

*The new EU Soil Strategy for 2030 was adopted in 2021 and sets the vision to have all soils in healthy condition by 2050 and to make protection, sustainable use and restoration of soils the norm. It proposes a combination of voluntary and legislative action and announces that the Commission will table a new legislative proposal on soil health by 2023 to help to achieve the vision and objectives of the strategy.*

The Bioenergy Association of Finland appreciates this opportunity to give feedback on the proposed directive Soil Monitoring and Resilience (Soil Monitoring Law). We acknowledge the importance of the directive to support sustainable soil management and long-term health and note that this is fundamental for the Finnish bioeconomy. A functioning soil ecosystem and good physical and chemical characteristics of various soils are a prerequisite for sustainable food production and safety as well as productive and resilient forests rich in their biodiversity and capacity to sequester carbon.

The proposal is likely to support many positive biodiversity functions. Most of them may eventually be realized indirectly as various processes in soils may be improved or restored provided that certain actions and measures will be carried out and areas most in need are targeted. The Bioenergy Association of Finland deems the flexibilities and freedom to choose the biological diversity indicators and their monitoring methods as positive. Soil characteristics and climatic conditions differ significantly inside the EU.

Most soil management actions of the proposal are linked with agricultural practices and prevention or recovery of soil deterioration. Due to the linkage many actions have already been adopted in agricultural policies (CAP, fertilizer regulation etc.), the indicators exist, and monitoring is ongoing. The actions have shown positive environmental impacts. Therefore, our response concentrates more on forest soils and land use aspects from bioenergy production point of view and raises some concerns from this mainly positive proposal.

Currently soil health monitoring and legislation, particularly in forests, are carried out at the Member State level with established competence. Adapted, national soil science and knowledge on the best-possible management practices should be acknowledged in the directive, and finally contribute to its implementation. We welcome flexibility, when the best possible indicators and criteria for defining healthy soils by 2050 are considered. As environmental conditions vary across the EU it can be difficult to find common indicators suitable for all soil types and different parts of the EU. Therefore, the definitions for healthy soils should be adapted accordingly.

Indicators for monitoring a healthy soil must be determined fairly. Indirect impacts on soil and factors that landowners and managers have only limited or no control, like climate change, transboundary air pollution deposition and previous land use history, should be considered with justice. The main objective should be that the soil is and remains healthy. The tools and ways

applied to reach a healthy soil must be flexible. Attempting to prescribe one-size-fits-all policies would be ineffective and lead to serious unintended negative consequences. Different locations and ecosystems, at different times and for different purposes, will require distinct approaches.

The proposal states that the soil is unhealthy, if one of the presented indicators is not within the range. This “one out-all out” principle is not fair and has to be reconsidered, because the indicators are not comparable. Some of them are measured equally throughout the EU, but in some cases (e.g., phosphorus) the levels and measurement vary from country to country making it hard to compare the results of certain indicators. According to the proposal some seldomly measured data would also be needed. Following this strictly would mean a lot of new measurements, many of which can be very expensive, causing additional bureaucracy and costs. We call on flexibility and risk-based, cost-conscious approach in determining the indicators, their measurement, and the levels.

The proposal suggests that measurements are to be carried out every five years. Instead of this frequency 10-year interval would be more appropriate as changes in most soil factors are slow. If the regional differences and Member States variety are not sufficiently considered, it may result in perplexity and resistance. Sustainable agriculture and forest management should not be restricted due to Soil Monitoring Law and its implementation. For example, monitoring soil clay-carbon relation (and its desirable value SOC/Clay >1/13) can be a challenge to measure and reach in all boreal forests simply because of natural soil characteristics and sustainable forest management practices that boost long-term carbon accumulation in forests although may cause some loss of organic carbon in the short-term. Established, beneficially proven agricultural and silvicultural practices should not be restricted in the design and the implementation of the directive. Environmental regulation should follow subsidiarity principle and be implemented in close cooperation with the landowners and managers.

There are many already existing national data acquiring methods and systems collection of needed soil data, e.g. in Finland National Forest Inventories (NFI) or the soil monitoring network covering the whole agricultural area. These should be fully utilized and further developed for providing the necessary information. New responsibilities for data collection should not fall on individual landowners of enterprises.

The proposal suggests a new “soil certification scheme”. Any new scheme should be voluntary for both member states and landowners. There are numerous forest and agriculture-related EU files in preparation, and the need for an impact assessment is evident. Different files must be carefully analysed and orderly communicated to all the stakeholders before implementation.

The proposal has identified a special feature of Finland, the abundance of organic soils, and the importance of their water level maintenance. However, the acidic soils are not recognized at all and thus there are no criteria for healthy soil in that respect.

Some of the proposed definitions within Article 3 fall short of being clear, accurate, or aligned with established EU legislation and globally recognised terminology. Specifically, the definition of ecosystem services fails to capture the entirety of their contributions to human well-being and societal functions. It only mentions indirect benefits, neglecting the crucial direct contributions such as food, water or wood. Rectifying this shortcoming is essential and fair for a comprehensive idea of ecosystem services and their multifaceted advantages. This would be consistent with the UN Convention on Biological Diversity (1992). The term 'detrimental' introduces a subjective element that may lead to varying interpretations. To ensure legal clarity, the word 'detrimental' should be replaced by 'causing significant (or irreversible) damage'.