



*European Fertilizer Manufacturers Association*

**EFMA**

**Market trends in EU27**



## **UN Task Force on reactive Nitrogen**

**Wageningen**

**21-23 May 2008**



## Contents

- ❑ **Market trends for fertilizer use in EU27**
  - » Driving factors
  - » EFMA's 10 yrs forecast on fertilizer use
  
- ❑ **EFMA expectation from UN TF rN**



## EU common agricultural policy and market impact

### □ Measures envisaged in the CAP « Health check »

*Expected impact on fertilizer use*

- » **Simplification of the Single Farm Payment:** slight **decrease**
- » **Abolition of set-aside.** **increase**
- » **Compulsory modulation:** **decrease**  
*(transfer from market support to rural development)*
- » **Suppression of the carbon credit.** neutral  
*>> 45€/ha for growing bioenergy crops*
- » **Suppression of milk quotas.** **increase**
- » **Adaptation of Cross Compliance** **decrease**  
*Introduction of Climate Change, Bioenergy, Water Management*

-----  
=> **decrease**  
**(due to expected CAP changes)**



**Development of Bioenergy**  
**&**  
**Climate Change**

**>> two key issues for EU future,  
Which are closely linked**



### New EU policy on bio-energy and climate change

- The EU “Renewable Energy - Climate Change” package:

**20 - 20 - 20 – 10**

#### EU mandatory targets for 2020:

- » 20% increase in energy efficiency.
- » 20% reduction in GHG emissions (compared to 1990).
  - ETS (emission trading): 21% saving in 2020, compared to 2005.
  - Non ETS activities: 10% saving in 2020, compared to 2005.
- » 20% share of renewable in all EU energy consumption.
- » 10% biofuel components in vehicle fuels:
  - >> compliance with sustainability criteria necessary



## Development of Bioenergy in EU

### *fertilizer use is expected to increase*

- ❑ **Extension of the cropped area**

But essentially limited to set aside >> potential swap between food and non-food crops

- ❑ **A trend towards more intensification due to limited area**

To supply increased demand of food, feed, fibers and energy, with less impact on nature

### *but new constraints and uncertainties*

- ❑ **Intense public debate on current strategic choices**

Share of import and time schedule for biofuel development (first generation)

- ❑ **Major uncertainties**

Second generation – food & energy prices

- ❑ **GHG emissions from Agriculture become an overwhelming issue**

- ❑ **Food security & land scarcity, a new raising concern for EU**

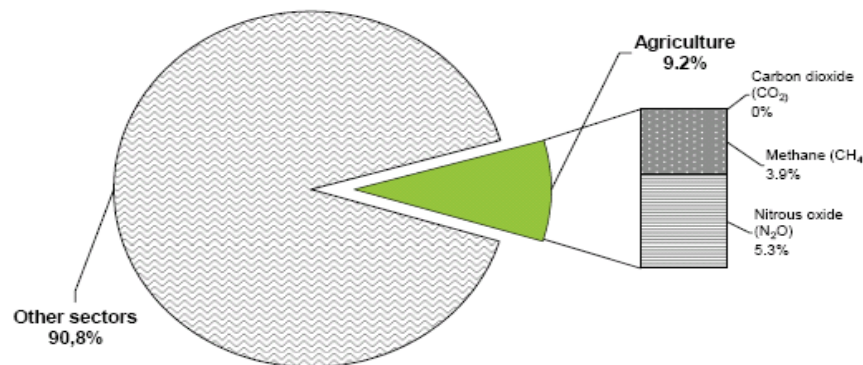
# EFMA – Market trends – driving factors



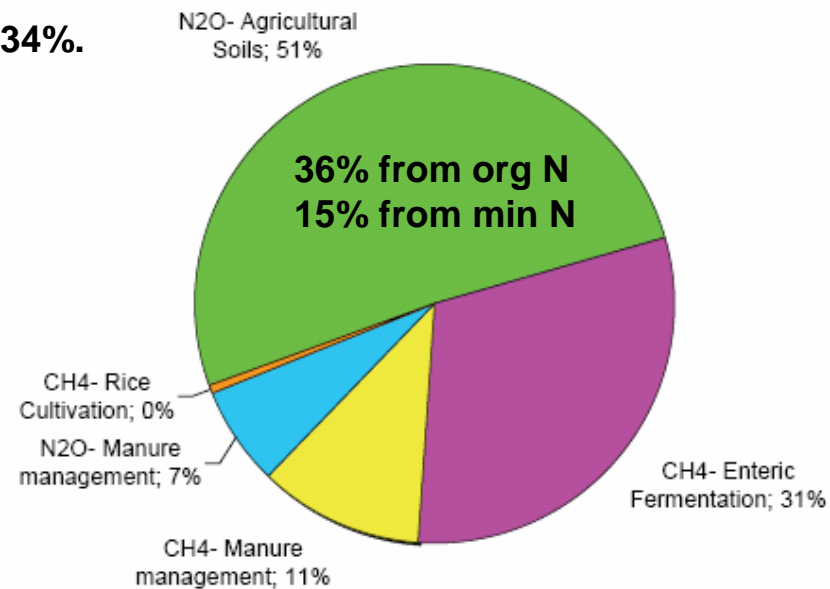
## The EU 27 greenhouse gas emission budget in 2005

Compared to global situation:

- ❑ Share of agriculture is smaller: 9.2% for 14%.
- ❑ N2O emissions from soil are higher: 51% for 34%.



Share of agricultural sector in total GHG emissions



Breakdown of agricultural GHG emissions

Source: Commission DG Agriculture elaboration based on EEA data<sup>1</sup>



- ❑ **Key facts on GHG emissions from EU agriculture**
  - » **GHG emissions from EU agriculture = 10% of all GHG emissions**
  - » **Soil N<sub>2</sub>O emissions = 51% of GHG emissions from EU agriculture**
  - » **Direct + indirect N<sub>2</sub>O emission from mineral N = 15% of GHG emissions from EU agriculture**
  - » **Other most important agricultural GHG sources:**
    - Animal husbandry (N<sub>2</sub>O from manure, CH<sub>4</sub> from ruminants)
    - Crop residues (N<sub>2</sub>O)

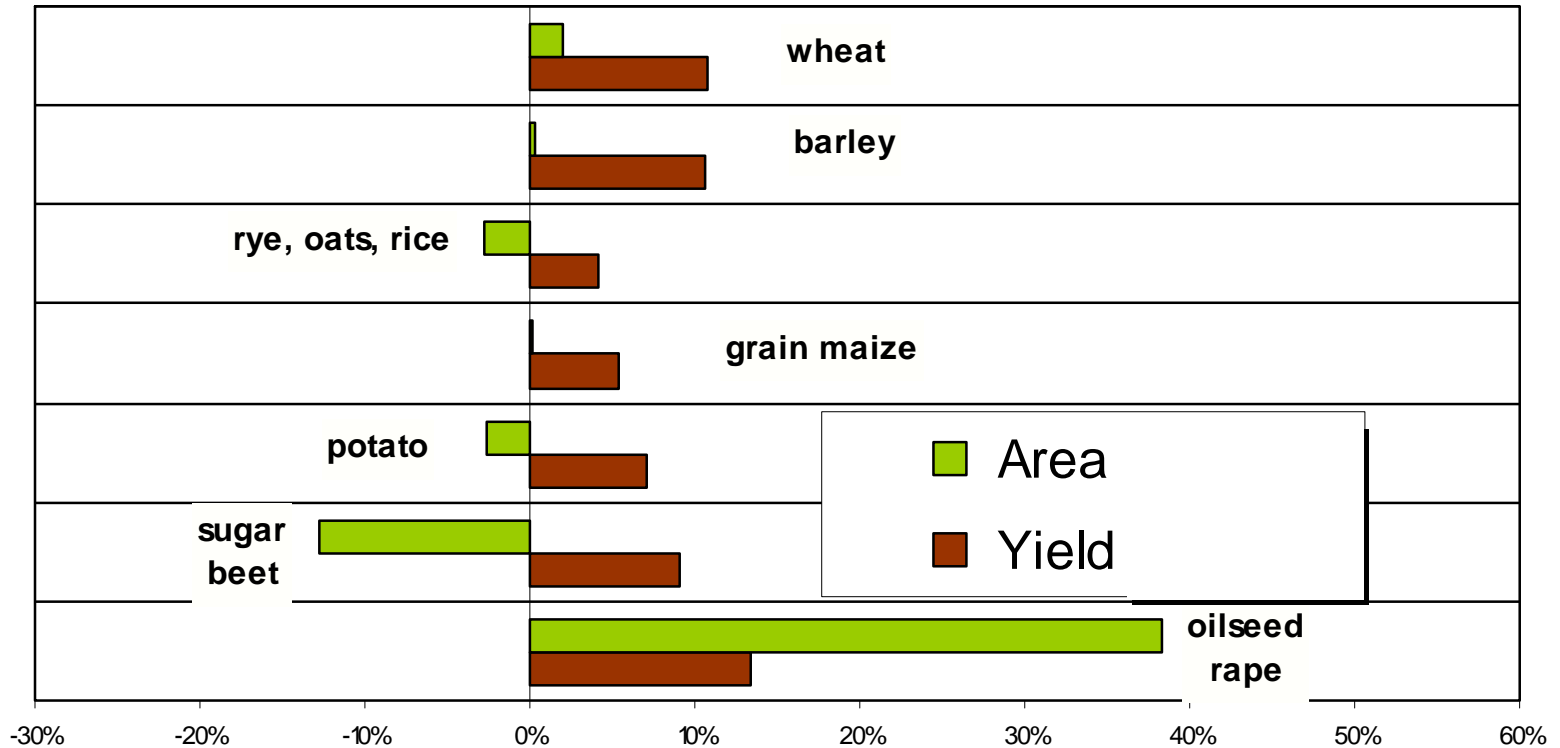


## **The EFMA 10 years forecast**



## Foreseen changes in crops

Forecast changes in farming food crops

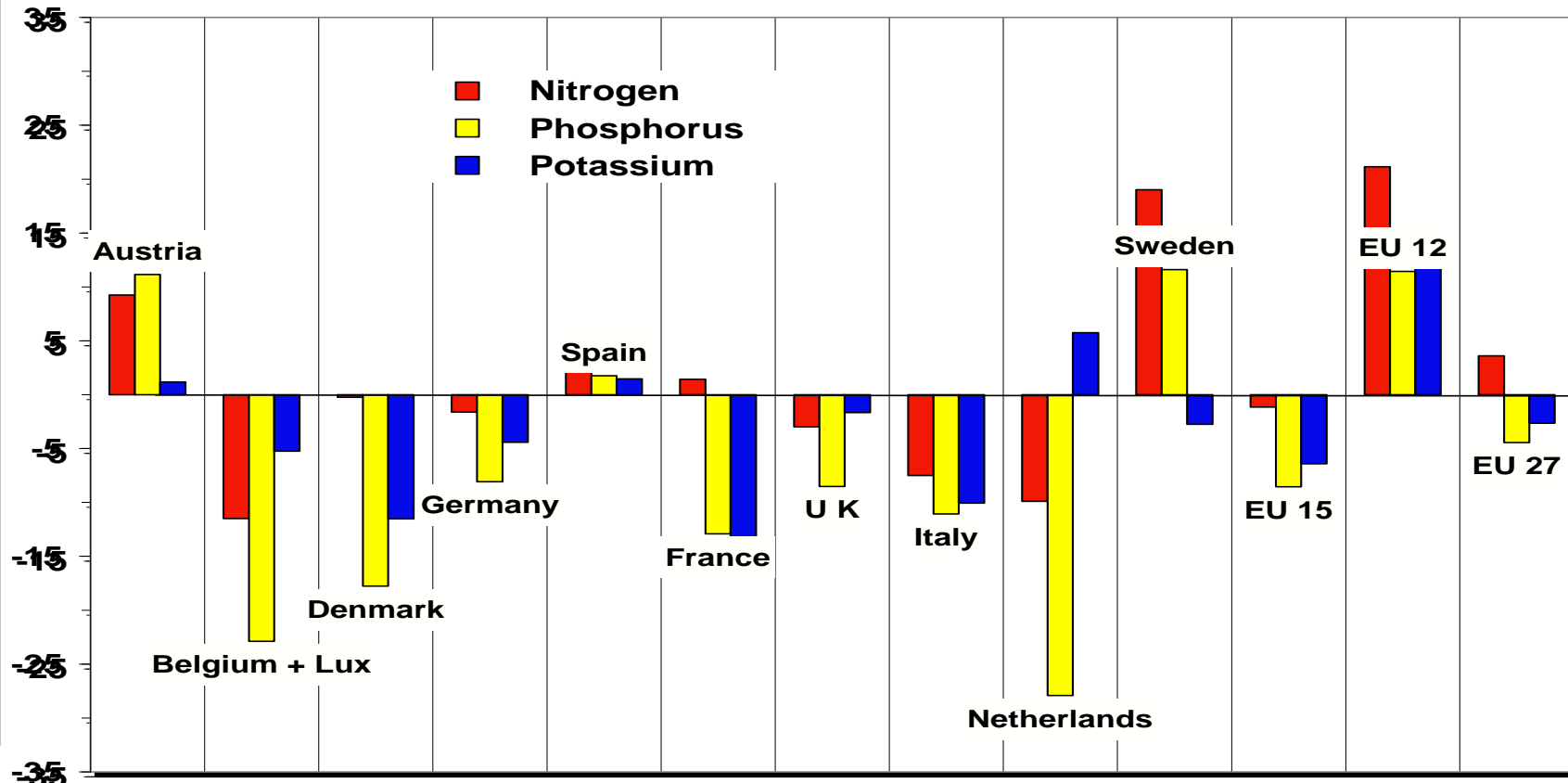


Forecast changes : 2016/17 - Ref. \*\*



## Forecast of fertilizer use in EU15 (west Europe)

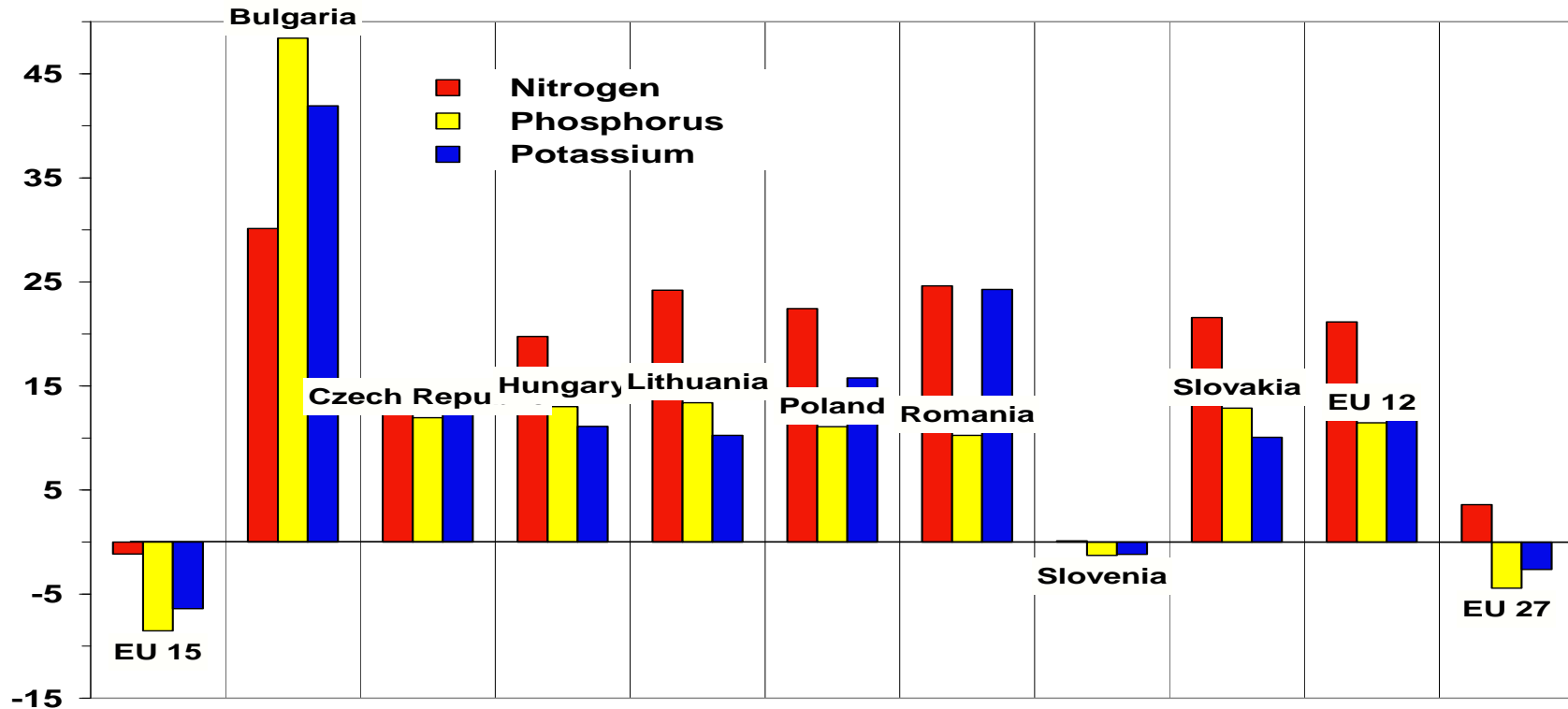
Forecast changes % in regional fertilizer use





## Forecast of fertilizer use in EU12 (east Europe)

Forecast changes % in regional fertilizer use

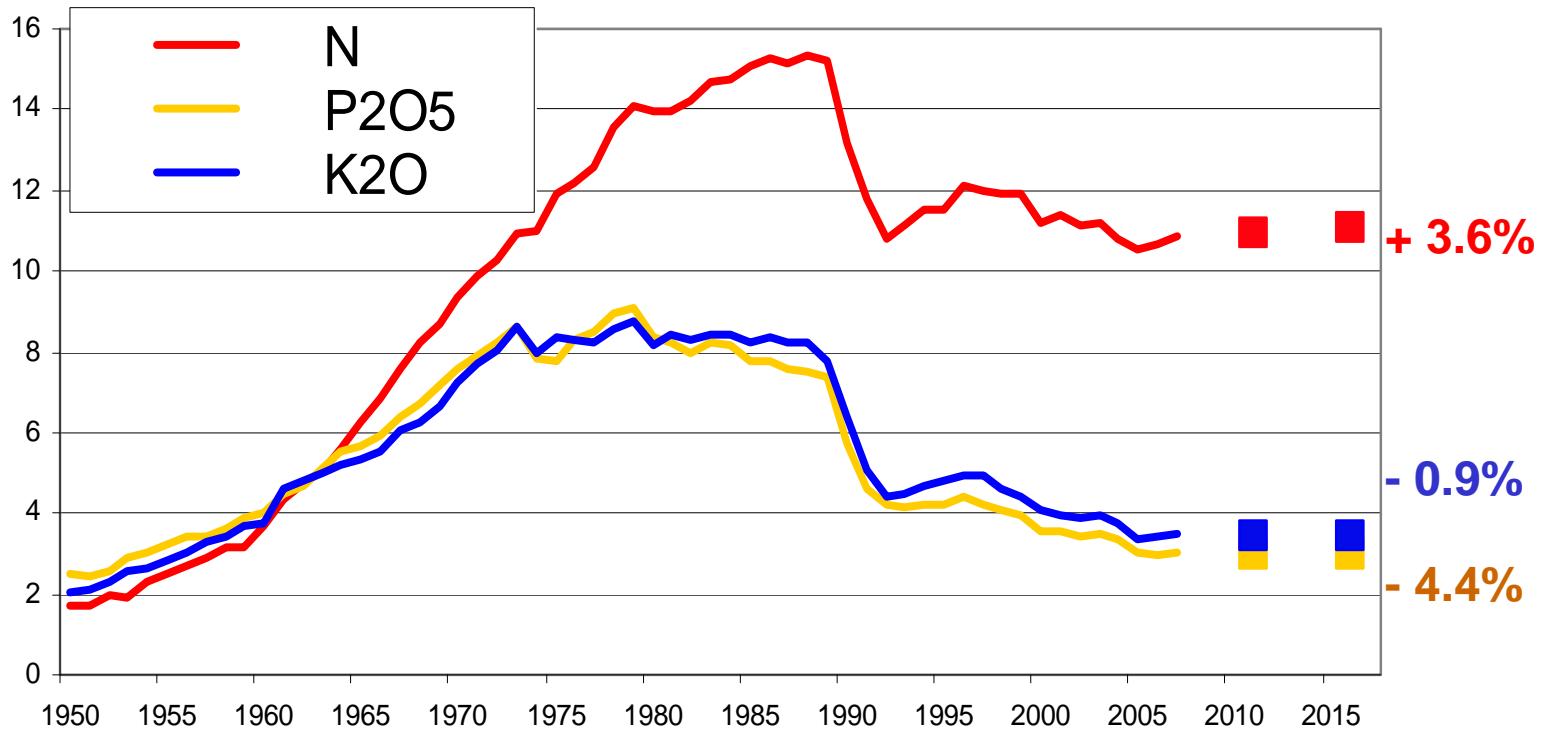




## Forecast of fertilizer use in EU27

Fertilizer nutrient consumption in the European Union 27

Nutrient (million tonnes)





## Conclusions

- ❑ **Mineral N fertilizers are essential** to sustain optimum yields that are needed to satisfy a fast increasing need for food, feed, fiber and bio-energy.

### **>> A trend toward more fertilizer consumption**

- More hectares fertilized
  - A more productive agriculture becomes necessary
- the real challenge: **to increase Nitrogen use efficiency**

- ❑ **The agricultural contribution to climate change is substantial**, with land use change (the issue is global), cattle farming, and N<sub>2</sub>O emissions from organic and mineral nitrogen inputs are the major sources.

**Integrated Farm Management based on GAP is the only way to balance the needed productivity with environmental considerations**

## EFMA – Expectation on the TFrN



- ❑ **Integration of climate change (in particular N<sub>2</sub>O)**
  - » Improved quantification
  
- ❑ **Integrated approach to reduce Nr from agriculture (farm management approach, GAP)**
  - » Bottom-up instead top-down (e.g. limits on N inputs, flexibility for farmers)
  
- ❑ **More involvement of stakeholders (e.g. EFMA)**
  
- ❑ **Integration/coordination of N-related policies and conventions**



**Thank you for your attention!**

**Frank Brentrup, Christian Pallière**

[Frank.brentrup@yara.com](mailto:Frank.brentrup@yara.com), [chp@efma.be](mailto:chp@efma.be)

**EFMA**