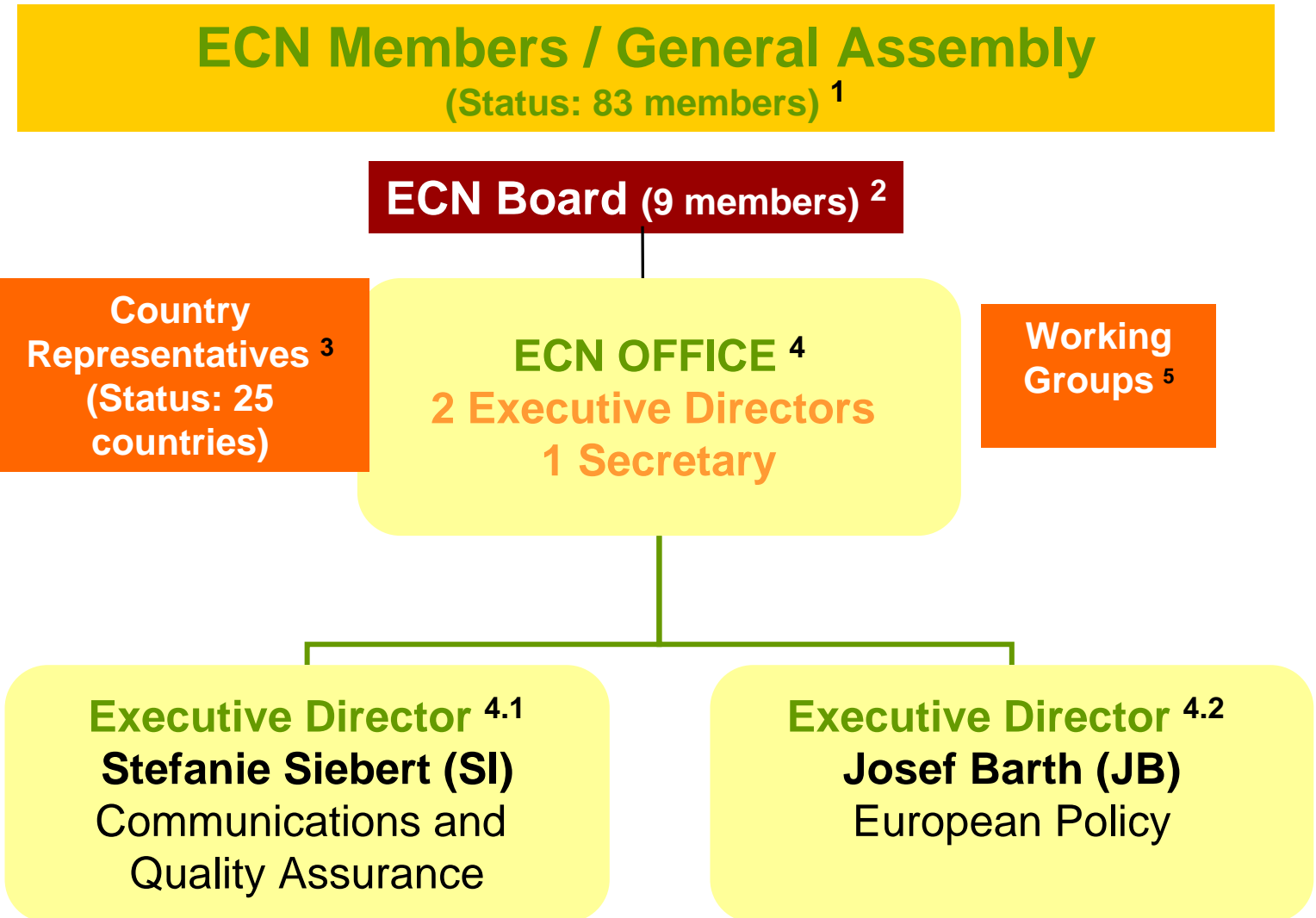


End-of-waste criteria for Compost and Digestate

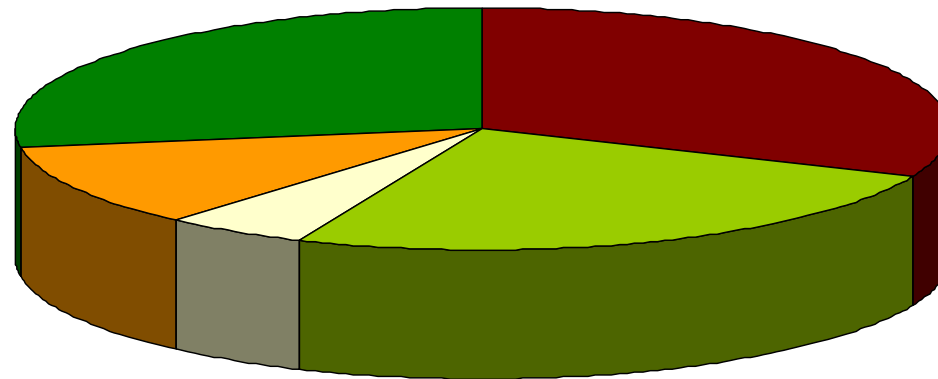
**Based on the IPTS draft
"Techincal report for End-of-waste criteria
on Biodegradable waste subject to
biological treatment"**

Dr. Stefanie Siebert, ECN

EUROPEAN COMPOST NETWORK



EUROPEAN COMPOST NETWORK



- Commercial Companies (25)
- Biowaste Organisations (20)
- Governmental Groups (4)
- Academic Institutes (9)
- NGOs (22)

ECN Board

Member	Organisation/Company/Institution	Country
Florian Amlinger	ARGE Kompost & Biogas	Austria
Morten Broegger	Solum Group	Denmark
Enzo Favoino	Scuola Agraria del Parco di Monza	Italy
John van Haeff	Attero Zuid BV	Netherlands
Dr. Jane Gilbert	Carbon Clarity	United Kingdom
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Jean-Luc Martel	SUEZ Environment	France
Aloys Oechtering	RETERRA Service GmbH	Germany

ECN Working Groups

- **WG 1 European Policy**

Chair: Florian Amlinger

- **WG 2 Quality Assurance**

Chair: Stefanie Siebert

- **WG 3 Integrated Waste Management**

Chair: Enzo Favoino

- **WG 4 Anaerobic Digestion**

Chairs: Angelika Blom / Henrik Lystad

- **WG 5 Eastern and Starting Countries**

Chairs: Mait Kriispalu / Josef Barth

Overview

- **EU Policy**
- **Status of EoW for Biowaste**
- **ECN Concept for Biowaste**
- **Further EU Biowaste Discussion**

EU Policy – Landfill directive

EU Landfill Directive

⇒ diverting targets for the reduction of biodegradable waste

According to the Directive 1999/31/EC on landfill of waste, Member States must reduce the amount of biodegradable municipal waste going to landfill

- to 35 % of 1995 level by 2016 (EU15) / 2020 (EU12)

Note: Biodegradable waste means any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food and garden waste, paper and cardboard.

EU Policy - WFD

EU Waste Framework Directive (WFD)

WFD (2008/98/EC) published Dec. 2008

Definitions (Article 3)

Biowaste means biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises and comparable waste from food processing plants

Waste hierarchy (Article 4)

- a) Prevention
- b) Preparing for re-use
- c) Recycling
- d) Other recovery, e.g. energy recovery
- e) Disposal

EU Policy - WFD

EoW (Article 6)

The WFD explicitly mentions compost as EoW candidate – Biodegradable Waste in Recital (22) ‘possible categories of waste for which ‘end-of-waste’ specifications and criteria should be developed, including, among others, construction and demolition waste, some ashes and slag, scrap metals, aggregates, tyres, textiles, compost, waste paper and glass’.

Re-use and Recycling (Article 11)

Member States shall promote re-use of products, high quality recycling, set up separate collection for at least paper, metal, plastic and glass by 2015 and take measures to achieve the recycling target of minimum 50 % for paper, metal, plastics and glass by 2020

Bio-waste (Article 22)

The Commission shall carry out an assessment on the management of bio-waste with a view to submitting a proposal if appropriate to examine the opportunity of setting minimum requirements for bio-waste management and quality criteria for compost and digestate from bio-waste, in order to guarantee a high level of protection for human health and the environment.

EU Policy - Biowaste

- **Feb. 2008: IPTS Report on “End of Waste Criteria for Compost”**
- **Feb. 2008: ECN Report “Compost production and use in the EU”**
- **Dec. 2008: Publication of the Green paper on the Management of Biodegradable Waste in the EU**
- **Dec. 2009: Publication of the final report “Assessment of the Options to Improve the Management of Bio-Waste in the European Union”**
- **May 2010: Publication of the Communication on the management of Biowaste by the EU Commission**
- **Sept. 2010: Publication of the working document on sludge and biowaste by the EU Commission**

EU Policy - Biowaste

Further steps

- End-of-waste criteria for compost and digestate
- Revision of the EU sludge directive
- Revision of WFD including recycling targets for biowaste by 2014
- Revision of the EU Fertiliser directive including organic fertiliser

Status of End-of-waste - Background

The WFD introduces a new procedure, under Article 6(1), which stipulates conditions under which End of Waste (EoW) criteria may be developed, as follows:

“Certain specified waste shall cease to be waste within the meaning of point (1) of Article 3 when it has undergone a recovery, including recycling, operation and complies with specific criteria to be developed in accordance with the following conditions”

Status of End-of-waste Background

These following conditions are

- (a) the substance or object is **commonly used for specific purposes;**
- (b) **a market or demand** exists for such a substance or object;
- (c) the substance or object fulfils the **technical requirements** for the specific purposes and meets the existing legislation and **standards applicable to products;** and
- (d) the use of the substance or object will not **lead to overall adverse environmental or human health impacts.**

The criteria shall include limit values for pollutants where necessary and shall take into account any possible adverse environmental effects of the substance or object.

Status of End-of-waste - Procedure

The WFD defines who has the initiative to develop EoW criteria, and the type of political procedure to follow

Comitology (Art. 5a(1)), 'Regulatory procedure with scrutiny':

1. The Commission takes initiative, drafting and proposing Commission Decision on EoW for each waste stream
2. A technical adaptation committee (TAC) composed of MS delegates votes its adoption
3. Scrutiny from Council and Parliament

Status of End-of-waste - Facts

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.”

Process towards EoW for Biowaste

- 2007-2008: Pilot study performed by IPTS on possible EoW criteria for Compost
- November 2010: Creation of a Technical Working Group for “Biodegradable waste subject to biological treatment”
- November 2010-January 2011: site visits to composting and digestion plants (DE, NL, FR)
- December 2010: stakeholder survey sent out to TWG, asking for feedback and updates on 2008 Compost pilot study + input on additional streams
- January 2011: feedback received from stakeholders (including contributions after deadline, participants 12 Member States, 16 Industry organisations)

Process towards EoW for Biowaste

- February 2011: background document prepared by IPTS and distributed to structure the discussions
- The TWG is asked to comment on the background document:
 - At the 1st workshop 2 March 2011
 - In written form, deadline is 25 April 2011
- Based on the workshop conclusions and the received comments, a new version of the background document will be circulated for consultation in September 2011 and about 1-2 months before a second workshop (October-November 2011)
- The second workshop will discuss the new document and aim at reaching consensus over a set of specific EoW criteria
- Subsequently, IPTS will prepare a final report to DG environment

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

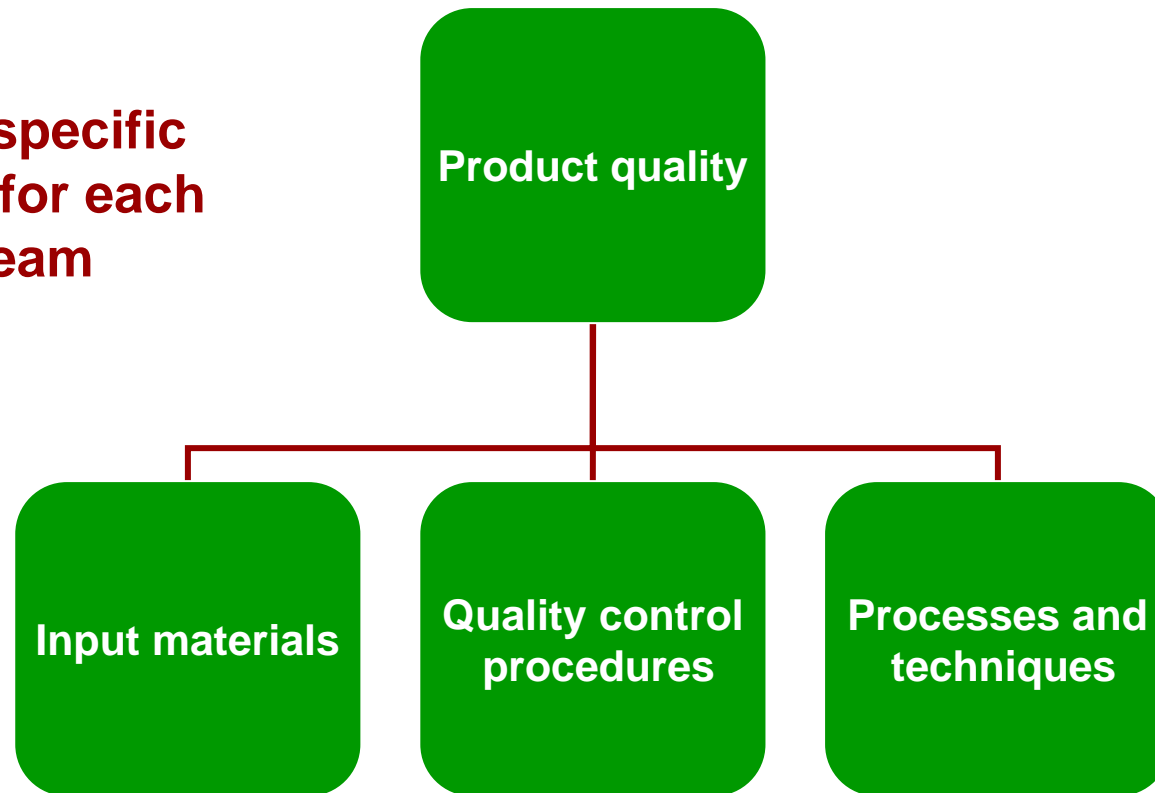
The waste cease to be waste when a useful and safe product is placed on the market

Methodology of EoW

**The framework
conditions**

<p>a) Commonly used</p>	<p>b) A market or demand exists</p>	<p>c) Meets tech. Requirements, legislation and standards</p>	<p>d) No overall adverse environmental or human health impacts</p>
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**Set of specific
criteria for each
stream**



Precondition for EoW

WFD, Art 6. ...when it has undergone a recovery, including recycling, operation;

Definition of input materials:

- **Bio-waste (WFD)**
- **Biodegradable waste (Landfill directive)**

Treatment requirement:

Material when it has undergone a recovery, including recycling, operation.

For EoW study:

- **composting**
- **anaerobic digestion**

Precondition for EoW

WFD, Art 6. 1(a) the substance or object is commonly used for specific purposes;

Compost as soil improver/organic fertiliser

- Increase in soil organic matter
- Increases water retention capacity and pH buffer capacity
- Improves physical structure of soil
- To lesser extent: organic fertiliser properties

Compost as component of growing media

- Part of material mix to grow plants as alternative to soil
- Partial peat replacer

Digestate applications

- Organic fertiliser properties (readily available N and P)
- Certain soil amendment properties, especially solid digestate

Precondition for EoW

WFD, Art 6.1(b) a market or demand exists for such a substance or object;

Economics and market aspects for compost

- **0 -12 Euro/tonne (agriculture outlets)**
- **6-15 Euro/tonne for landscaping, horticulture and hobby gardening**
- **Up to 300 Euro/tonne when sold in mixtures and bagged in low volumes (only hobby gardening outlets)**
- **Marketing and upgrading of value by blending allows higher revenues**
- **Agronomic value based on humus value, N or P: 3.3 to 8.5 Euro/tonne**

Precondition for EoW

WFD, Art 6.1(c) 'the substance or object fulfils the technical requirements for the specific purposes and meets the existing legislation and standards applicable to products;'

Standards and technical specifications

- **The European Compost Network has recently established a (voluntary) Quality Assurance Scheme, including product and management specifications based on a Quality Manual**
- **CEN TC 400 is finalizing horizontal sampling and testing standards for a number of matrices, including compost**
- **Voluntary quality assurance systems for digestate are available in UK, DE, SE, BE (CH)**

Precondition for EoW

WFD, Art 6.1(d) 'the use of the substance or object will not lead to overall adverse environmental or human health impacts'

Environmental and health issues

- **Composting and digestion have direct influences (through the process) and indirect influences (through the use of the materials) on air emissions, greenhouse gas emissions, soil quality and human health.**
- **Influences can be negative (e.g. uncontrolled methane emissions) or positive (e.g. improvement of soil water retention capacity)**
- **Overall, composting and digestion have the least negative impacts and the most benefits, when compared to other MSW management options**

Product Quality for EoW

Product quality requirements are needed to check:

- **For elements causing direct or indirect environmental and health risks**
- **That the product is suitable for**
 - **Being placed on the market without needs for waste regulatory control**
 - **For production of other materials such as growing media**

Compost/digestate should constitute an adequate alternative to primary raw materials (peat, mineral fertilisers, etc)

Proposed Product Quality for EoW

Parameter	Value
Minimum organic matter content	20 % in weight
Minimum stability	To be proposed
No content of pathogens	No Salmonella sp. in 50 g sample
Limited content on viable weeds	To be proposed
Limited content of impurities	0.5 % of dry matter weight
Limited content of heavy metals	mg/kg (dry weight)
Zn	400
Cu	100
Ni	50
Cd	1.5
Pb	120
Hg	1
Cr	100
Currently, no proposal for organic pollutants	

Product Quality for EoW

Requirements on product testing (sampling and analysis):

- Compost producers must demonstrate by external independent testing that there is a sufficiently high probability that any consignment of compost delivered to a customer complies with the minimum quality requirements and is at least as good as the properties declared.
- The compliance testing has to be carried out within external quality assurance by laboratories that are accredited for that purpose
- The CEN/Horizontal standards for sampling and analysis have to be applied as far as available.

Input materials for EoW

Two main options:

- (1) Negative list approach. Exclude the materials or sources that pose a specific environmental, health or quality concern if not treated adequately (excl. sew. sludge)
- (2) Positive list approach. Exclude all but input sources that ensure absence or minimization of risks

➔ Only clean, biodegradable wastes as input materials for the production of end-of-waste compost

Most contentious input materials:

- organic fraction from mechanical separation of mixed MSW (MBT compost)
- sewage sludge

Process requirements for EoW

Rationale for requirements on processes and Techniques

- To check indirectly product quality. More specifically, to identify, if appropriate, a minimum treatment which is known in all cases to result in quality suitable for EoW.
- The material must have gone through all necessary treatment processes that make it suitable for the final users, and allow transporting, handling, trading and using the compost/digestate without increased risks of environmental and health impact.

Process requirements for EoW

It must be demonstrated for each compost batch that a suitable temperature-time profile was followed during the composting process for all material contained in the batch, for stabilization and pathogen/weed seed inactivation purposes.

Proposed time-temperature profiles:

65 °C or more for at least 5 days

60 °C or more for at least 7 days

55 °C or more for at least 14 days

Note: time/temperature requirements from ABPR regulations invariably apply for category 2 & 3 materials

Declaration and labelling for EoW

Rationale for requirements on provision of Information

- Minimize administrative load, yet fully characterize completeness of treatment and ensuring fitness for safe use
- Demonstrate value of compost/digestate as replacement for raw materials
- Information may be delivered both on parameters bound by limits and parameters providing information on fitness of the material for use

Declaration and labelling for EoW

Usefulness concerning soil improving function:

- Organic matter content
- Alkaline effective matter (CaO content)

Usefulness concerning fertilising function:

- Nutrient content (N, P, K, Mg)
- Mineralisable nitrogen content (NH₄-N, NO₃-N)

Biological properties:

- Stability/maturity
- Plant response
- Contents of germinable seeds and plant promulgates

General material properties:

- Water or dry matter content
- Bulk density/volume weight
- Grain size
- pH
- Electrical conductivity (salinity)

Hygienic aspects relevant for environmental and health protection:

- Presence of Salmonellae and/or presence of E.coli

Pollutants and impurities relevant for environmental and health protection:

- Contents of macroscopic impurities (such as glass, metals, plastics)
- Contents of some heavy metals and persistent organic compounds

Quality assurance for EoW

Rationale for requirements on quality assurance

- Establish confidence in end-of-waste status
- Quality management should be in place that explicitly covers the key areas of operation where compliance with end-of-waste criteria has to be demonstrated:
 - control of input materials
 - monitoring process requirements
 - monitoring product quality
 - application recommendation to customers
 - record keeping

The quality assurance system is audited externally by the competent authorities or by quality assurance organisations accredited by Member State authorities.

Application of EoW

Application of end-of-waste criteria

Compost ceases to be waste, provided all other end-of-waste criteria are fulfilled, when it is placed on the market by the producer. However, if no customer is found that will use the compost lawfully, compost will be considered waste.

If the compost is mixed/blended with other material before being placed on the market, the product quality criteria apply to the compost before mixing/blending.

The undertaking placing compost on the market must provide the national authorities with the information or documentation required by national law that can be used to control that the compost is actually used for a lawful purpose.

Discussion points for EoW

EoW criteria for compost and digestate

- regulated in one legislative approach
- Time frame
- Set of criteria

Differentiation between product / waste

- Materials not fulfilling the EoW criteria are regulated on EU or MS level?
- National product standards possible?

Kind of input materials

- Positive list / negative list
- Mixed solid waste as input
- Sewage sludge as input

ECN concept for Biowaste

In order to achieve a consistent framework conditions for the recycling of organic waste in Europe ECN is of the opinion that the set of regulatory measures must consider (among others) the following conditions and principles:

- Economic viability (Cost effectiveness)
- Respecting market needs
- Consider environmental criteria for both (i) processing and (ii) use

ECN's waste stream or input approach

- EU End-of-waste regulation
- EU sludge / low quality treated bio-waste directive
- National end-of-waste of waste/soil protection regulation

ECN concept for Biowaste

EoW / End of waste Regulation for Compost/Digestate

Prerequisite: Input materials from separate collection (no mixed waste, no sewage sludge)

Important regulatory elements:

- Binding POSITIVE LIST [include manure; former foodstuff etc.]
- Quality criteria for end product
- External quality assurance QAS = obligatory
- Standard labeling /compost specifications
- Application rules on MS level
- Exact definition of point where compost/digestate ceases to be waste (monitoring, process control; product declaration, etc.)
- Official approval procedure within QAS: “End-of-Waste-Plant”; “End-of-Waste-Quality Compost/Digestate”;

Basis: Quality Assurance concept of the ECN-QAS

ECN concept for Biowaste

EU sludge / low quality treated biowaste directive

Regulation where composts from source separated organic waste streams and sewage sludge is regulated

Input materials: organic waste from separate collection and sewage sludge

Important regulatory elements:

- Minimum criteria
- External quality assurance QAS = obligatory
- Application rules on MS level

National regulations

Input material: mixed solid waste

INPUT MATERIAL	TYPE OF PRODUCT	LEVEL AND TYPE OF REGULATION	QUALITY CRITERIA	USE	MONITORING	NATIONAL DEVIATIONS
Source segregated bio-/garden waste; commercial and (agro-)industrial sources; manure Sludge from WWTP from agro industries → POSITIVE LIST	QUALITY COMPOST = PRODUCT	EU Regulation on END OF WASTE CRITERIA	Regulation on end of waste criteria for QUALITY COMPOST	No specific restrictions on EU level To be defined by MS	Quality assurance obligatory Only in production phase	Stricter criteria only if justified by health and environmental arguments
	COMPOST = WASTE	EU Revised Bio-waste Sludge Directive MINIMUM CRITERIA	Minimum criteria: COMPOST	No specific restrictions on EU level; To be defined by MS	Quality assurance eventually voluntary During production and documentation of compost application	Detailed application rules and also national END of WASTE regulation possible
	QUALITY DIGESTATE = PRODUCT 1)	EU Regulation on END OF WASTE CRITERIA	Regulation on end of waste criteria for QUALITY DIGESTATE	No specific restrictions on EU level To be defined by MS	Quality assurance obligatory Only in production phase	Stricter criteria only if justified by health and environmental arguments
	DIGESTATE = WASTE	EU Revised Bio-waste Sludge Directive MINIMUM CRITERIA	Minimum criteria: DIGESTATE	No specific restrictions on EU level; To be defined by MS	Quality assurance eventually voluntary During production and documentation of digestate application	Detailed application rules and also national END of WASTE regulation possible
STANDARD Sewage sludge	Municipal Sludge = WASTE	EU Revised Bio-waste Sludge Directive MINIMUM CRITERIA	Minimum quality criteria for (sewage) sludge and sludge compost	Allowed to be used in agriculture, however not on soils subject to high risk of contamination	Quality assurance obligatory During production and use on soils; also periodic monitoring of soils	Detailed application rules
	Sludge or Bio-Solids Compost = WASTE					For Sludge COMPOST national END of WASTE regulation possible
Mixed waste (with or without sludge)	Stabilised organic fraction of Mixed waste / MBT process = WASTE	MS National regulation	To be defined by MS	To be defined by MS	To be defined by MS	---

Set of limit values

			END OF WASTE CRITERIA		PROPOSED LIMITS OF WORKING DOCUMENT FOR A REVISED SLUDGE DIRECTIVE		
			Proposal by JRC A)	Proposal by ECN	Proposal by ECN Biowaste Compost	EC 1 st draft proposal sludge	EC 1 st draft proposal stabilised MBT Material
Contaminants [mg/kg dm]	ORGANIC FARMING ^[1] (FROM HOUSEHOLD WASTE)*	EU Eco-labels ^{[2]*}					
Cd	0.7	1	1.5	1.3	2.0	10	3
Cr (total)	70 (total) 0 (Cr VI)	100	100	60	70	1,000	300
Cu	70	100	100	200 ^{B)}	200 ^{B)}	1,000	500
Hg	0.4	1	1	0.45	0.7	10	3
Ni	25	50	50	40	70	300	100
Pb	45	100	120	130	150	500	200
Zn	200	300	400	600 ^{B)}	600 ^{B)}	2,500	800
PAH (or benzo-a-pyrene)**		-				6 (2)	6 (2)
Impurities ≥2mm [% dm]		0.5%	0.5%	0.5%	1%	--	2%

A) by JRC EoW Compost Study; *

B)Cu and Zn can be also seen as trace-nutrients; Concentrations of Cu > 110 and Zn>400 must be declared on the labelling or accompanying papers. See also Amlinger et al. 2004. Heavy metals and organic compounds from wastes used as organic fertilisers and ECN e.V., 2010: Quality Assurance Scheme – Quality Manual., Oelde.

Overview on compost qualities

COMPOST	FRANCE : MIXED WASTE / MBT STABILISED MATERIAL (2007 DATA)			FRANCE : 2 BIOWASTE COMPOST PLANTS / SEPARATE COLLECTION	GERMANY BIOWASTE COMPOST [2010]		BELGIUM/FLANDE RS VFG Compost [2010]	
	FR 75%ILE N=97	FR 95%ILE N=97	FR NFU 44051		DE 75%ILE N=2638	DE 95%ILE N=2638	BE 75%ILE N=42	BE 95%ILE N=42
Contaminant:				Range of mean values [2009]				
Cd	1.4	1.7	3	0.3 - 0.4	0.55	0.81	1	1.2
Cr (total)	54	70	120	17 - 28	27	41	37	39
Cu	152	179	300	58 - 65	53	80	56	62
Hg	0.6	0.9	2	0.1 - 0.3 -	0.15	0.24	0.20	0.20
Ni	31	41	60	9 - 18	17	30	17	18
Pb	138	162	180	32 - 32	43	69	77	93
Zn	476	566	600	128 -192	195	270	266	289
PAH (or benzo-a- pyrene)**	benzo-a-pyrene: MEAN: 0.10% n=40		(1.5) mg/kg dm		---	---	---	---
Impurities ≥2mm [% dm]	Total: 1.44% Plastics only: 0.34% n=16		A)	0,08 - 0,87 % 0,04 - 0,27 %	Total (mean): 0.20%: [2007]		0.3	0.5

A) Limits of NFU 44051: Plastic films >5mm (< 0.3% DM); Other plastics >5mm (< 0.8% DM) Glass + Metals >2mm (< 2.0% DM)
Data Source: GERMANY: BGK/Leifert – personal communication; BELGIUM/Flanders: VLACO/Vandenauweele – personal communication;
FRANCE: stabilised MBT- material: Veolia/Copin – personal communication // Biowaste compost: 2 individual composting plant – personal communication

Overview of digestate qualities

DIGESTATE	GERMANY DIGESTATE LIQUID [2010]		GERMANY DIGESTATE SOLID [2010]		SWEDEN DIGESTATE LIQUID [2009]		BELGIUM/FLANDERS DIGESTATE LIQUID [2010]	
	DE 50%ILE N=504	DE 90%ILE N=504	DE 50%ILE N=69	DE 90%ILE N=69	SE 75%ILE N=16	SE 95%ILE N=16	BE 75%ILE N=72	BE 95%ILE N=72
Contaminants								
Cd	0.34	0.6	0.6	1.2	0.35	0.64	0.5	0.95
Cr (total)	13	29	19	43	14	26	21	36
Cu	72	174	46	78	129	279	130	210
Hg	0.09	0.23	0.12	0.46	0.08	0.31	0.08	0.23
Ni	11	23	13	25	12	25	14	18
Pb	6	29	29	52	6.5	14.2	10	15
Zn	311	564	231	362	408	575	428	582
PAH (or benzo-a-pyrene)**	---	---	---	---				---
Impurities ≥2mm [% dm]	0	0.01	0.06	0.3			0.02	0.02

Data Source: GERMANY: BGK/Leifert – personal communication; BELGIUM/Flanders: VLACO/Vandenauweele – personal communication;
SWEDEN: Avfall Sverige /Blom – personal communication

1. **Setting binding biowaste recycling targets**
2. **Setting end of waste criteria for compost and digestate but with specific criteria for each product type (compost / digestate)**
3. **Requiring quality assured processing of separately collected biowaste feedstocks according to a set of standards**
4. **Including treated biowaste of separate collection in the revision of the sludge directive or separate legislation**
5. **Regulating MSW materials on national level**

To support sustainable marketing of quality products

Further EU Biowaste Discussion

EoW

- Discussion of draft EoW report until 25 April 2011
- Collection of data and information on digestate
- Revised EoW report expected for Sept. 2011
- 2nd Technical Working Group Meeting Okt./Nov. 2011
- Final report to EU Commission in 2012
- Comitology 2012

REACH

Compost is exempted from the registration procedure
Unclear situation for digestate

Further EU Biowaste Discussion

EoW/Sludge Directive

- Harmonisation of the EoW // Bio-waste/sludge regime with the definition of material groups and recycling activities which are accounted for the WFD`s recycling targets
- Definition of the future scope of the the EU Sludge directive
- Harmonisation with existing national regulations
- Monitoring of the EoW regime

Further EU Biowaste Discussion

EC Fertiliser Regulation

- Limited range of fertilisers covered by Reg. (EC) No 2003/2003 : only mineral fertilisers to be extended to organic fertilisers, growing materials, ...
- Diverging rules for the control of contaminants

Option 1 : Existing Legal Framework repealed –
Fertilisers regulations would be repealed → REACH
« will do the job » !

Further EU Biowaste Discussion

EC Fertiliser Regulation

Option 2 : Existing Legal Framework repealed –
Organic fertilisers based on bio-wastes could be addressed
by:

- Directive 86/278/EEC (sewage sludge) : prevent harmful effects on soil, vegetation, animal and humans
- Regulation (EC) No 1774/2002 (animal by-products) : health rules linked to safety of food chain (sanitary reasons)
- Bio-waste proposal (?)

Q: Are all organic fertiliser types currently on the market covered by these existing framework ? Agronomic effectiveness?

Further EU Biowaste Discussion

EC Fertiliser Regulation

Option 3 + : End-of-waste criteria as one of the essential requirements for....

- **Industry Voluntary Agreement (option3(1)) : good manufacturing practices, self-control activities, certification schemes : possible (?) reference to End-of-waste criteria if they are using ingredients from biowastes streams**
- **Fertiliser types listing (incl. organic, growing media,...) with all technical details :**
 - minimum nutrient content and maximum limit values for contaminants
 - description of manufacturing procedures (possible reference to EoW criteria for the ingredients used if they are issued from biowaste streams)

Further EU Biowaste Discussion

Summary

EoW for compost and digestate

EU Sludge directive

Revision of WFD for Recycling targets for biowaste

Revision of the EU Fertiliser directive

Harmonisation with REACH and ABPR

Further Information

ECN News

The ECN NEWS are published
bi-monthly and can be ordered by
info@compostnetwork.info
or downloaded from ECN website

www.compostnetwork.info



European Compost Network ECN
Organic Resources and Biological Treatment

No. 03
2010

NEWS

We wish you all
Merry christmas
and a Happy
New Year 2011.

The Team of ECN

EU Commission
Bio-waste Strategy of the European Commission

On the 21. September 2010 DG Environment of the European Commission published a new working document with the title „Sludge and Biowaste“. The document is based on the changes of the biowaste and sludge policy outlined in the Communication from the Commission on “Future steps in bio-waste management in the European Union” adopted on 18. May 2010. It aims to structure the further discussion with Member States and key stakeholders as well as to enable the Commission for a better preparation of the revision of the Directive on the use of sewage sludge in agriculture.

ABPR
The Future of Hygienisation
Page 3-4

SPECIAL ORBIT
Soil and Organic Matter
Page 4

ECN INFO PAPER
Sustainable Compost Application in Agriculture
Page 5

FROM THE COUNTRIES
News from the European Countries
Page 7

Commission proposes a three category system:
The three categories of the Commission differentiate between a product class for compost/digestates, which is freely tradable (even over borders), a waste class for sludges and bio-wastes, suitable for the application in agriculture and a third class below the minimum quality limits, which can't be used in agriculture any more.
The Commission emphasizes that the use of high quality compost/digestate

Further Information

ECN INFO PAPER

Info Paper on specific topics:

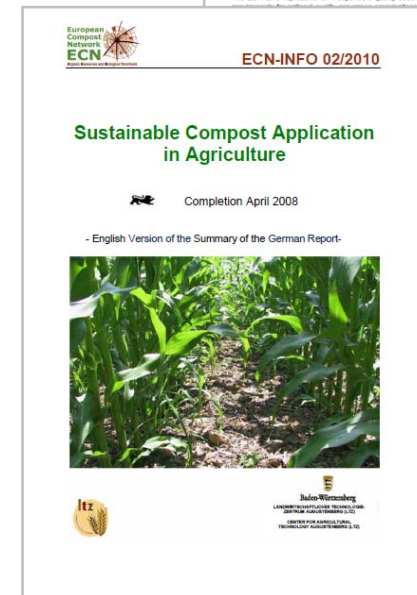
No. 01/2010

European Quality Assurance for Compost

No. 02/2010

Sustainable Compost Application in Agriculture

Download from ECN website
www.compostnetwork.info



Further Information

ECN-QAS

- In 2010 Implementation of the European Quality Assurance Scheme (ECN-QAS)
- July 2010 Publication of the ECN-QAS Manual
- Rules for awarding the ECN-QAS Conformity and Quality labels and terms of use



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Thank you!

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