

Save Organics in Soil -

Biological Cycle and Sustainable Agriculture

13th October 2020 I 09:00 am to 10:30 am (CET)

Bio-Waste and compost status update

European Compost Network ECN e.V.
Marco Giacomazzi



renew europe.



EUGreenWeek 2020 PARTNER EVENT





@compostnetwork



@ECNnetwork

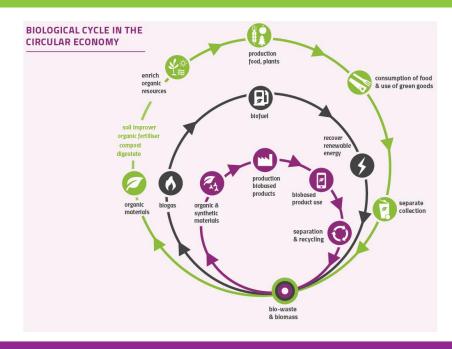
European Compost Network



ECN's Vision

"Living well within the limited resources of the planet respecting the organic cycle"

- ECN is the leading European membership organization
- Promoting sustainable recycling practices of organic resources: composting, anaerobic digestion...



64 members from 27 European countries

48 M tpa treatment capacities

4.500 treatment plants (composting & AD)



Status on bio-waste management in Europe



ECN STATUS REPORT 2019 EUROPEAN BIO-WASTE MANAGEMENT Overview of Bio-Waste Collection, Treatment & Markets Across Europe European Compost Network e.V.

- Published by ECN, supported by ISWA WG BTW
- Data reporting results from 18 European countries

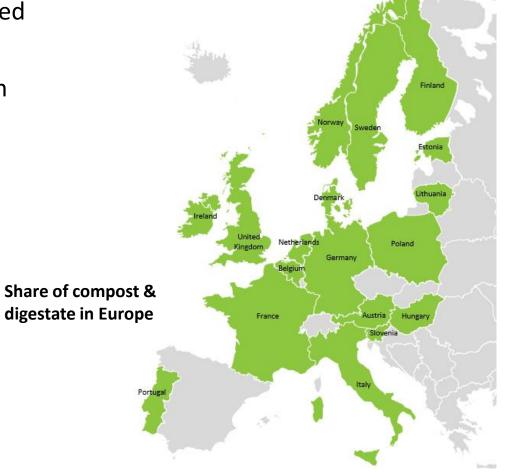
Total bio-waste generated (estimation): 118 Mt
Total bio-waste collected: 47,5 Mt



11.7 Million tonnes of compost



4.1 Million tonnes of digestate





Updated rules incentivising bio-waste collection and recycling









But how can be assessed the effectiveness of the biowaste separate collection?



Effective bio-waste separate collection



	Germany	Austria	Italy	France	Ireland
Population (Million)	82,2	8,7	60,7	67	4,7
Municipal waste generated (Mtonnes)	52	4,9	30	34	2,7
Bio-waste separately collected (Mtonnes)	14,1	1,3	6,5	4,6	0,4
Weight of bio-waste in separate collection	27 %	26 %	21 %	13 %	13 %
Bio-waste separate collection per capita (kg/inhb)	172	151	107	69	75
Recycling rate	67 %	58 %	46 %	42 %	41 %

By weight, bio-waste represent a big share of household waste composition:

- When collected bio-waste is 20 % less than the MSW generated, or when bio-waste collected is less than 100 kg/capita, the separate collection scheme implemented is not effective
- This does not mean that countries that do not effectively collect bio-waste recycle less than the others. But it means that countries could boost recycling rates by at least 10 % with effective separate collection of bio-waste
- Separate collection of bio-waste is a powerful enabler of recycling targets (55% of household waste by 2025; 60% by 2030 and 65% by 2035)

IMPORTANT: National figures might be flawing. Bio-waste separate collection is an activity organized locally, that depends on

- Seasonality
- Demographics and urbanisation vs rural areas
- Engagement of the population

Source: ECN Status Report 2019, based on data from 18 European countries

^{*} AT, BE, CH, DE, EE, FI, FR, HU, IE, IT, LT, NL, NO, PL, PT, SE, SI, UK





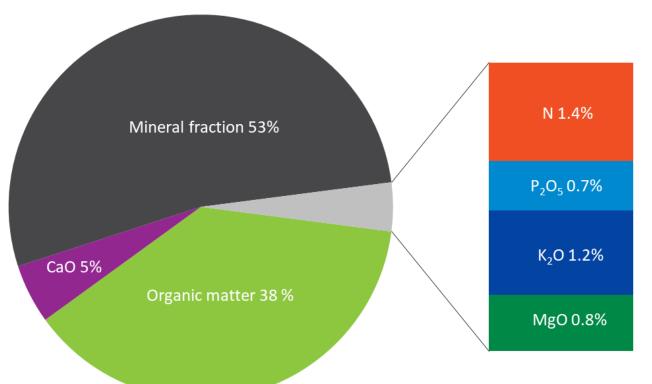
Compost status in Europe



Compost outlook – Nutrients and Organic Matter



Compost Typical Composition (% dry matter)



1 tonne of fresh compost = 300 kg organic matter

Application of 30 tonnes of fresh compost per hectare per year

▶ 9 tonnes of organic matter is added to the soil



Outlook 2030: bio-waste and compost in 2030



Europe Current

48 MILLION

TONNES A YEAR OF BIO-WASTE



Europe Potential

128 MILLION

TONNES A YEAR OF BIO-WASTE

- Currently, 118 Mt of bio-waste are generated in the EU every year, but less than 40% recycled.
 - > About 12 Mt of compost

12 MILLION

TONNES A YEAR OF COMPOST



32 MILLION

TONNES A YEAR OF COMPOST

By 2030, 128 Mt of bio-waste could be collected and recycled

It would roughly amount up to 32 Mt of quality compost that can be used to restore soil health, quality and fertility



Different models, practices and performances in EU Countries



Examples from Austria, Germany, Flanders (BE), and Italy

Information based on ECN Status report 2019 and ECN country reports:









KBVÖ Austria

BGK Germany

VLACO Belgium

CIC Italy

- All Quality Assurance Schemes are appoved by the European Quality Assurance Scheme (ECN-QAS)
- > 16 Countries have national standards for compost quality
- ➤ 10 Countries have **quality assurance schemes** that verify compliance of compost quality standards. EE, FI, FR and IE have based their schemes on ECN_QAS



Source: ECN website: <u>www.compostnetwork.info</u> Country Reports



Conclusions



- ➤ Bio-waste separate collection allows to recycle ensured good quality organic soil improvers that are crucial to restore soil health and mitigate the climate change.
- ➤ By 2030, 120 Million tonnes of bio-waste from separate collection should be recycled generating 32 Million tonnes of clean and safe compost

Thank you!

