



The End-of-waste Standards for Compost: Current State and Foreseen Implementation

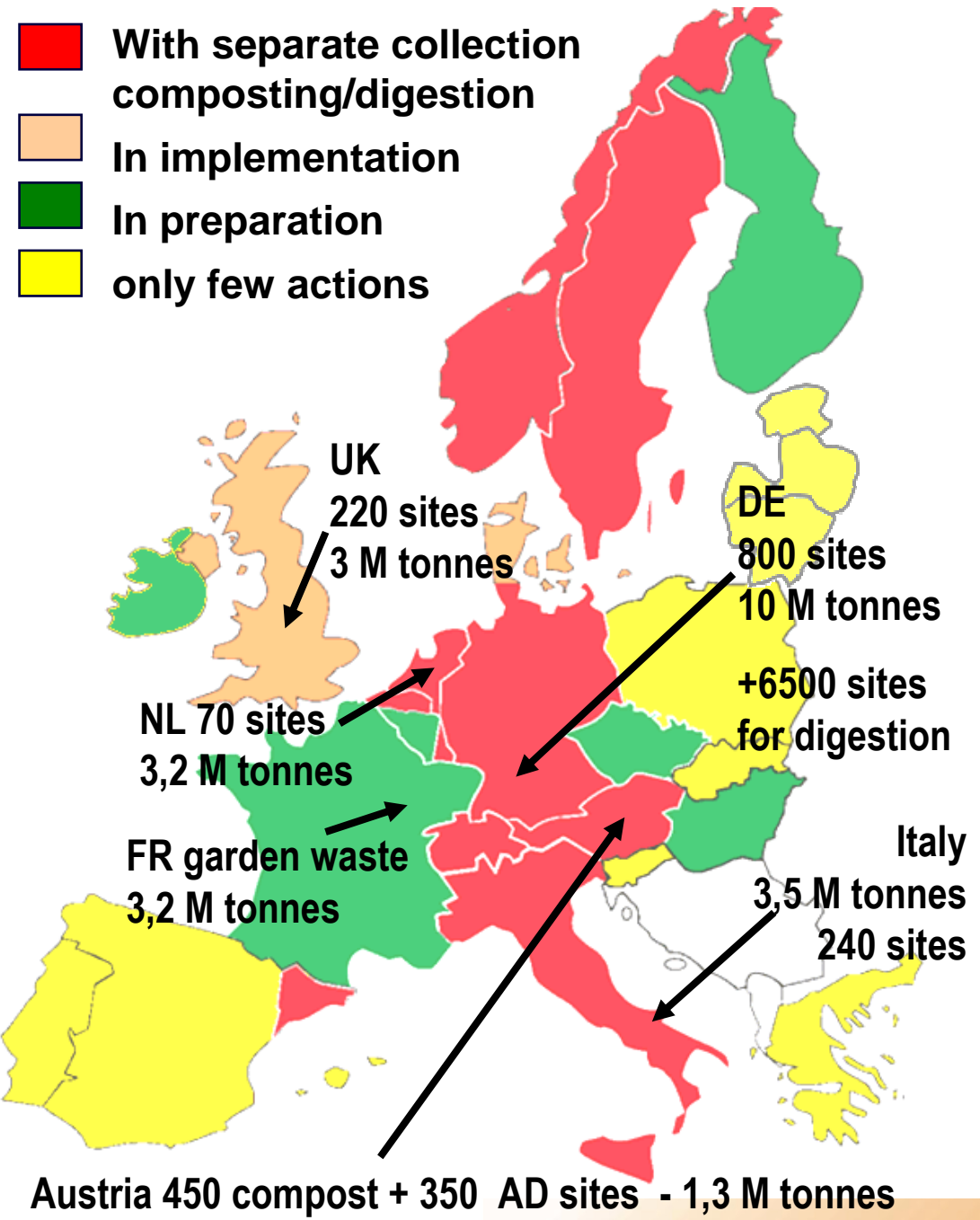
J. Barth, Informa, DE

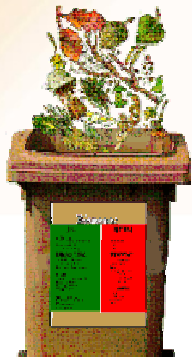
**ISWA Workshop 2012:
Global Issues pertaining to BioWaste**

**Potential of organic waste in EU27:
115 M tonnes / year**

**Recycling in 2009:
16 M tonnes organic waste
11 M tonnes green waste
5 M tonnes digested
= 15 M tonnes compost**

Only 1/4 of the potential - still a long way to go





Realising the Bio-waste Recycling Vision - A pull and push approach

Targets

- **REGULATORY PUSH**
- European-wide legislation to provide framework for biowaste recycling **e.g. End-of-waste**

QAS

- **QUALITY ASSURED COMPOST PRODUCTION**
- Separately collected biowaste treated to high standards **e.g. accord. End-of-Waste**

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- **MARKET PULL**
- Create demand and realise economic and environmental benefits

Why End of Waste EoW Regulation?

- **COM(2010) 235: Communication on future steps in biowaste management in the European Union, stating:**
- “Compost and digestate from bio-waste are under-used materials. While offering an excellent contribution to EU resource efficiency and to the improvement of carbon-depleted soils, in many Member States demand suffers from a lack of end-user confidence.
- Standards for compost and digestate should be established to enable their free circulation on the internal market and to allow using them without further monitoring and control of the soils on which they are used.
- The "end of waste“ procedure under the WFD could be the most efficient way of setting such standards.”

Methodology of EoW

Purpose of end-of-waste criteria

- to further encourage recycling in the EU by creating legal certainty and
- to remove unnecessary administrative burdens

End-of-waste principle

Waste status if regulatory controls under waste legislation are needed to protect the environment and human health; otherwise end-of-waste status to facilitate recycling and recovery

The waste ceases to be waste when a useful and safe product is placed on the market

END OF WASTE CRITERIA

Draft Final Report



Final Report: October 2008

Technical report for

End-of-waste criteria on

Biodegradable waste subject to
biological treatment

Second Working Document

11 October 2011

IPTS
Seville, Spain



END of WASTE EoW criteria for COMPOST & DIGESTATE

- **2 Consultation Meetings**
 - February 2011
 - 24/25 October 2011
 - Draft Reports
- **Consultation ended**
 - → January 2012
- **Final Report to DG ENV**
 - 31 June/July 2012
- **EoW Regulation**
 - End of 2012

**NEW! Included is a Regulation for
DIGESTATE !**

END OF WASTE PROPOSAL: The key elements

- **Positive List** of suitable raw materials/feedstocks
- **Limit Values**
- **Product property to be declared & labeled**
- **Standard is external control and a**
- **Quality Assurance scheme**

END OF WASTE PROPOSAL: Criteria for Compost & Digestate

Parameter		Value compost	Value digestate
Minimum organic matter content		15 % d.m.	15 % d.m.
Minimum stability		Oxytop / Self Heating	1500 mg/l org. acids
Pathogens		Salmonella sp. and E.Coli	Salmonella sp. and E.Coli
Viable weeds and plant propagules		2 per liter	2 per liter
Impurities: plastic, glass & metals (no proposal for stones)		0.5 % d.m	0.5 % d.m.
Heavy metals [mg/kg d.m.]	ECN-QAS		
Zn	600 ^{B)}	600	600
Cu	200 ^{B)}	300	300
Ni	40	50	50
Cd	1.3	1.5	1.5
Pb	130	120	120
Hg	0,45	1	1
Cr	60	100	100
No proposal for organic compounds	-	-	-

B) Cu & Zn can be also seen as trace-nutrients. Concentrations of **Cu > 110** and **Zn > 400** must be declared

Outlook: Fertiliser Regulation (EC) Nr. 2003/2003 - under revision

- **Now organic fertilisers included!!1**
- Results of CONSULTATION/IMPACT ASSESSMENT
→ December 2011
- 4 working groups within TAC: January 2012
 - = Overall structure | Nutrient content | Contaminants/Risks | Labeling/Control
- Proposal **new regulation until the** end of 2012
- Reference: **End-of-Waste standards & Quality Assurance QAS for market control**

Conclusion

- End-of-Waste is an important tool in European Biowaste Management - urgently needed.
- It **defines the first time "Quality Compost/Digestate"** on a European level and how it should be controlled. Awaited by the sector for more than 10 years!!!
- It is less relevant to create an European market over borders.
- **National legislation has to be adopted** for End-of-Waste AND for waste compost and digestate
- The market will react and **demand the high quality End-of-Waste compost and digestate** - especially agriculture.
- Important: Compost (natural substance) is exempted from REACH, digestate NOT. EU Fertiliser Directive will affect EoW.