

Position Paper on Impact Assessment of EU Soil Health Law

The European Biogas Association (EBA) welcomes the European Commission's call for evidence on the impact assessment of its Soil Health Law (SHL). EBA¹ is very supportive of **harmonised European legislation for soil protection and health**. EBA hopes that Member States and the European Parliament will authorise the EU to establish a multilevel governance framework for soil.

According to the EBA's *Statistical Reports 2021*, combined biogas and biomethane production in Europe could cover today 4.6% of the EU gas demand, this is expected to double by 2030 and by 2050 it could cover 30–40% of the gas demand.

Compost and digestate are produced annually in Europe and are projected to grow with the expansion of biomethane production and swift implementation of separate collection of biowaste (BW) from households.

The German Biogas Association³ measured **128 million tonnes of digestate** produced in Europe in 2018. This figure includes a large feedstock base, comprising not only materials from separate collection but also manure and crop residues. The market for recycled fertilisers can grow to 67% of the total fertiliser market by 2050⁴.

Organic fertilisers and soil improvers (OF&SI) are very important mineral fertiliser substitutes that provide stable organic carbon which helps to maintain and replenish the content of **soil organic matter (OM)**. This recycled OM delivers a diverse range of micro-organisms that form an essential component of a healthy soil ecosystem.

Soils that are low in OM are less productive, retain less water and store less carbon. Soils with low levels of OM can be improved by regular applications of OF&SI, including compost. On the contrary, OM rich soils improve the N use efficiency, i.e. less N is needed to obtain potential crop yield⁵. Their correct use in agriculture **will reduce** the need for **nutrients** in the first place and the subsequent **losses associated with over application**. Ratios of DOC:TOC are reliable predictors of the stored carbon one year after digestate incorporation and thus could be used as simple quality parameters to denote the C sequestration potential of digestates prior to their use in the field⁶.

EBA welcomes the exploration of measures that can contribute to reduce nutrient losses by at least 50% without deterioration in soil fertility. Such measures should result in the reduction of **mineral** fertiliser use by at least 20% and should not target **organic** fertilisers.

EBA would also suggest an assessment of the impact of targets for **minimum annual concentrations of soil organic carbon (SOC)** in agricultural soil, supported by resources for farmers to carry out such monitoring. Stakeholders need to consider how SOC should be measured because it is difficult to accurately measure it in ways that allow year on year comparison of SOC concentrations. Natural factors cause them to fluctuate as well as other factors in the field.

¹ More than 7,000 stakeholders of the biogas and biomethane value chains from 36 European and foreign countries currently producing 18 bcm and aiming to achieve 35 bcm in 2030,

² EBA Statistical Report (2021) [Link](#)

³ German Biogas Association (2018) [Link](#)

⁴ European Commission (2021) [Link](#)

⁵ Schjøning et al. (2018). [Link](#)

⁶ Reuland et al. (2022) [Link](#)

In the near future, **an EU scheme of carbon-crediting linked to carbon farming** will be required. Carbon stocking has a value not only to reduce pollution but also to climate mitigation. The SHL could contribute to climate objectives and ensure policy coherence. The value of climate actions should be converted via carbon crediting into incentives⁷.

We expect that linking the target to the existing obligation of BW separate collection will generate the following **impacts**:

- Sequestering from 1.32 to 4.7 **Mt CO2e a year**⁸
- Creating 1 **job** per 1380 tonnes of BW in rural areas and 1 job per 4500 tonnes in urban areas⁹
- Increasing the available **water capacity** by 38 cubic meters per hectare in the top 0–30 cm of soil. This is equivalent to 3.8 litres of water over one square meter of soil (in the top 0–30 cm horizon)¹⁰
- Preventing a further 1% reduction in soil organic content will negate the use of a further 7,000 tonnes of **nitrogenous fertilisers**¹¹

⁷ Not doing biogas first but spreading on land 'as is' (e.g. raw manure) results in mineralization of the rapidly degradable OC – turning this in CO2 emissions. So setting up schemes in which residues are passed over biogas before brining to land result in a better overall balance.

⁸ Gilbert et al (2020). [Link](#)

⁹ ECN (2017) [Link](#)

¹⁰ Gilbert et al (2020). [Link](#)

¹¹ Brady et al (2015). [Link](#)