



Sewage Sludge Trends, Stakeholder interests and public perception

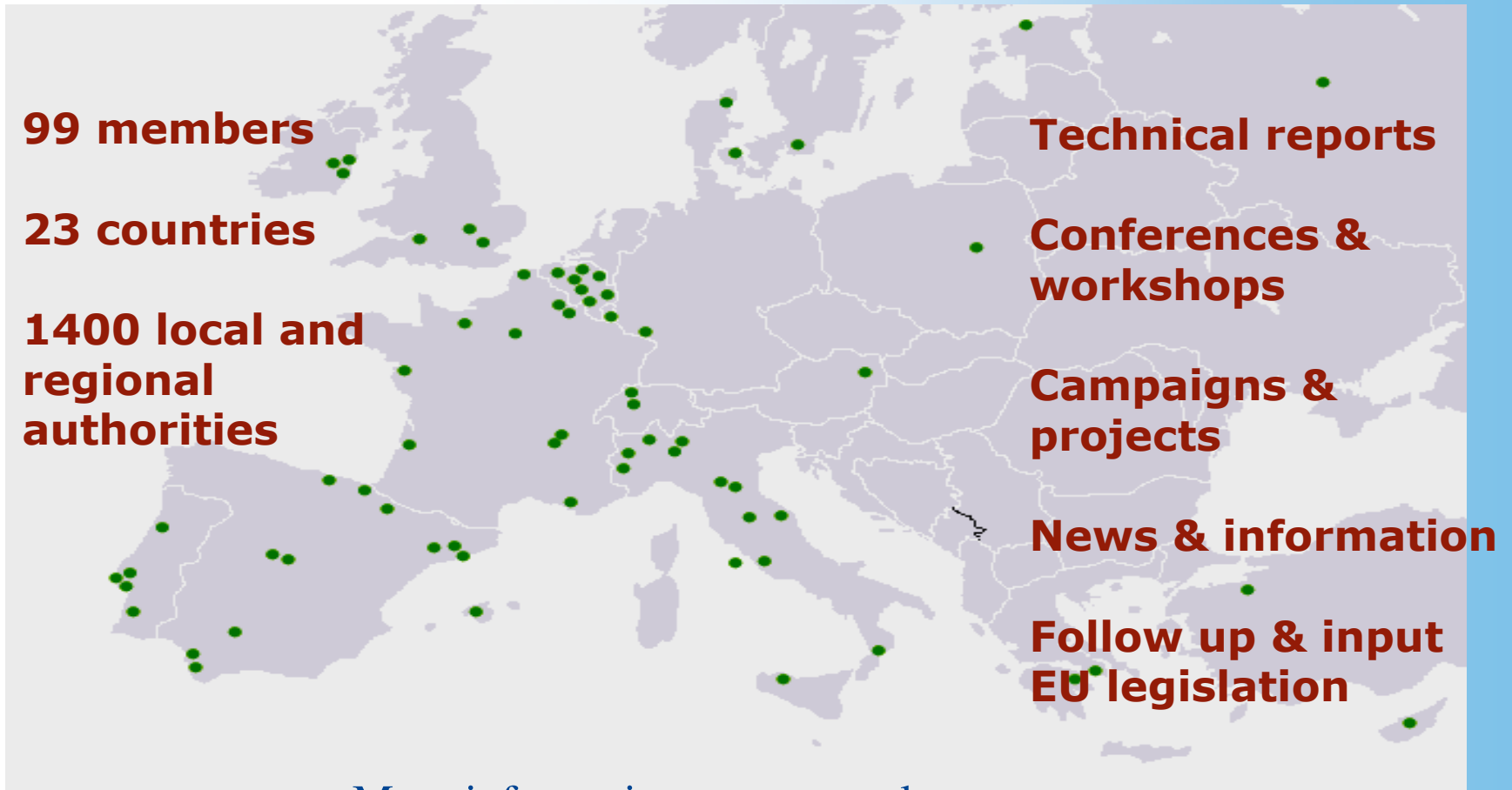
**INTERNATIONAL CONFERENCE SUSTAINABLE
MANAGEMENT OF SEWAGE SLUDGE AND BIOWASTE**

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THE ASSOCIATION OF CITIES AND
REGIONS FOR RECYCLING**



ACR+: an international network of public actors active in waste and sustainable consumption matters



More information: www.acrplus.org



Introduction



The Sewage Sludge Directive (86/278/EEC) adopted more than 20 years ago to:

Encourage the application of sewage sludge in Agriculture.

Regulate its use as to prevent harmful effects on soil, vegetation

Beneficially can be used to help sustain and improve **agricultural productivity** and the Environment.

Trends: Increased production of sewage sludge across the EU from **10m tons in 2006** to 13m tons by 2020.

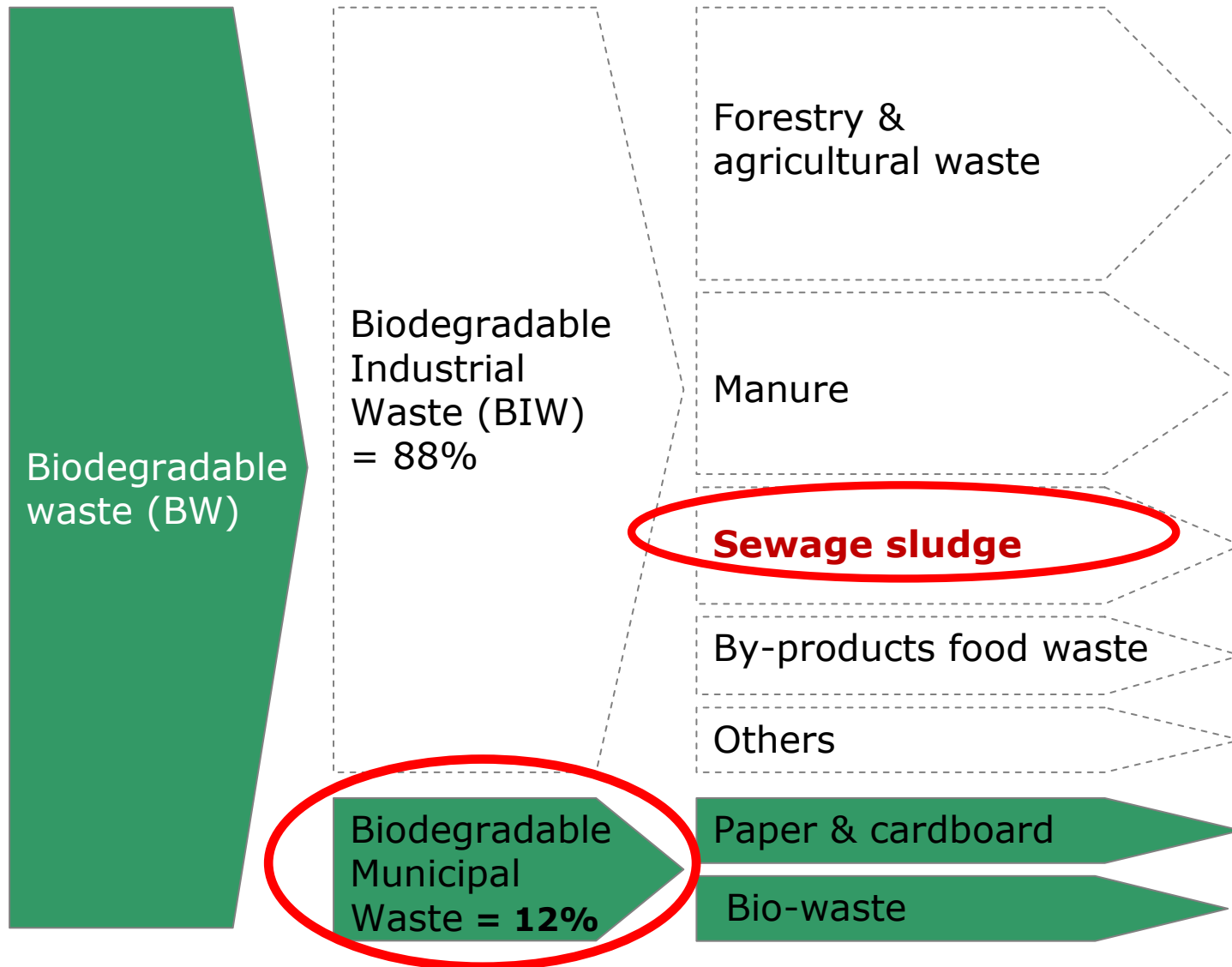
However: in certain MS (i.e. Netherlands; Swiss) recycling of sludge to land has **completely stopped**, use energy recovery methods instead (i.e. Incineration)



EC Baseline Scenario: 2020 concerning biodegradable treatment

- Landfilling (from 35Mt to 15Mt)
- Composting + 48%
- Incineration + 30%
- MBT + 103%
- Anaerobic Digestion +349%
- Home composting +148%

MUNICIPAL (BIO)-WASTE – PUTTING IT INTO CONTEXT

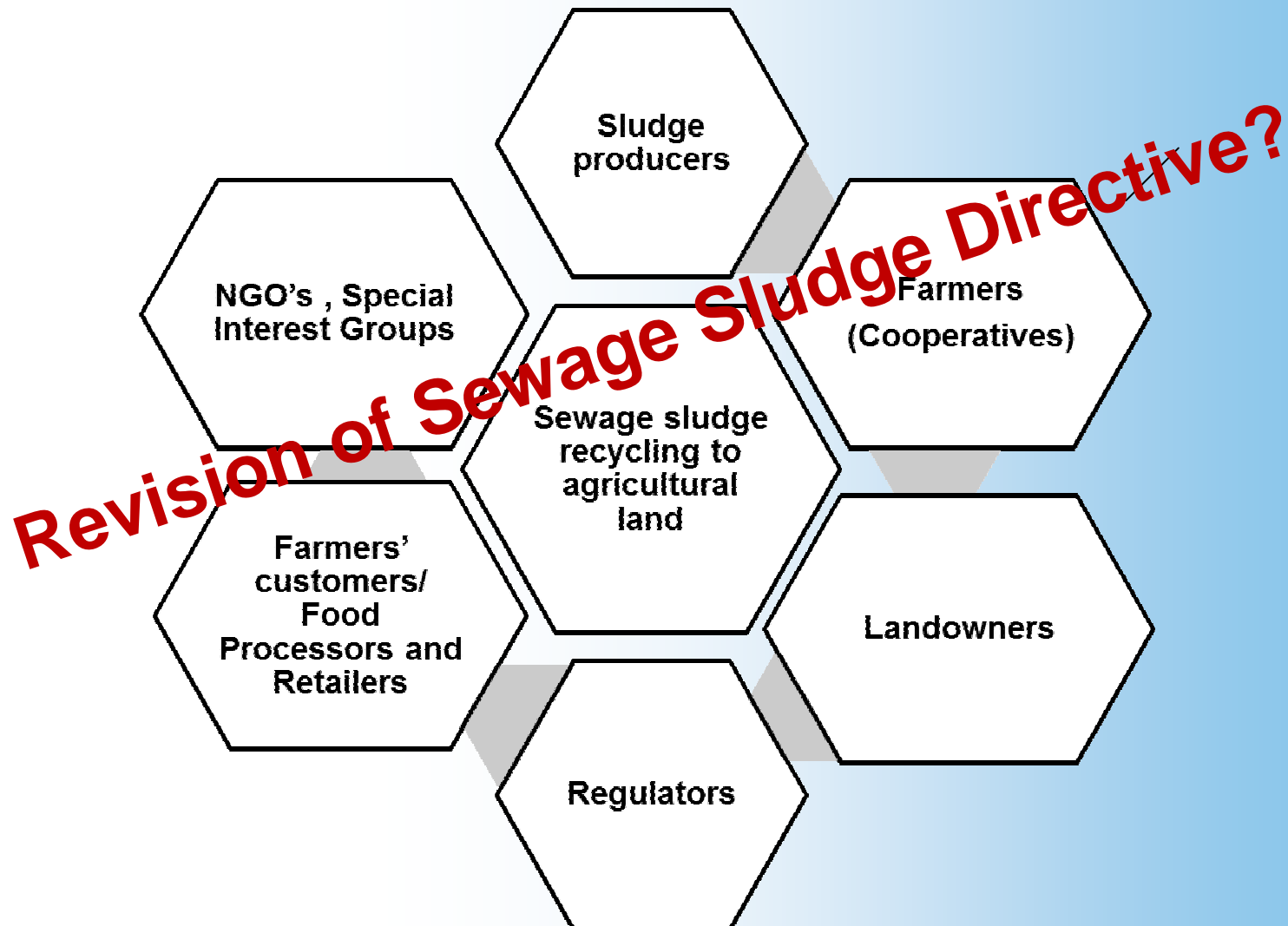




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Principal Stakeholders - Who?

Confidence has to be created for all stakeholders?





During roundtable discussions

By: COPA/ COGECA (co-operative of farmers)



Farmers Statements and Proposal:

'Sludge application on farmlands give farmers a chance to play a meaningful role'

European and national authorities should work progressively in three different areas:

- scientific approach to deepen knowledge
- agronomic level, analyse legal questions and responsibility problems (farmers / landowners)
- financial warranties if pollution or accident occurs.

We should improve knowledge on **technical recommendations** to ensure that **sludge is used in good conditions**



Roundtable discussions

By: ANIA Environment Committee



European Food Industry Statements and Proposal:

The food and drink industry guarantees consumers that its products **are safe, wholesome** and of **high quality**.

Any research should include **risk assessment** and a **cost benefit analysis**.

However, the food and drink industry **has to take into account** the opinion of the consumers regarding sludge landspreading.

The food and drink industry considers that given their diversity, the regulatory framework for the various categories of by-products and sludges intended for landspreading should be:

- 1. Effective**
- 2. Appropriate**
- 3. Precise**



Roundtable discussions

By: Environmental NGO -



PROS

- ✓ **Beneficial effects on land application of organic waste materials**
- ✓ **Conditions to ensure “beneficial use”: distinction between waste and product(s).**

CONS

- ❖ **Potential risk: heavy metals, organic pollutants, pathogens, nitrogen release**
- ❖ **Undesired social and agronomic side-effects: odours, soil oxygen uptake, nitrogen release,**



Roundtable discussions

By: European Local Authority

New legislation with higher standards can be helpful but need transparency

Compromise between ecology and economy

Municipalities call for: clear rules/ enough time / stable framework

There is no single solution BUT have to tackle issue of pollution at source

Public responsibility
–waste prevention
(incentives, eco-labelling)

Follow 4 Es!!



Public Perception: Recycling vs Energy Recovery fo sewage sludge treatment

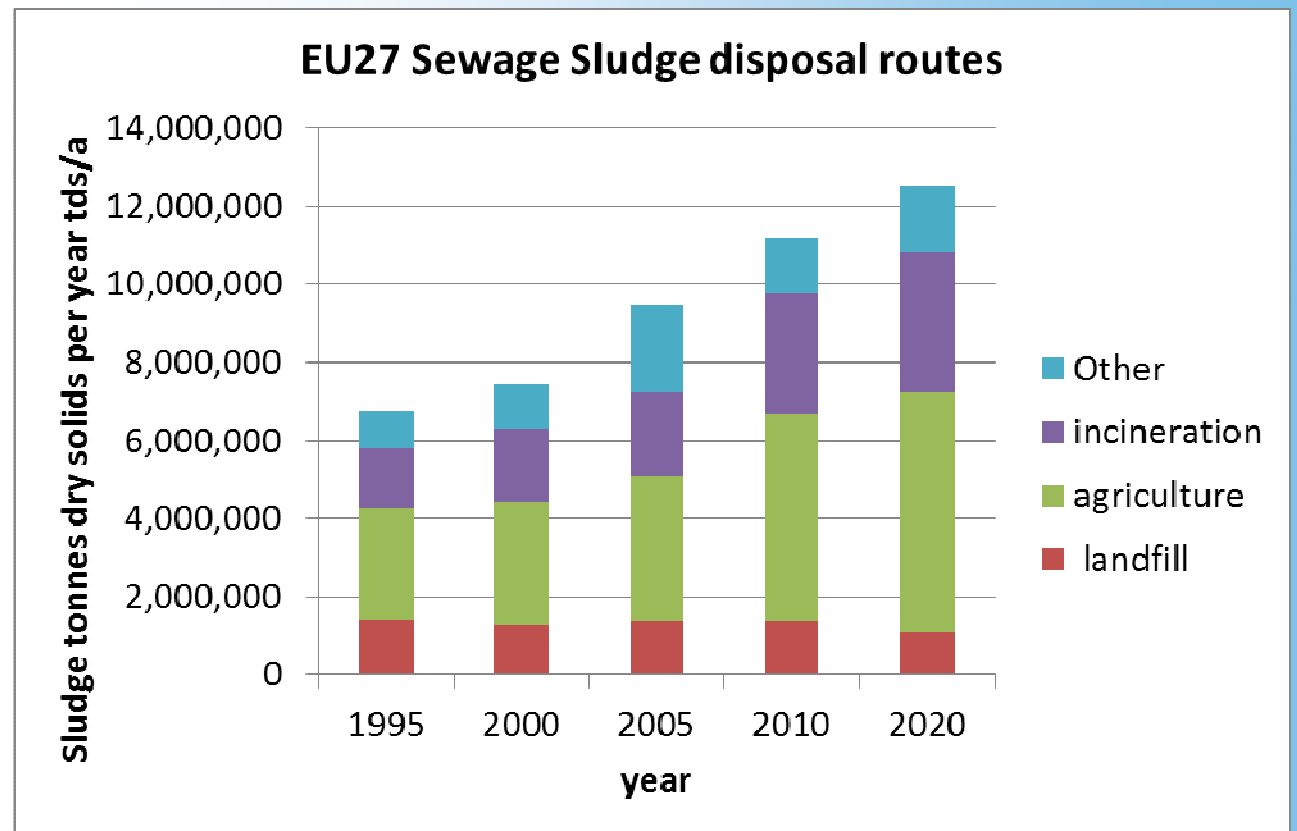
FOR SOME: Restrictions on sewage sludge use in agriculture could breach the EU waste hierarchy, which requires the EC and member states to prioritise recycling over incineration. (UK Water industry, French government)

Life Cycle Thinking

Certain policy makers:
need to be applied!
1st. Recycling
2nd. Incineration

Others consider recycling and energy recovery together as a preferred option

BUT, negative public perceptions of sludge use on land may direct political decision **IN FAVOUR of incineration**





Public Perception: Potential influence on use of sludge on land

Public perception that sludges may contain substances with adverse effects on health drives unacceptability of agricultural use Negative Medium.

Outlet	Cost to Customer	Environmental Sustainability	Public Perception
Landfill	Medium	Low	Low (Least desired)
Incineration with energy recovery	High	Medium	Low-Medium
Recycling to Land	Medium	High	_____

Source: Source: Recycling of biosolids to Land (WATER UK, 2006)



Biowaste – recycling targets and LAs

Biowaste defined as ‘animal and vegetal waste arising from households, commerce and the food manufacturing industry.’ (EUROSTAT)

Biowaste : 113 -139 Mt (kitchen and green waste)

Recycling Target: 35% reduction in 2020 (based on 1995)

Further..

Recycling Targets: 7.1.2:

The Commission will continue its analysis with a view to conclude on the appropriateness of setting targets by 2014 at the latest under the WFD. It is likely that a target for biological treatment would have to go hand in hand with enhanced separate collection to ensure good quality of compost and digestate

Local Authorities are in need for new targets to increase efficiency:

- LIPOR in Porto
- Agencia de Residus de Catalunya



Biowaste – recycling targets and LAs

LIPOR: Intermunicipal Waste Management of Greater Porto

- Need to be ambitious → recycling / separate collection of biowaste targets
- Can respond to the challenge – with good results and higher efficiency
- High quality compost allowing the compost market to become more competitive.
- Due to strong Strategy – the composting plant productivity increase 23% (10,000 of good quality compost)

Most important is the commitment and engagement of the national authorities that will stimulate the adoption of best practices, challenges and the engagement of different stakeholders.





Conclusions

To understand where does sewage sludge fall under: MSW or Industrial?
(the different types of sewage sludge)

Provide clear definition: land application of sewage sludge (**spreading on soil**)

Confidence for all stakeholders: Identify ways and/or methods to stimulate the formation of local groups with representatives:

- from Local Authorities (Environmental),
- industries,
- treatment plant owners,
- farmers

AIM: build up confidence for management and control systems.



Thank you

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