

# Stakeholders comments received on Green Paper on bio-waste – Summary

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## Summary of the document?

- Consultative document
  
- Main problem – are we loosing an opportunity, created by Landfill Directive 1999/31?
  
- Risk: Diverting the waste from landfill into other disposal operations (low grade incineration or low grade MBT) may result in lost of potential for soil improvement and renewable energy generation



## Content of the Green Paper

- Description of existing legislation
- Description of existing bio-waste management practises and their impacts environmental economic and social impacts
- Presentation of several alternatives how for additional measures supporting recycling
- Presentation of possible approach to the issue of compost standards
- Set of 8 questions



## Statistics of comments

- We have received 135 comments
  - 17 Member States
  - 24 Regional and Local Authorities
  - 26 NGOs – EU level
  - 35 NGOs – national level
  - 8 Academic and Think Tanks
  - 27 Companies
  - 5 Individual persons
- All comments are available at:  
[http://circa.europa.eu/Public/irc/env/biowaste\\_prop/home](http://circa.europa.eu/Public/irc/env/biowaste_prop/home)  
enter CIRCA and look for: Bio-waste – Impact Assessment



## General comments

- This presentation is based on 116 comments, including comments from all Member States
- Very broad spectrum of comments – for each question we have received contradictory answers



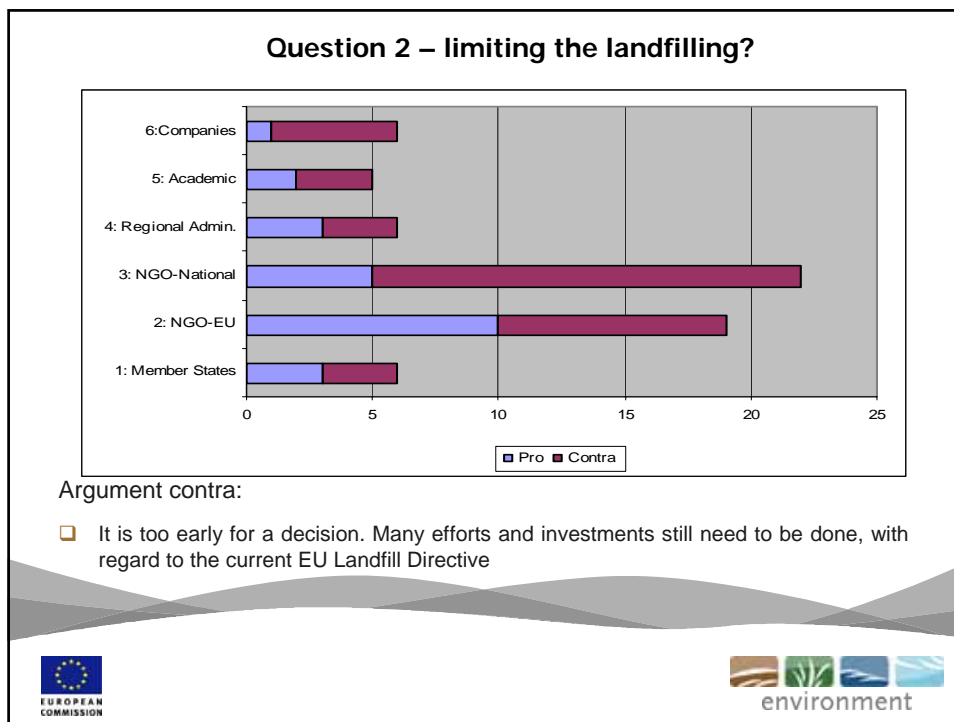
## Question 1 - prevention:

- **General support - Several options proposed (by no. of comments)**
  - Home composting
  - Information and awareness rising campaigns
  - Improved industrial processes and logistics
  - Programmes for the distribution of products for the poor
  - Smart gardening
  - and about 8 other proposals

2 votes against ?!

- "Bio-waste is so useful resource we should not restrict its production"
- "Bio-based products could replace other non-biodegradable products"





- ### Question 3 – preferred biowaste management options:
- Which options for the treatment of bio-waste diverted from landfills would you prefer to see strengthened and what would you see as their main benefits? (popularity in descending order)
    - Anaerobic digestion
    - Incineration
    - Composting
    - Separate collection of bio-waste (as a prerequisite)
    - Combination of methods
    - Production of biofuels
    - Mechanical Biological Treatment (MBT)
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### Question 3.1 – need for more LCA?

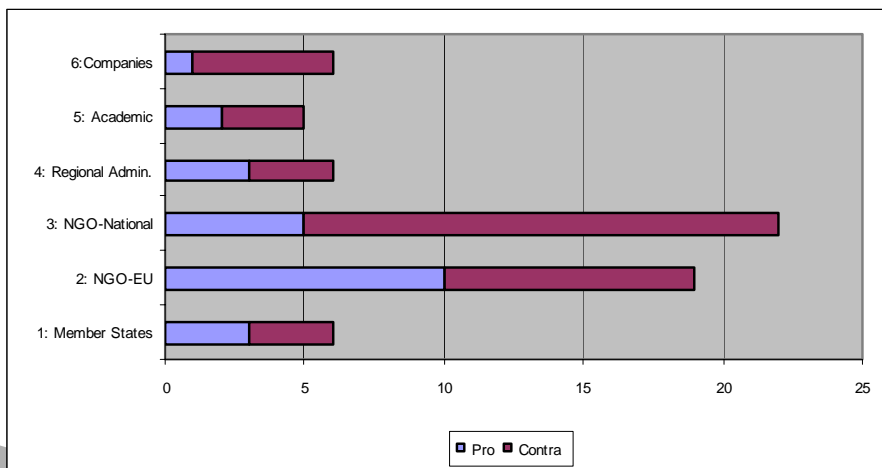
- *Do you think that the choice of the treatment of bio-waste diverted from landfills should benefit from a wider and more consistent use of life-cycle assessment studies?*

Significant support but also main limitations addressed:

- Social and economic impact is not evaluated
- The result of LCA strongly depends on the parameters considered.
- Many positive impacts very hard to quantify: Carbon sinks, soil properties in general, value of organic matter, improved erosion behaviour reduced pesticide consumption, improved workability and water holding capacity and reduced irrigation needs,



### Question 3.1 – need for more LCA?

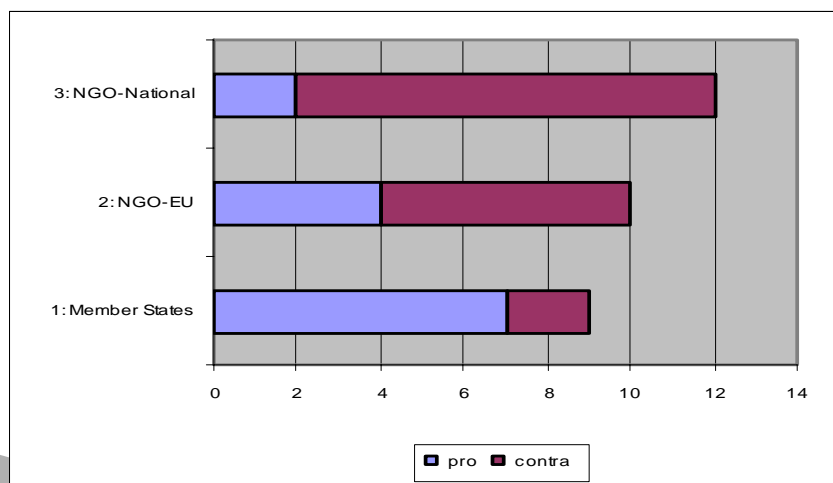


## Question 4 – role of energy recovery?

- Many stakeholders prefer anaerobic digestion
- Some stakeholders supports (or at least accepts) incineration – arguments pro:
  - No need for compost in northern Europe or in big cities
  - Basic requirements for high efficiency of energy recovered
- while some are strongly against incineration – arguments contra:
  - wet fraction of bio-waste serves to lower caloric values of mixed waste
  - because the nutrients and organic matter are completely lost



## Question 4 – energy recovery – acceptance for incineration?



## Question 5 – further promotion of bio-waste recycling?

### Proposals pro:

- For many stakeholders the promotion is preferred, particularly speaking of selectively collected bio-waste
- Some stakeholders proposed maximum amounts of bio-waste in residual waste, prior to further treatment,

### Arguments pro:

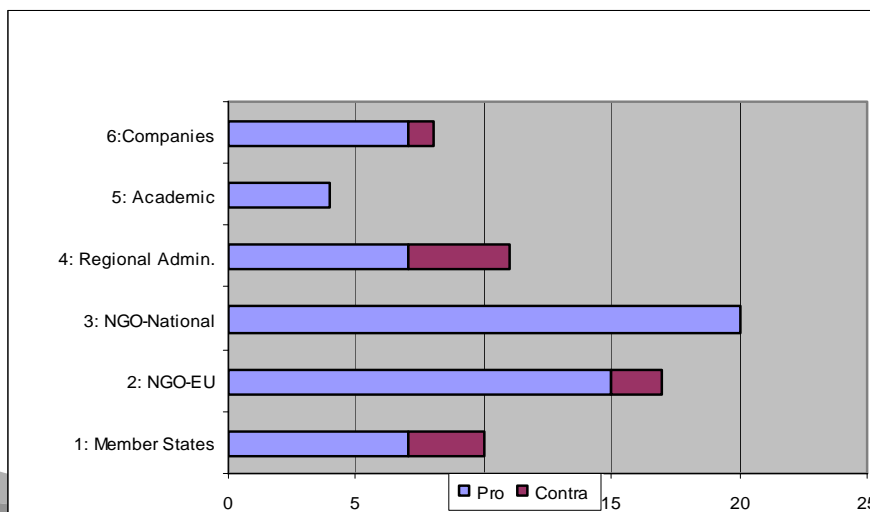
- Waste hierarchy
- EU legislation would provide a perspective and investment security for long term recycling industry

### Arguments contra:

- The set up of separate collection schemes for bio-waste should be left open to local authorities,
- no single best treatment option for bio-waste



## Question 5 – further promotion of bio-waste recycling?



## Question 6.1: How many levels of quality standards?

- ❑ General agreement that standards are required
- ❑ Differences within number of standards (by descending number of comments)
  - ❑ Two standards – for compost (product) and for „stabilized-biowaste” (under waste regime)
  - ❑ One standard – for product quality only
  - ❑ Three standards, e.g.:
    - compost (product),
    - “compost” from source separated waste,
    - “compost” from mixed waste



## Question 6.2 – rules on compost applications and on soil quality?

- ❑ A number of countries and organisations do support EU wide standards for quality of compost including limits on load applied and quality of soil.
- ❑ No clear view which applications should be covered – most stakeholders mentioned agriculture/food production. Others stakeholders mentioned also other uses e.g. landscaping
- ❑ There are opinions which prefer to leave the detailed rules on the use to the Member States, due to the difference in soil needs, climate and customers needs across Europe.
- ❑ Furthermore it is asked to set only minimum requirements for compost and its use in the EU, so that Member States can decide to set up more stringent requirements according to national considerations.



## Question 6.3 – use of compost from mixed waste?

### Arguments contra

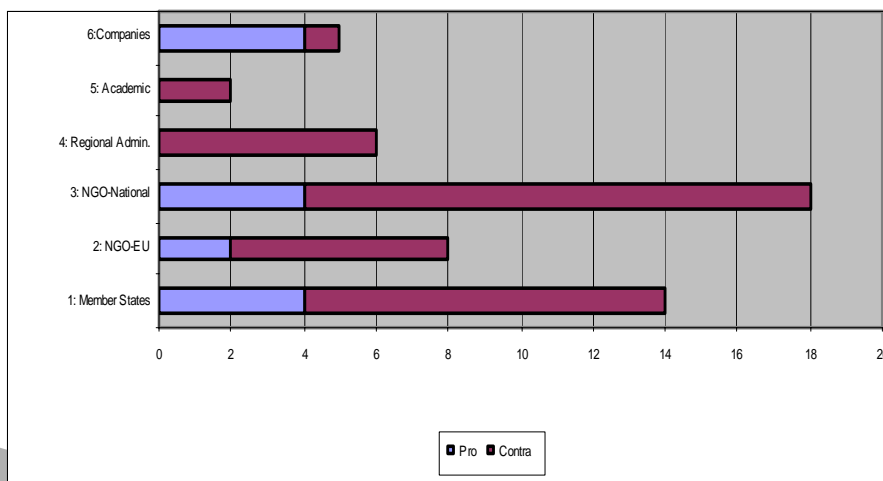
- Arguments against the use of compost from mixed waste are mainly related to the potential for contamination and limited applications associated. This requires a more stringent quality control and application measures

### Arguments pro

- The use of mixed waste favours carbon capture
- In principle there is nothing wrong about the use of mixed waste, but the criteria used to control the recycling practices should always reflect the risks and have appropriate Quality Management System
- Better equipment allows to obtain better quality of compost from mixed waste



## Question 6.3 – use of compost from mixed waste?



## Question 7 – operational standards for smaller plants?

### Proposal pro:

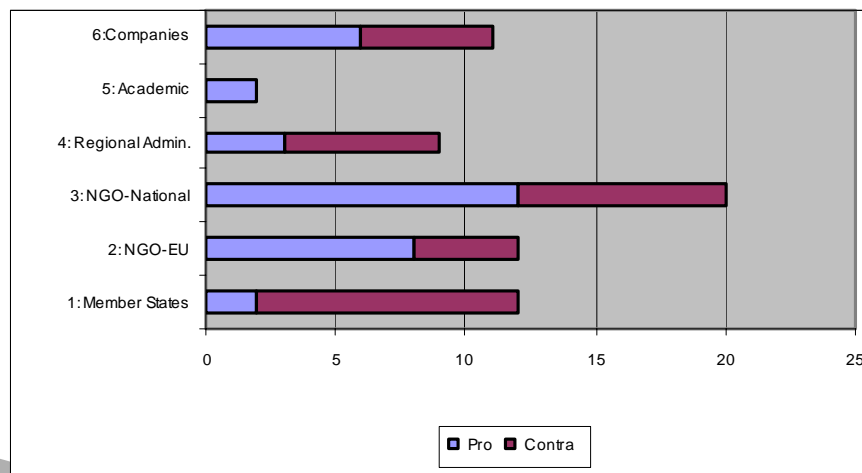
- Operational standards should be broadened to all composting and biogas plants
- A simplified version of IPPC requirements could be foreseen under a legislative act on the management of bio-waste for plants treating less than 50 tons per day.
- A second tier for systems between 25 and 50 tons need to be in operation for composting plants.
- Quality assurance system for bio-waste treatment plants with minimal European standards

### Arguments contra:

- current legislative provisions already overlap and no gap needs to be filled
- Environmental effects of small treatment installations are mainly occurring at local level and therefore, these installations should be ruled by national legislation



## Question 7 – operational standards for smaller plants?



## Question 8: Emerging technologies

Repeated message: Further research are necessary

Most frequently mentioned technologies:

- Biochar
- Gasification
- Pyrolysis

Most frequently mentioned obstacles:

- The lack of legal clarity and certainty at European level,
- There is a lack of EU promotion activities (e.g. targets)
- Extensive regulatory demands on smaller plants (e.g. by Animal By-Products Regulation or IPPC)



## Other issues to be addressed

- Lack clarity in definitions
  - “bio-waste”, „biodegradable waste”, „green waste”
  - “compost” vs. „stabilized bio-waste” or „residual compost”
- „Stability” - Calls for definition and measurement of stability – as a method to verify if the waste can be landfilled

