain to close the cycles.
 - *Need for an **Integrated and holistic** approach, taking account all environmental media*
 - *Use of **innovative practices and solutions***
 - ***Enhanced implementation** of existing policies, aiming at reducing pollution at source*

THANK YOU!

Claudia Olazábal

Head of Unit - Agriculture, Forests & Soil

Directorate General for the Environment – European Commission

Claudia.OLAZABAL@ec.europa.eu