

ECN Feedback - European Commission roadmap Farm to Fork Strategy

10 March 2020

ECN warmly recommend the Commission to promote measures that enhance soil health and soil fertility as the cornerstone of the transition towards a sustainable food system.

ECN welcomes the European Commission intention to develop a strategic framework to accelerate the transition towards a sustainable food system.

ECN warmly suggest the Commission to include in the strategy measures that

- Incentivize uptake of quality proved and certified compost in organic soil improvers and growing media; and
- Make regular application of organic soil improvers on the agricultural land more likely, e.g. by rewarding such practices.

Such measures could include a target on minimum soil organic matter content in agricultural land, and on the use of recycled nutrients.

As a matter of fact, soil health, quality and fertility are crucial factors for sustainable food production as well as for carbon sequestration in soil through CO₂ binding in soils.

Compost is the end-product of the composting process of bio-waste and is a valuable soil improver as it contains stable organic carbon that can help (maintain and/or) increase the content of soil organic matter. It also contains a diverse range of micro-organisms that form an essential part of a healthy soil ecosystem. Between 118 and 138 million tonnes of nutrients-rich bio-waste is generated across the EU every year, but less than 40% are currently recycled. This is a huge potential for recovering and reusing sustainable nutrients and organic matter.

ECN runs a European-wide compost quality assurance scheme (ECN-QAS), which monitors the effectiveness of national compost quality assurance schemes. The ECN-QAS is based on the following principles

- A positive list of suitable input materials (like source-separated bio-waste) accepted for composting
- Biological treatment requirements
- Compost quality criteria
- Labelling requirements for the sustainable use of compost

ECN oversees the ECN-QAS in several Member States. The scheme is important to ensure that

• Composting facilities are operated effectively – to ensure that the compost has been hygienised and that sufficient degradation has taken place

• The compost meets defined quality criteria – to ensure that the compost contain acceptable levels of nutrients and that its application to soil safely

Recycling bio-waste into compost harnesses natural biological cycles by converting residues into useful products that can be returned to the soil. Soil is made up of many different components and the organic matter fraction is very important as it helps to

- Provide structure and hold onto water
- Store plant nutrients
- Provide a medium and nutrient source for microbes and invertebrates to live

Soil organic matter sustains soil productivity and fertility to grow nutritious and healthy food but the organic matter content of most of Europe's arable soils is decreasing. This has important implications, as these soils

- Are less productive as nutrients and carbon are not stored as microbiological activity is poor,
- Hold onto less water and dry out quicker in the summer months, and are not as good at absorbing water when it does rain

Sustainable and productive agriculture is therefore dependent upon both adequate levels of soil organic matter and the supply of nutrients.

The composting process is complex and involves the degradation residues into a stable and sanitised product called compost. The process transforms the woody parts of plants into humus, which forms the main component of the soil organic matter fraction. Adding quality proved and certified compost to soil therefore increases a soil organic matter content. Providing that the composting process has been carried out effectively, a fraction of the organic carbon in the bio-waste is converted into stable humic substances (humus). Once applied to soil, this can then remain there for many years. Applying compost to soil continuously can therefore not only improve a soil's functionality, but also sequester carbon.