

Questions and Answers on the Soil Monitoring Law (SML)

What is the Soil Monitoring Law about?

The Soil Monitoring Law will be the first-ever EU piece of legislation on soils. The Directive aims to establish a harmonised soil monitoring framework across the EU that allows for comparability and exchange of soil health data and assesses the overall state of soils. In addition, the Directive sets obligations on Member States to encourage landowners and managers to improve soil health and resilience, for example by ensuring access to advice, promoting research and innovation and mapping available funding while granting Member States full flexibility in tools and approaches they can use. The SML also includes a set of voluntary principles that Member States can apply to reduce the pressure of soil sealing and removal. Finally, the SML tackles the issue of contaminated sites by requiring Member States to identify, assess and manage those sites to ensure they do not pose a risk to human health or the environment.

Where does the Soil Monitoring Law stand in the legislative process?

The Soil Monitoring Law was [proposed](#) by the European Commission in July 2023. The European Parliament adopted its [position](#) in April 2024 and the Council adopted its [General Approach](#) in June 2024. Months of intense negotiations resulted in many compromises that significantly weakened the law in many aspects. However, on 10 April 2025, EU institutions succeeded in reaching a [provisional agreement](#) on the Soil Monitoring Law. As a standard next step of the ordinary legislative procedure, co-legislators must now formally endorse the provisional agreement before the law can enter into force.

How does the agreement on the Soil Monitoring Law differ from the initial Commission proposal?

Throughout the legislative process, the Soil Monitoring Law has been significantly watered down. One of the main concessions concerns Article 10 on sustainable soil management. The European Commission had originally proposed that Member States be required to define and implement sustainable soil management practices based on a common set of principles. However, **this part of the law has been entirely removed in the provisional agreement**. Article 10 now consists of measures to ensure better access for advice for landowners and managers, raise awareness on the benefits of practices that improve soil health and promote research and innovation.

Also, measures to reduce **land take have been made voluntary and the scope has been reduced to soil sealing and removal only**, with a recital now clarifying that Article 11 cannot prevent the permitting of any activities.

In addition, several key **deadlines have been extended** compared to the Commission's proposal. For example, Member States now have three instead of two years to transpose the law. The agreement also includes **many more flexibilities for Member States**. Notably, Member States are allowed to set most of the thresholds for the indicators to assess soil health themselves.

Is the Soil Monitoring Law needed and should the EU take action (= principle of subsidiarity)?

In its subsidiarity check for the law, the Commission has [concluded](#) that the SML complies with the principle of subsidiarity as (1) the objectives of the SML cannot be sufficiently achieved by the Member States and as (2) EU action brings an added value.

The [impact assessment](#) for this law states that **national actions alone have failed to reverse soil degradation**. In addition, in 2021, 14 environment and agriculture ministers acknowledged in a letter that Member States had tried to reverse these problems at the national level, but as these are global issues, they can only be solved together. In the same year, the [European Parliament](#) also identified national measures as insufficient on their own and called for an EU-wide legal framework for soil protection. The [EEA](#) also highlighted that the lack of a comprehensive and coherent soil and land policy framework is a key gap that reduces the effectiveness of existing incentives and measures.

While soils and their characteristics are rooted in local conditions, **they are undeniably a [cross-border issue](#)**. The drivers and impacts of soil degradation extend beyond national borders, and healthy soils, whether in forests, agricultural fields or urban spaces, are crucial for addressing global challenges like climate change. Soils are key elements of the nutrient, carbon and water cycles – systems that are not limited by geographical or political borders. Insufficient measures in one country can undermine climate change mitigation and adaptation efforts in others. Poor soil management can increase flood risks across borders and an entire region's vulnerability to extreme weather events. Nutrient runoff can also lead to cross-border eutrophication of water bodies and seas, while contaminants in soil leach into ground, surface, marine and coastal waters, which can all be transboundary.

For the reasons listed above, it becomes clear that soil degradation is a cross-border problem which requires cross-border solutions. The ongoing trend of soil deterioration and the fact that [over 60%](#) of soils in the EU only are undergoing degradation processes show that national actions have failed to solve the problem and that a European Soil Law is long overdue.

Is existing legislation sufficient and will the Soil Monitoring Law lead to additional burden?

There is a clear legal gap on soils both in EU and national legislation, which the Soil Monitoring Law aims to fill. The [legal gap at EU level](#) regards notably the lack of definitions, indicators and criteria to harmoniously define "soil health" and the lack of obligation to monitor all aspects of soil health. Soils benefit only marginally from existing EU legislation, as they protect other environmental resources and therefore address other environmental threats.

National efforts are also insufficient to tackle the problem as there are [huge differences in the extent and scope of national soil legislation](#). Some Member States have implemented soil protection legislation, while others lack national measures. In a large majority of Member States, the existing frameworks don't sufficiently address soil salinisation, excess of nutrients in soil, soil acidification and water retention capacity. Only a very limited number of Member States have established explicit and overarching policies for soil protection. In most cases, the legal instruments in place are fragmented and fail to address the full picture of soil protection, focussing, for example, only on specific land uses.

The significant differences in existing national regulation result in **distortions within the internal market, unfair competition among businesses and an uneven playing field**.

Do stakeholders oppose this law?

No, quite the opposite. Throughout the processes, there has been very broad stakeholder support for this law across many different sectors. In the call for evidence in 2022, [79%](#) of replies supported or strongly supported an EU Soil Law. In 2023, [more than 250 scientists, businesses, farmers and civil society organisations](#) have called for an ambitious EU law on soils. In addition, the [business coalition OP2B and FoodDrinkEurope, McCain, Nestlé, Pepsico, Pernod Ricard, Unilever and others](#) called on the Council to take a strong position on the Soil Monitoring Law in 2024. In a [Reuters article](#), Moët Hennessy states that “EU food companies need a strong law for soil health”. In addition, [water service providers, Biogas, Biochar and Compost Industry as well as the international network of cities and regions ACR+](#) have also been calling for an ambitious legislative framework on soils as this would be key to address major soil threats across the EU.

With broad support from diverse stakeholders, across many different sectors and throughout the process, it is essential to ensure that misinformation spread by a small minority, for example on supposed management requirements or costs for farmers (which is false, see more answers below) does not undermine the outcome of an extensive process of negotiation, stakeholder consultation and carefully crafted compromise.

Does the Soil Monitoring Law set legally binding targets or sub-targets?

No, the Soil Monitoring Law **sets no legally binding targets**, neither for 2050 nor for any intermediate steps. It only includes a non-binding objective, which is to achieve healthy soils in the EU by 2050. However, as this objective is non-binding, it serves more as a vision and a general direction, not as a legal requirement. The same objective is also included in the already adopted [Soil Strategy for 2030](#).

Does the law allow for flexibility and for existing national monitoring systems?

During the interinstitutional negotiations, the Council ensured that the law included as much flexibility for Member States as possible. Unfortunately, this came at the expense of better harmonisation of soil health monitoring and assessment. For example, Member States can define themselves the level at which the monitoring framework will be established (Art.6(1)). In addition, soil descriptors and associated methodologies were revisited to further reflect existing practices and requirements (Annex I and II). Member States can also use existing data and monitoring networks (Art. 8(2a)) and derogate from a monitoring cycle for soil descriptors expected to not evolve significantly (Art.8(5)). In addition, the law leaves it to Member States to define the conditions for soil to be considered healthy (Art.7(4) and (4a)).

Does the Soil Monitoring Law put obligations on farmers? Will it create additional bureaucracy or specific management requirements for farmers?

Contrary to misinformation, the Soil Monitoring Law puts no obligations on farmers. All obligations in the law refer only to Member States and their public authorities. Article 10, which previously referred to “sustainable soil management practice”, has now been refocused on requiring Member States to support landowners and managers in improving soil health and soil resilience, by encouraging, facilitating and supporting them through access to advice, promoting awareness of the benefits of sustainable practices, promoting research and innovation and mapping available funding.

Since the law imposes no obligations on farmers, it will not create any bureaucracy or soil management requirements for them.

Will farmers have to carry out monitoring themselves or pay for monitoring on their land?

No, the monitoring activities fall under the full responsibility of the Member States and their public authorities. **The Soil Monitoring Law requires no monitoring whatsoever from landowners and managers themselves and therefore also doesn't require them to carry any of the costs.** This is also explicitly clarified in a new Recital that states that soil health monitoring under this Directive should not create any financial burden on landowners and land managers (Recital 29b).

Can specific soil health assessments be traced back to private land parcels?

No, the SML includes specific provisions that **prevent soil health data collected in accordance with Article 6 to be traced back to specific land parcels.** Article 6 clearly states that the soil health data portal will provide access only to data aggregated at the soil unit level (and only a more detailed level if the Member States wishes). Article 6 further clarifies that access to data will be granted only in compliance with relevant Union legislation. In this regard, Article 19 specifies that confidential data must be protected in accordance with Regulation (EC) No 223/2009¹. Article 6 also clarifies that the digital soil health data portal should not provide access to data and information which would adversely affect public security or national defence.

Will the Soil Monitoring Law impact food security?

The Soil Monitoring Law imposes no soil management requirements, so its impact on agricultural practices and output will be very limited. However, **food availability is closely linked to soil health**, especially considering that 95% of our food grows on soils. Unhealthy soils already have significant negative impacts on food production. According to the [European Commission](#), EU agriculture loses around 0.43% of crop productivity annually from water erosion alone. Soil degradation also results in the loss of nearly 3 million tonnes of wheat and 0.6 million tonnes of maize per year. The use of heavy agricultural equipment on wet soils can cause soil compaction and reduce long-term crop yields by 2.5-15%. In addition, between 1990 and 2006, soil sealing caused a loss of 0.81% of agricultural production

For this reason, actions to improve soil health have clear benefits for food availability and quality, as well as to broader human health (see link of soil health with [One Health approach](#)). However, it is to be noted that food security also includes other facets such as access to food, use of food and stability of food supply.

¹ Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics and repealing Regulation (EC, Euratom) No 1101/2008 of the European Parliament and of the Council on the transmission of data subject to statistical confidentiality to the Statistical Office of the European Communities, Council Regulation (EC) No 322/97 on Community Statistics, and Council Decision 89/382/EEC, Euratom establishing a Committee on the Statistical Programmes of the European Communities (Text with relevance for the EEA and for Switzerland)

Does the Soil Monitoring Law prevent construction of housing or the permitting of mining or renewable energy projects?

Land take is an important driver of soil degradation across Europe, impacting [4.2%](#) of EU territory. However, the law includes no target or objective regarding the reduction of soil sealing and removal and does not mention the “no net land take” objective. During the negotiations, the scope of Article 11 has been reduced to soil sealing and removal only. The SML merely calls on Member States to “*take into consideration*” a set of principles to reduce soil sealing and soil removal, for example by selecting areas where the loss of ecosystem services would be minimal, in particular on brownfields. Any efforts to reduce soil sealing and removal are voluntary. **The Soil Monitoring Law therefore includes no provisions that directly prevent the construction of infrastructure and housing or the permitting of mining or renewable energy projects.**

In addition, negotiators included a Recital that clearly states that the provisions concerning land take in this Directive “**do not impose new permitting procedures and should not prevent permitting of activities, including for projects of overriding public interest**” (Recital 30e).

Will the implementation of the law be too expensive?

The Commission addressed the cost dimension of the law in its [impact assessment](#), stating that “*the costs associated with the proposed measures are lower than the positive economic impacts*” and that the costs of inaction outweigh the costs of action by a [factor of six](#). The majority of the projected costs of the Commission proposal were associated with the implementation of sustainable soil management practices – an element which has been removed from the provisional agreement. The remaining costs to establish the monitoring network, identifying and remediating contaminated sites and covering administrative burden are relatively minor compared to the substantial benefits of avoiding further soil degradation (for specific numbers please see page 92 of the [impact assessment](#)).

It is also important to recognise that the estimates for soil degradation costs in the EU are still fragmented and incomplete. Figures from SYSEMIQ & Soil Capital suggest costs of [97 billion euros](#) per year for the EU, nearly double the Soil Mission’s estimates of [50 billion euros](#). Many different factors have barely been quantified yet, including the economic impact of soil biodiversity loss as well as costs of water vapour, green water and small water cycles. In addition, as soil ecosystem functions, such as water infiltration and percolation, become more important in the face of increasingly extreme weather patterns, the value of soil health to society rises over time. Therefore, the total costs of soil degradation, including non-monetisable effects, exceed by a large margin even the highest estimates.

Taking all this into account, **the real question is not whether we can afford a modest Soil Monitoring Law, but whether we can, as a society, afford continued destruction of our soils.** The costs of soil degradation are currently primarily borne by [farmers and society at large](#).

What are the economic benefits of soil health?

Soil health brings important economic benefits. A [report](#) from March 2025 states that improved soil biodiversity offers the potential for 14 billion euros in annual economic benefit in Germany alone and that **healthy soil practices across the EU could lead to economic benefits of 120 – 130 billion euros**

annually. Healthy soils are also an important contributor to public health, as crops from healthy soils with high biodiversity have higher nutrient density.

In addition, a [2023 report](#) analysing the economic potential of regenerative agriculture in Germany, states that no-till practices and minimally disturbing subsoiling can lead to an **increase of revenue** of up to 97 euros per hectare, while the implementation of species-rich cover crops can lead to an increase of 52 euros per hectare.

Will the Soil Monitoring Law affect the EU's competitiveness?

With the projected costs of soil degradation of [97 billion euros](#) per year, it is clear that unhealthy soils have a direct impact on the EU's competitiveness. With many economic activities, including agriculture, being more and more impacted by extreme weather events like droughts and floods, healthy and resilient soils are essential to a resilient and sustainable economy.

In June 2023, the **European Central Bank** [stated](#) that “**humanity needs nature to survive, and so do the economy and banks**”. Its assessment showed that 72% of companies and almost 75% of bank loans are exposed to the loss of biodiversity as they are dependent on at least one ecosystem service, such as pollination, clean water or healthy soil.