



European Sustainable
Phosphorus Platform



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SMART-Plant

ECOMONDO
THE GREEN TECHNOLOGIES EXPO

22^a Fiera internazionale
del recupero di materia ed energia
e dello sviluppo sostenibile

Green & Circular Economy
6-9 Novembre 2018
Rimini Italy

IN CONTEMPORANEA CON
KEY ENERGY

The phosphorus issue in the new Regulation of fertilizers: the vision of Assofertilizzanti

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3rd EUROPEAN NUTRIENT EVENT @ ECOMONDO 2018

8 - 9 November 2018, Rimini, Italy

www.smart-plant.eu/ENE3



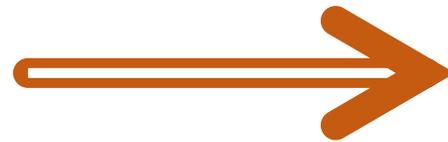


WHO WE ARE

Assofertilizzanti is one of Federchimica's (National Association of the Chemical Industry) 17 Associations that safeguards and represents all the productive divisions of the fertilizers sector.

54

affiliate members



3 groups

- mineral fertilizers
- organic-mineral and organic fertilizers, soil improver and growing media
- specialities - biostimulants

1 billion €

Turnover

90%

market representation



PHOSPHORUS SCENARIO

importance of phosphorus

- phosphate (P) fertilizers are essential for food production
- it is a component of nucleic acids, lipids and a key to energy transfer

source

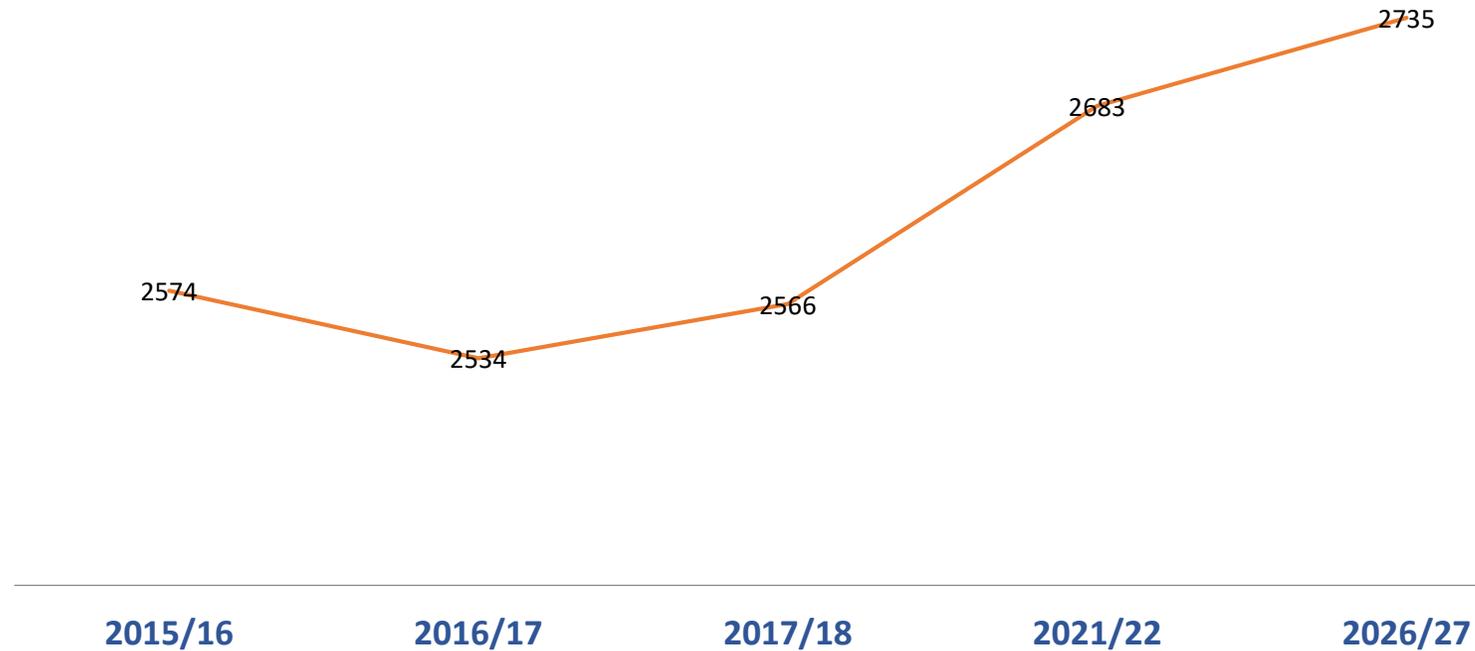
obtained from rock phosphate mines, animal by products or by-products





PHOSPHORUS SCENARIO

PHOSPHORUS CONSUMPTION (kt)





REGULATION AND POLITIC

Which factors will influence the consumption of fertilizers in the next 10 years?

- New fertilizer regulation
- Revision of the CAP
- Bioenergy and environmental policy

Main goals

- following the norms in order to be ready for the changes
- drive technological innovation





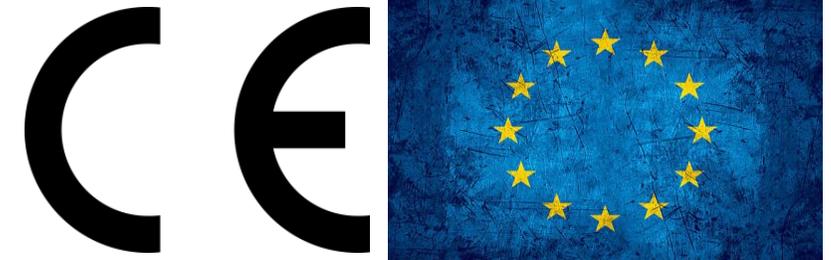
NEW REGULATION

main goal

- incentivize organic or secondary raw materials recovery
- transforming waste into nutrients for crops
- make easy the access to the internal market

but...

make equal rules and competition with linear economy model



- encourage large-scale production in EU
- CE mark on voluntary basis
- elimination of obstacles to free sales
- integrated and fairer market



NEW REGULATION

EXPLANATORY MEMORANDUM

The main policy objective of the initiative is therefore to incentivize large scale fertilizer production in the EU **from domestic organic or secondary raw materials** in line with the circular economy model, by transforming waste into nutrients for crops. The proposal will provide a regulatory framework radically easing access to the internal market for such fertilizers, **thereby levelling their playing field with that of mined or chemical fertilizers produced in line with a linear economy model.**

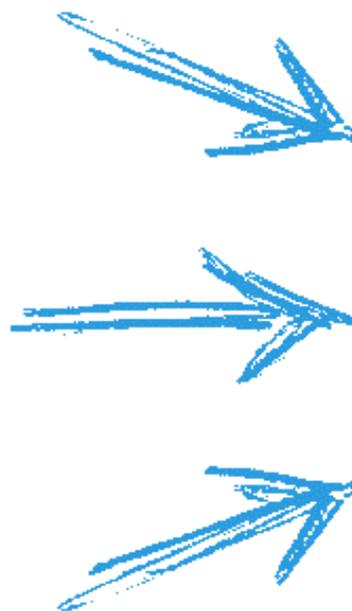




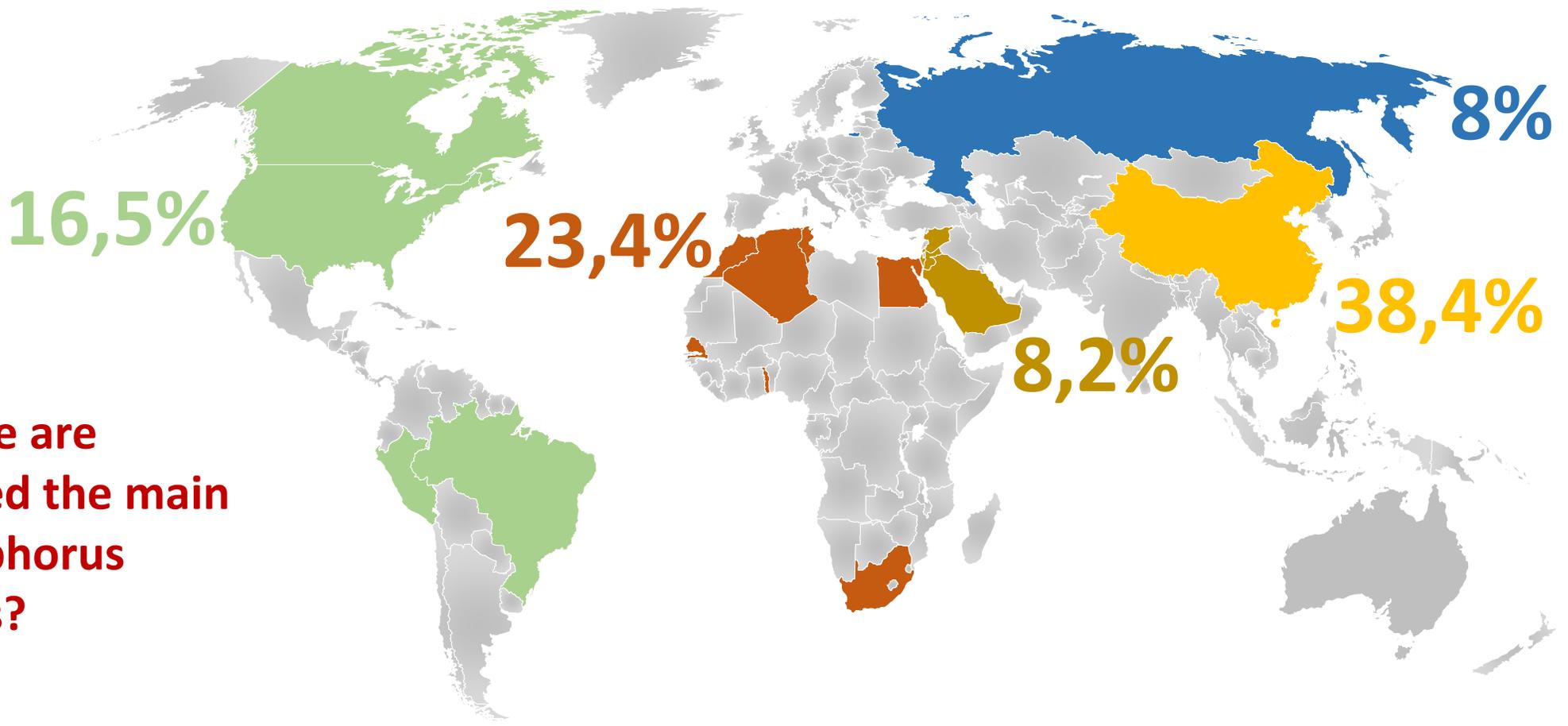
NEW REGULATION

Unresolved issue

- 1 ROCK PHOSPHATE**
 - cadmium content
- 2 ABPs PRODUCTS**
 - end point issue
- 3 BY PRODUCTS**
 - shall be reached a compromise



1 PHOSPHATE ROCKS

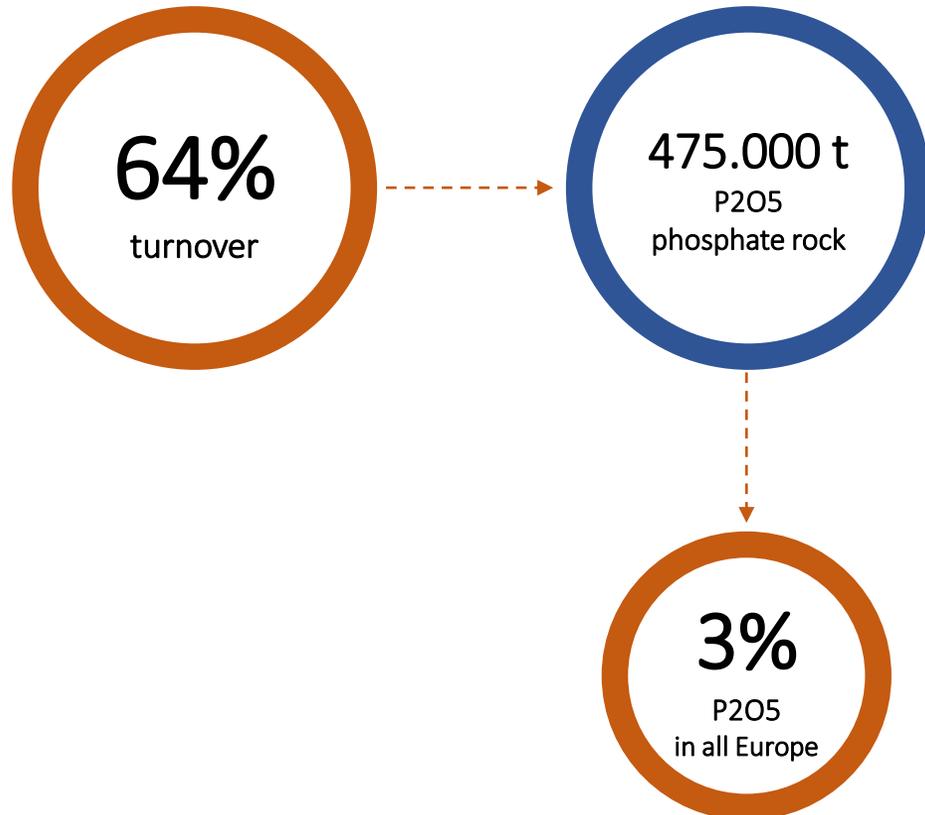


Where are located the main phosphorus mines?



1 PHOSPHATE ROCKS

Italy totally depends from import



MAINLY
from Africa



1 PHOSPHATE ROCKS

EC proposal introduces restrictive **cadmium** limits



**NOW UNDER TRILOGUE
NEGOZIATION**

- the IFS study¹ shows that 75 mg/Kg is a sustainable benchmark that guarantees no accumulation of cadmium in the soils
- the limits proposed by EC are not feasible in the time limits proposed
- the decadmiation technologies are not still refined
- distant phosphorus supplies could allow a worsening of carbon footprint caused by an increase of transports and distributions

ORIGINAL PROPOSAL

from starting 60 mg/Kg

to 40 mg/Kg after 3
years

till 20 mg/Kg after 12
years

2 ANIMAL BY PRODUCTS

A natural phosphorus source

- some fertilizers ABPs based have high content of phosphorus (e.g. bone meal with a minimum of 18% of phosphorus)
- Italy is the European leader in the production of organic and organo – mineral fertilizers ABPs based
- all ABP without an **endpoint** are regulated by Reg. 1069/2009 and Reg. 142/2011



*no longer pose any significant risk
to public or animal health*

What's the matter?

If a raw materials fall within the scope of Regulation (EC) No 1069/2009 and has not reached the end point in the manufacturing chain, the products should be excluded from the scope of the new Regulation.

WE NEEDED AN ENDPOINT!



2 ANIMAL BY PRODUCTS

Currently the endpoint is foresee only
for these fertilizers:

- hides and skins
- wool and hair
- feathers and down



excellent nitrogen sources
AND PHOSPHORUS?

3 BY PRODUCTS

EC proposal doesn't include by-products

**which destiny for struvite, biochar,
sewage sludge, etc...?**

Under discussion two proposals:

- European Parliament
- European Council



EUROPEAN COUNCIL
Includes by products as raw material if
they are complying within:

- the meaning of Directive 2008/98/EC
- REACH registration

OUR POSITION

WHAT WE THINK

safeguard the agriculture sector,
without unjustified restrictions for
phosphates fertilizers



HOW?

- choices based on **scientific data**
- make a **risk assessment evaluation** as for the major part of substances of very high concern
- **safeguard** the SMEs R&D investments



OUR POSITION

Cleaner soil and healthier food
circular and linear models must guarantee it in a sustainable way

