Aktuelles zur Verwertung von biogenen Abfällen in der EU

Stefanie Siebert, Executive Director of ECN

www.saveorganicsinsoil.org

ECN
Compost and Digestate for a Circular Bioeconomy

@ECNnetwork

www.compostnetwork.info

European Compost Network

ECN
Compost and Digestate for a Circular Bioeconomy

Vision — Living well within the limited resources of the planet and respecting the organic cycle

Mission — Leading the organic recycling industry through our focus on separate collection of biowaste, quality assurance for compost and digestate and to keep our soils healthy

Values — Care; Internet & Networking; Simplicity

Pillars — Quality Assurance; Advocacy; Market; Innovation

Circularity & Sustainability is at the heart of everything we do

66 Members from 28 European Countries

≈ 48 M tpa Treatment Capacity

> 4.500 Composting & Anaerobic Digestion Plants

ECN Board

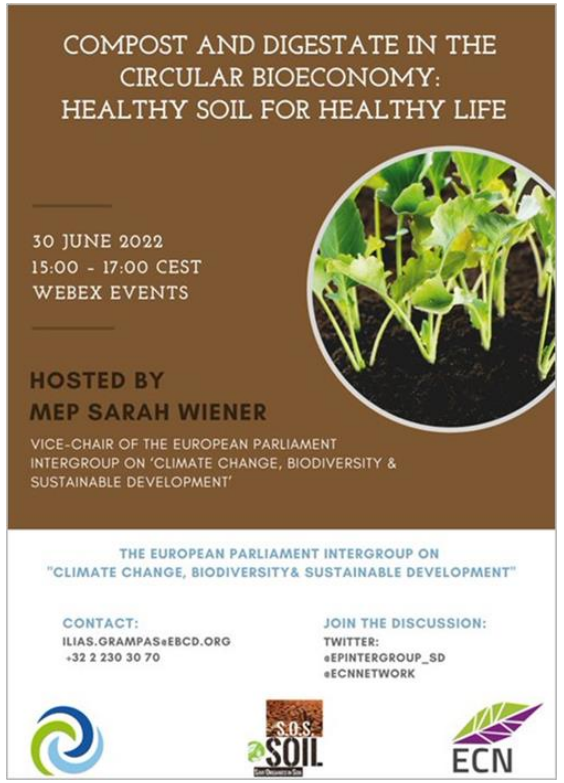
ECN Board 2022

- **Kristel Vandenbroek (BE, VLACO) - Chair**
- **Massimo Centemero (IT, CIC) – Vice-Chair**
- **Irmgard Leifert (DE, BGK) - Treasurer**
- Susana Lopes (Lipor, Portugal)
- Domantas Tracevicius (LT, NGO Ziedine ekonomika)
- Tomasz Wojciechowski (PL, GWDA)
- Arjen Brinkmann (NL, BVOR)
- Jens Måge, (NO, Avfall Norge)
- Horst Müller (AT, KBVÖ)

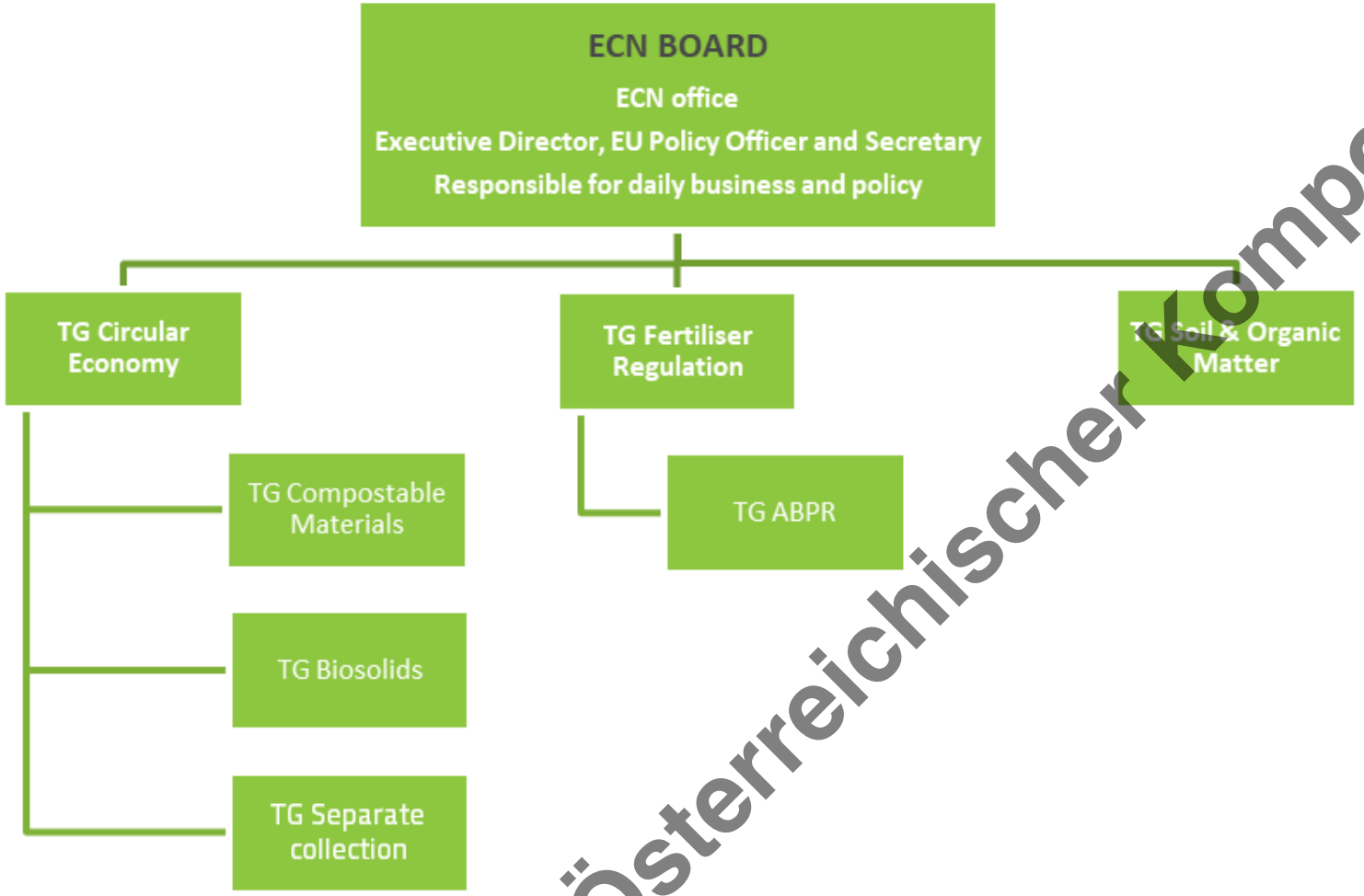
Annual Meeting 2022

The Annual Meeting (AM) 2022 took place on the 30 June 2022 in Brussels in conjunction with

- the celebration of ECN's 20th Anniversary, and



Area European Policy



- **TG Circular Economy-** Chair: Stefanie Siebert (ECN), Paricipants: all Board Members
- **TG Compostable Materials** – Chair: Marco Ricci-Jürgensen (CIC, IT), 38 participants
- **TG Biosolids** – Chair Vacancy, 23 participants, (pausiert)
- **TG Separate Collection** – Chair: Steffen Walk (TU Hamburg-Harburg, DE), 21 participants
- **TG Fertiliser Regulation** – Chair: Irmgard Leifert (Reterra Service GmbH, DE), 33 participants
- **TG ABPR** – Co-Chairs: Percy Foster (CRÉ, IE) and Wim Vanden Auweele (Vlavo, BE) , 13 participants
- **TG Soil & Organic Matter** – Chair: Albertoo Confalonieri (CIC, IT), 26 participants
- **TG Quality Assurance** – Chair: Wim Vanden Auweele (Vlaco, BE), 33 participants

Biowaste & The Circular Bioeconomy

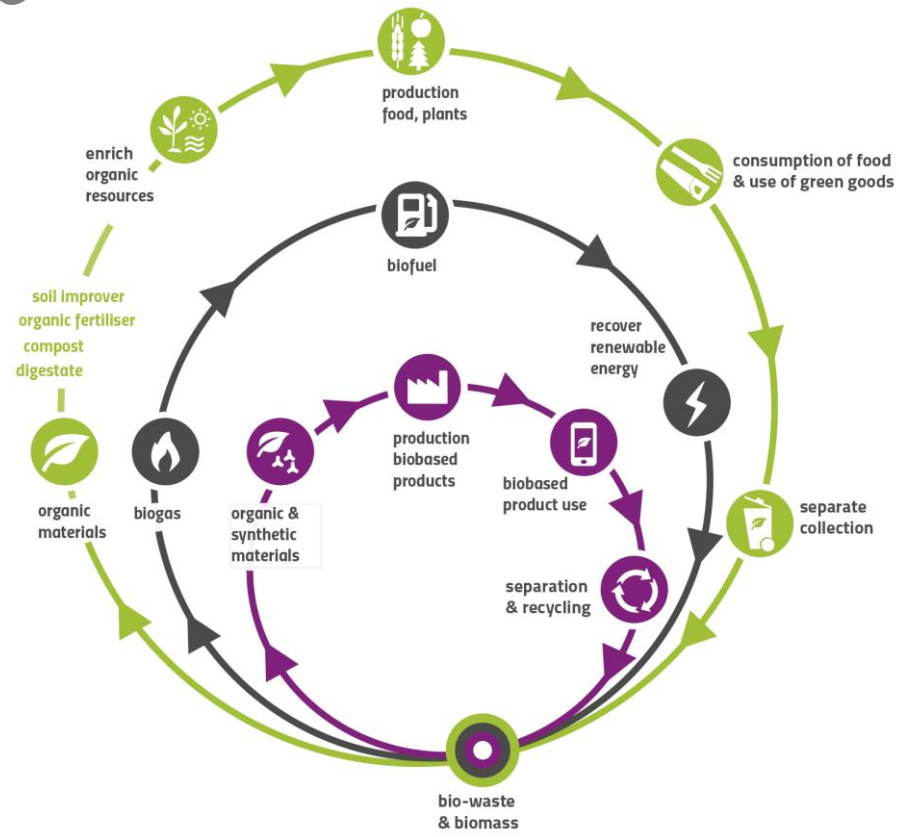
ECN
Compost and Digestate for a Circular Bioeconomy

BIOWASTE

A Cross-Cutting Resource

- European Green Deal
- Bioeconomy Strategy
- Biodiversity Strategy
- Farm to Fork Strategy
- Soil Strategy
- Waste Framework Directive
- Zero Pollution Action plan

BIOWASTE in the Circular Bioeconomy



EU Policy Approach - The EU Green Deal

Carbon Neutral Economy 2050

Climate law

- GHG emissions reduction from source
- GHG emissions removal from the atmosphere in natural sinks – e.g. in soil

Farm to Fork Strategy 2020

- **Reducing mineral fertilisers and pesticides; increasing organic farming**

Biodiversity Strategy 2030

- **30 % restoring land and increasing organic farming**

CE Action Plan

2020

- New **chemicals strategy** for sustainability

2021

- **Green Public Procurement (GPP) criteria and targets** in sectoral legislation with **mandatory reporting**
- **Industrial Emission Directive: Revision**
- **Unintentional release of microplastics: labelling, standardisation, certification and regulatory measures**
- **Waste Shipment** Regulation: Revision

2022

- Harmonised model for **separate collection and labelling** of waste

2023

- Regulatory framework for **certification of carbon removals**

EU Green Deal & CE

- 65 % recycling target for municipal waste by 2035
- Mandatory separate collected or separated at source by 2023
- Ban on Mechanical biological Treatment from Recycling by 2027
- Landfill target Maximum 10 % of municipal solid waste by 2035

Waste Framework & Landfill Directives

Fertilising Products & Animal By-Products Regulation

- Boosting organic matter (biowaste) recycling from biowaste
- Integration of organic fertilising products into the scope of the new Regulation
- Introducing harmonised EU rules for products diverting from organic waste materials
- CE marking and free trade for organic fertilising products across EU
- Optional Harmonisation
- End point in the manufacturing chain for ABP-derived materials

- Integrated Nutrient Management Action plan (INMAP)
- Reduce nutrient losses by at least 50 % without deterioration in soil fertility
- Reduction of fertiliser use by at least 20 %
- Carbon farming practises & carbon removal schemes

Farm to Fork & Sustainable Carbon Cycles

Soil Health Law & Biodiversity strategy

- Soils should be in a healthy condition by 2050
- 60-70 % of soil ecosystems in the EU are unhealthy and suffering from continuing degradation
- 12,7 % of Europe is effected by moderate to high erosion
- EU Soil Health Law by 2023
- Identifying Soil health indicators & Soil Health Certificate
- 30 % restoring land and increasing organic farming (25% organic farmland by 2030)

KEY CHALLENGES

- Enforcement: implementation of biowaste separate collection (esp. food waste)
- Binding recycling target for separate collected/source separated municipal biowaste
- Separate collection/recycling target for commercial and industrial biowaste

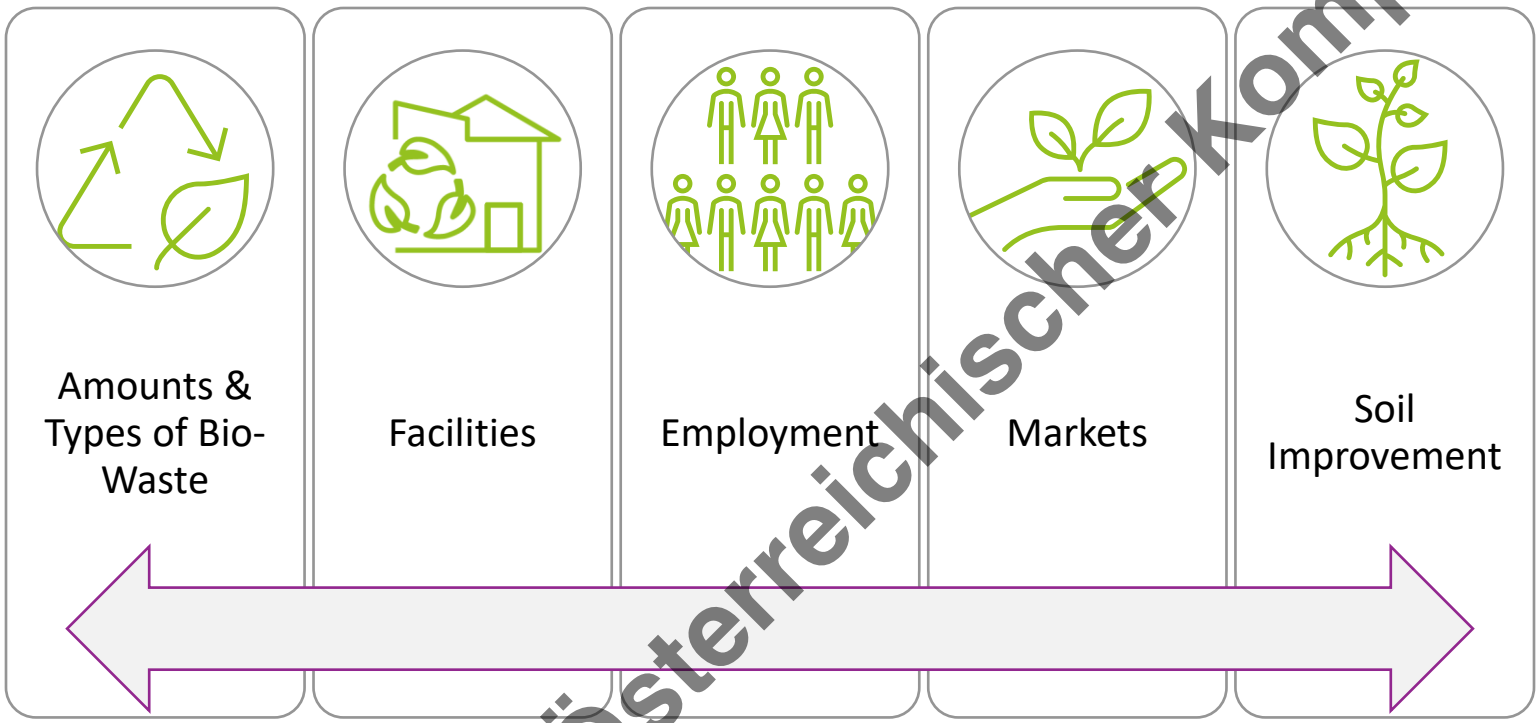
- Unsuitable ABPR treatment requirements for food waste from kitchen (Cat. 3)
- Exemption of sludges from food & feed processing industries as input material for composting & AD
- Unbalanced requirements in the conformity assessment procedures for compost & AD

- Including compost & digestate from biowaste in carbon farming practises, carbon removal schemes
- Replacement of mineral fertilisers with high-quality recycled organic materials
- Recognition of soil organic matter in the Integrated Nutrient Management Action Plan

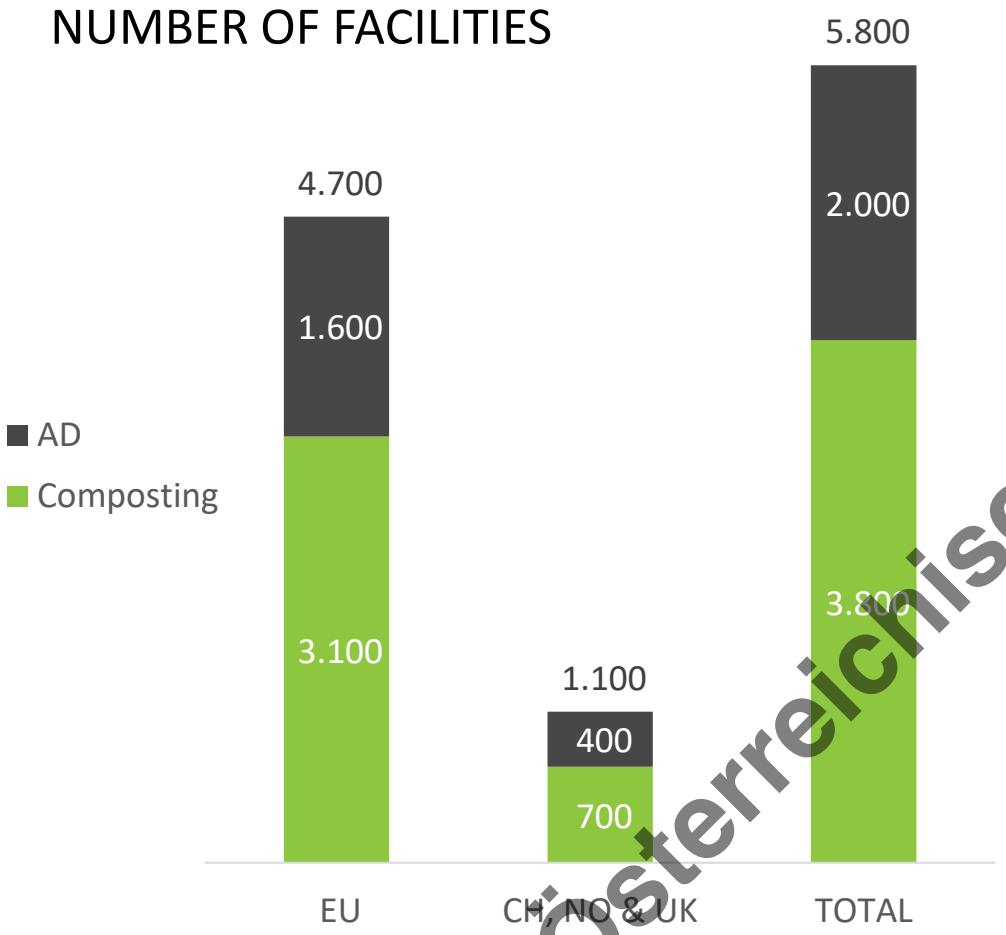
- Maintaining & improving soil organic matter
- Recognition of carbon sequestration potential of compost and solid digestate
- Replacement of peat in growing media with high-quality recycled organic materials (compost & solid digestate)

ECN's Data Report 2022

Comprehensive survey in 2021



Biowaste Treatment – FOR PEOPLE – JOB CREATION



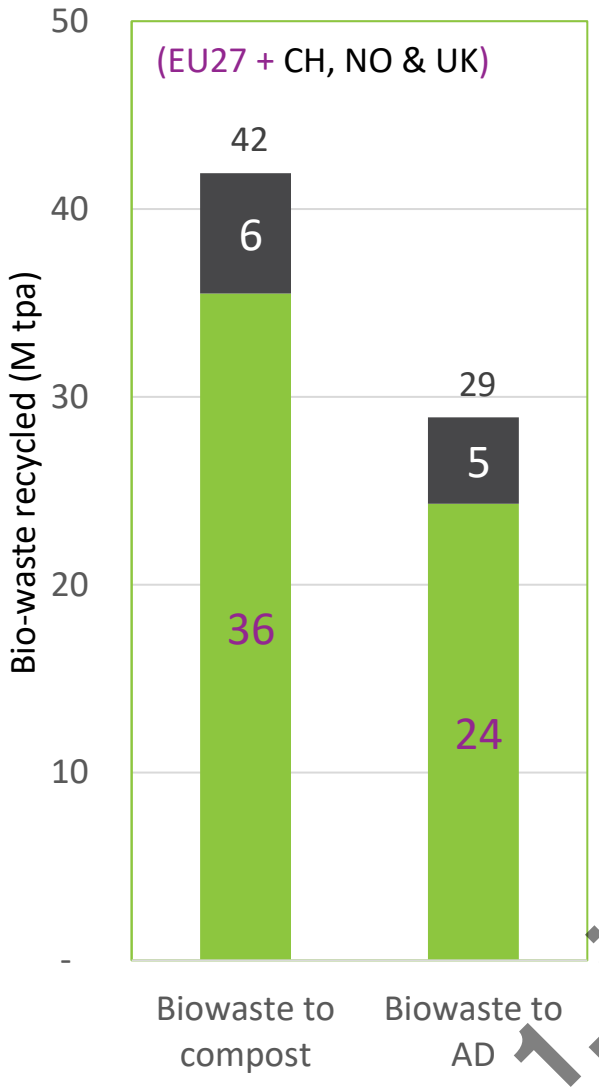
	FTEs PER FACILITY	TONNES PER FTE
COMPOSTING	4.7	4,200
ANAEROBIC DIGESTION	4.9	5,300

11,000 - 18,000 FTEs
COMPOSTING

2,000 - 5,500 FTEs
ANAEROBIC DIGESTION

FTE – Full Time Equivalent Employees

Biowaste Collection – Compost & Digestate Production



71 M tpa
BIO-WASTE RECYCLED

21 M tpa
COMPOST PRODUCED

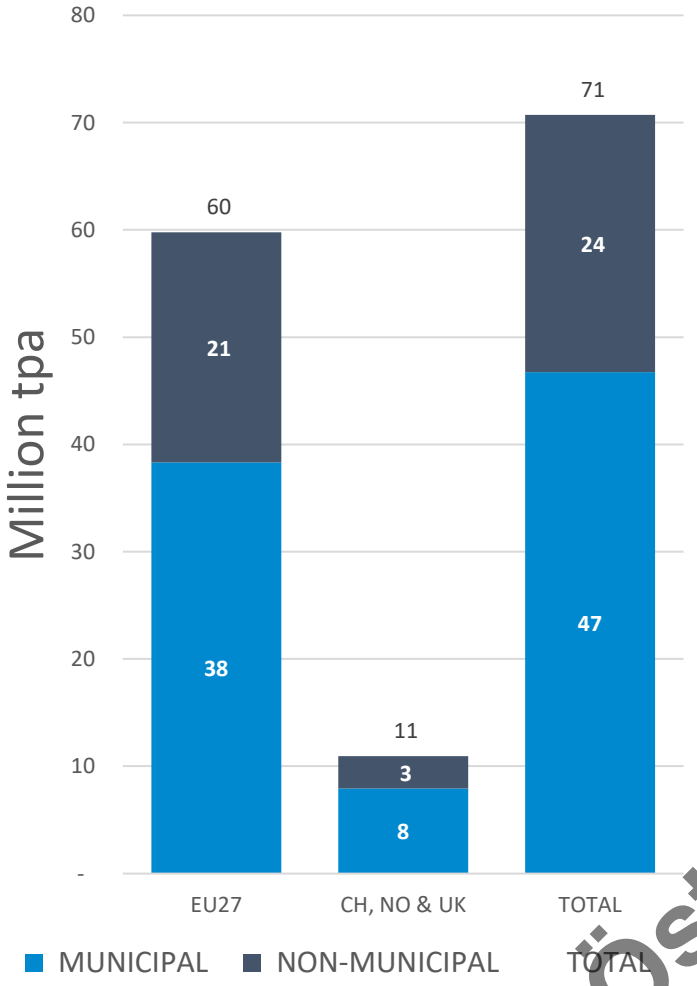
Surface area (million ha)	Fraction of Arable Land	Fraction of Mod./ Severely Eroded Land
2.1	2%	16%

1.2 million tonnes CO_2-eq
sequestered on agricultural soils every year

=

19.1 million
urban tree seedlings grown for 10 years

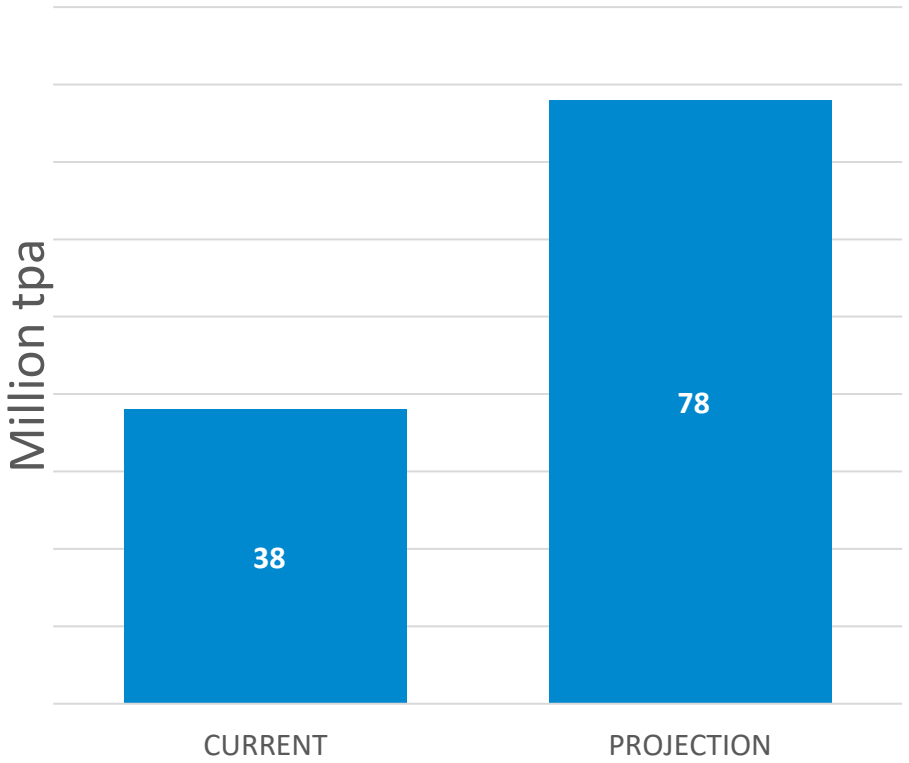
Municipal Biowaste – RECYCLING POTENTIAL



EU TARGET TO RECYCLE 65% MSW BY 2035

17% to 35% needed through bio-waste

Extra 40 M tpa <u>MUNICIPAL BIOWASTE</u> has to be separately collected!



Biowaste – HIGH QUALITY RECYCLING

Quality Assurance is a pre-condition for placing compost- or digestate-based fertilising products on the European Market

25 % Quality Compost

produced in the EU 27, CH, NO; UK

was certified to the ECN-QAS

=

5.3 Million tpa out of 21,7 Millon tpa

kompost & biogas verband

KBVÖ Austria

BGK Germany

VLACO Belgium

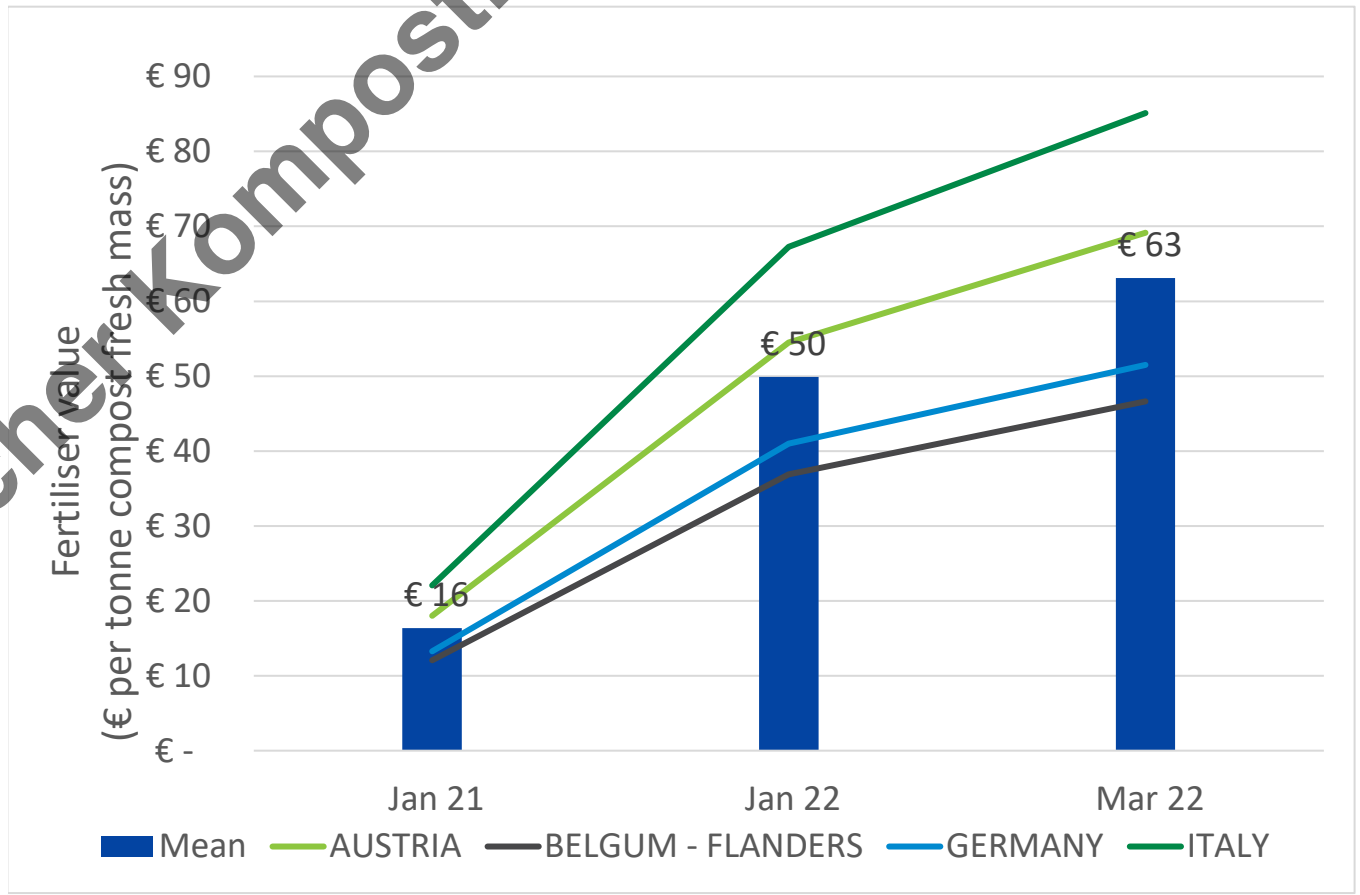
CIC Italy

Compost & Digestate – MARKETS & FERTILISER VALUE

ECN
Compost and Digestate for a Circular Bioeconomy

Markets (%)

Fertiliser Value



ECN Data report 2022 - Sponsors

Thanks to all sponsors of the ECN Data report 2022!

Networking

European membership co-operation

- Since 2017 ECN is official Affiliate Member of the European Environmental Bureau (EEB; participation in EEB's Waste WG and Agri WG)
- Since Q4/2017 ECN is a Liaison Organisation of CEN TC 223 'Soil improvers and Growing media'
- Networking with ACR+, EBA, EUBP, EUROCITIES, FEAD, GME, MWE, ZWE

International membership co-operation

- ISWA, Participation in Working Group Biological Waste Treatment
- ECN is Partner in the 4per1000 initiative
- International Compost Alliance (ICA)

International Compost Alliance Networking

ECN
Compost and Digestate
for a Circular Bioeconomy

INTERNATIONAL
COMPOST
ALLIANCE
HEALTHY SOILS • HEALTHY PLANET

Initiative & Campaign

Promotion of ECN & CIC initiative 'Save Organics in Soil'

- Awareness raising on the **importance of soil organic matter** and its role in **sustainable and productive agriculture**
- **Recycling of carbon from bio-waste** by applying high-quality compost and digestate plays a key role in improving soils and **for keeping soils healthy and productive.**

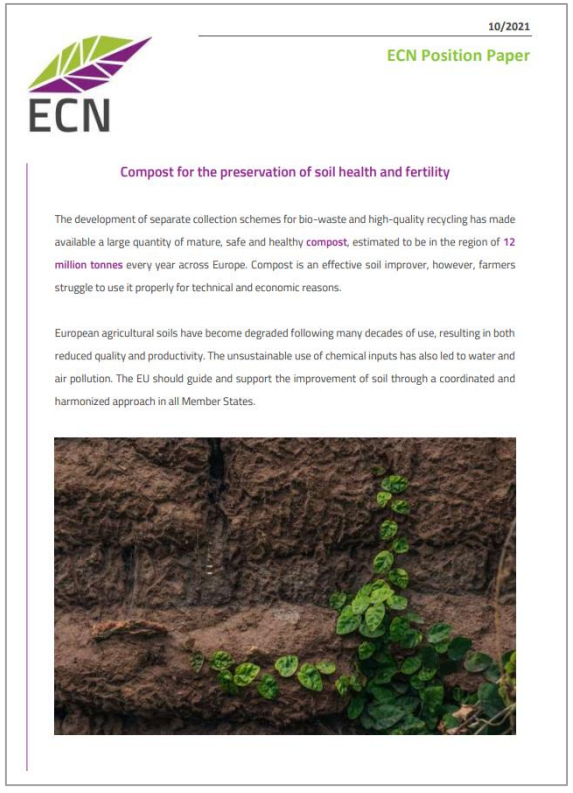
International Compost Awareness Week 2023 (30/04-06/05)

- **Theme: Healthy Soil for Healthy life**
- Poster contest organized by Compost Research & Education foundation

ECN Position Papers and Guidance

Position Paper

Compost for the prevention of soil health and fertility


10/2021

ECN Position Paper

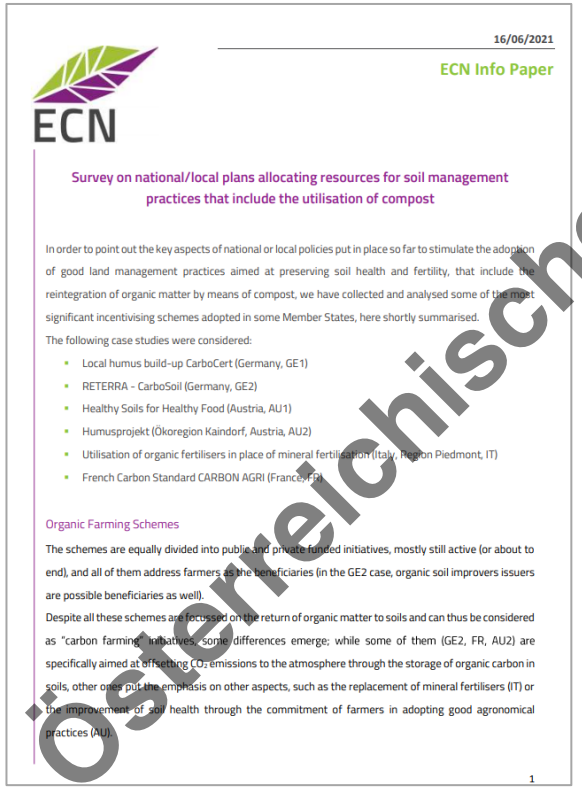
Compost for the preservation of soil health and fertility

The development of separate collection schemes for bio-waste and high-quality recycling has made available a large quantity of mature, safe and healthy compost, estimated to be in the region of 12 million tonnes every year across Europe. Compost is an effective soil improver, however, farmers struggle to use it properly for technical and economic reasons.

European agricultural soils have become degraded following many decades of use, resulting in both reduced quality and productivity. The unsustainable use of chemical inputs has also led to water and air pollution. The EU should guide and support the improvement of soil through a coordinated and harmonized approach in all Member States.

Info Paper

Survey on carbon farming schemes including compost


16/06/2021

ECN Info Paper

Survey on national/local plans allocating resources for soil management practices that include the utilisation of compost

In order to point out the key aspects of national or local policies put in place so far to stimulate the adoption of good land management practices aimed at preserving soil health and fertility, that include the reintegration of organic matter by means of compost, we have collected and analysed some of the most significant incentivising schemes adopted in some Member States, here shortly summarised.

The following case studies were considered:

- Local humus build-up CarboCert (Germany, GE1)
- RETERRA - CarboSoil (Germany, GE2)
- Healthy Soils for Healthy Food (Austria, AU1)
- Humusprojekt (Ökoregion Kaindorf, Austria, AU2)
- Utilisation of organic fertilisers in place of mineral fertilisation (Italy, Region Piedmont, IT)
- French Carbon Standard CARBON AGRI (France, FR)

Organic Farming Schemes

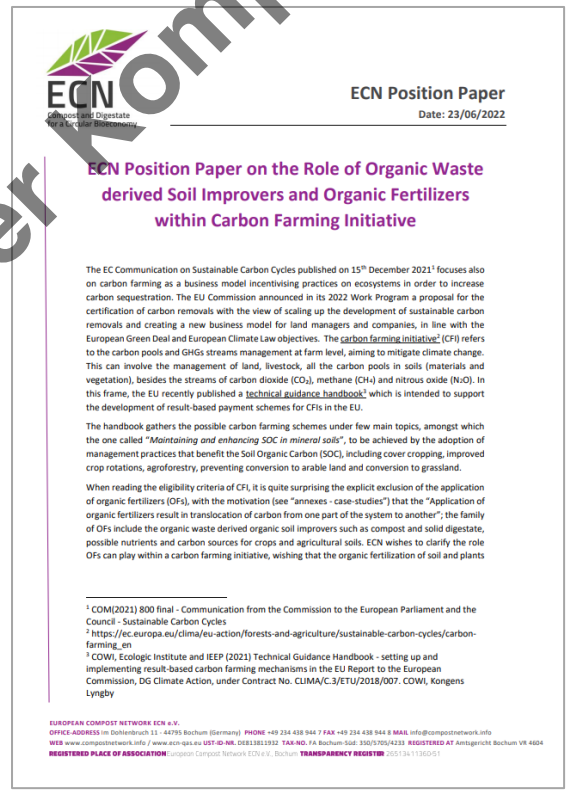
The schemes are equally divided into public and private funded initiatives, mostly still active (or about to end), and all of them address farmers as the beneficiaries (in the GE2 case, organic soil improvers issuers are possible beneficiaries as well).

Despite all these schemes are focussed on the return of organic matter to soils and can thus be considered as "carbon farming" initiatives, some differences emerge; while some of them (GE2, FR, AU2) are specifically aimed at offsetting CO_2 emissions to the atmosphere through the storage of organic carbon in soils, other ones put the emphasis on other aspects, such as the replacement of mineral fertilisers (IT) or the improvement of soil health through the commitment of farmers in adopting good agronomical practices (AU).

1

Position Paper

The role of recycled organic waste products within the Carbon farming Initiative


ECN Position Paper

Date: 23/06/2022

ECN Position Paper on the Role of Organic Waste derived Soil Improvers and Organic Fertilizers within Carbon Farming Initiative

The EC Communication on Sustainable Carbon Cycles published on 15th December 2021[1] focuses also on carbon farming as a business model incentivising practices on ecosystems in order to increase carbon sequestration. The EU Commission announced in its 2022 Work Program a proposal for the certification of carbon removals with the view of scaling up the development of sustainable carbon removals and creating a new business model for land managers and companies, in line with the European Green Deal and European Climate Law objectives. The carbon farming initiative[2] (CFI) refers to the carbon pools and GHGs streams management at farm level, aiming to mitigate climate change. This can involve the management of land, livestock, all the carbon pools in soils (materials and vegetation), besides the streams of carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). In this frame, the EU recently published a technical guidance handbook[3] which is intended to support the development of result-based payment schemes for CFIs in the EU.

The handbook gathers the possible carbon farming schemes under few main topics, amongst which the one called "*Maintaining and enhancing SOC in mineral soils*", to be achieved by the adoption of management practices that benefit the Soil Organic Carbon (SOC), including cover cropping, improved crop rotations, agroforestry, preventing conversion to arable land and conversion to grassland.

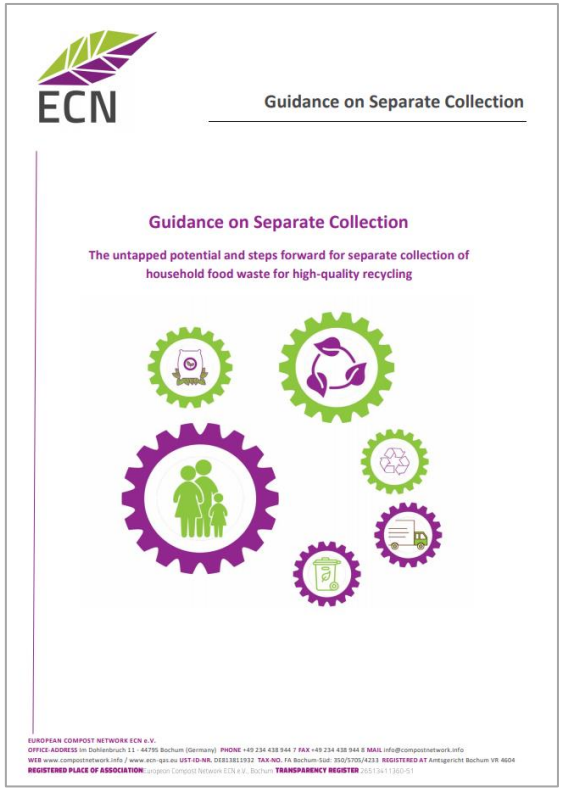
When reading the eligibility criteria of CFI, it is quite surprising the explicit exclusion of the application of organic fertilizers (OFs), with the motivation (see "annexes - case-studies") that the "Application of organic fertilizers result in translocation of carbon from one part of the system to another"; the family of OFs include the organic waste derived organic soil improvers such as compost and solid digestate, possible nutrients and carbon sources for crops and agricultural soils. ECN wishes to clarify the role OFs can play within a carbon farming initiative, wishing that the organic fertilization of soil and plants

[1] COM(2021) 800 final - Communication from the Commission to the European Parliament and the Council - Sustainable Carbon Cycles
[2] https://ec.europa.eu/clima/eu-action/forests-and-agriculture/sustainable-carbon-cycles/carbon-farming_en
[3] COWI, Ecologic Institute and IEEP (2021) Technical Guidance Handbook - setting up and implementing result-based carbon farming mechanisms in the EU Report to the European Commission, DG Climate Action, under Contract No. CLIMA/C.3/ETU/2018/007. COWI, Kongens Lyngby

EUROPEAN COMPOST NETWORK ECN e.V.
OFFICE-ADDRESS Im Dohlenbruch 11 - 44795 Bochum (Germany) PHONE +49 234 438 944 7 FAX +49 234 438 944 8 MAIL info@compostnetwork.info
WEB www.compostnetwork.info / www.ecn-qas.eu UST-ID-NR. DE813811932 TAX-NO. FA Bochum-Süd: 350/5705/4233 REGISTERED AT Amtsgericht Bochum VR 4604
REGISTERED PLACE OF ASSOCIATION European Compost Network ECN e.V., Bochum TRANSPARENCY REGISTER 265134111360-51

Guidance Document

Guidance on separate collection of bio-waste for high-quality recycling


ECN

Guidance on Separate Collection

Guidance on Separate Collection

The untapped potential and steps forward for separate collection of household food waste for high-quality recycling

EUROPEAN COMPOST NETWORK ECN e.V.
OFFICE-ADDRESS Im Dohlenbruch 11 - 44795 Bochum (Germany) PHONE +49 234 438 944 7 FAX +49 234 438 944 8 MAIL info@compostnetwork.info
WEB www.compostnetwork.info / www.ecn-qas.eu UST-ID-NR. DE813811932 TAX-NO. FA Bochum-Süd: 350/5705/4233 REGISTERED AT Amtsgericht Bochum VR 4604
REGISTERED PLACE OF ASSOCIATION European Compost Network ECN e.V., Bochum TRANSPARENCY REGISTER 265134111360-51

Further information

Sign the manifesto
'Save Organics in Soil':
www.saveorganicsinsoil.org

Visit ECN Homepage:
www.compostnetwork.info

https://www.compostnetwork.info/download/ecn-status-report-2022/