

HALT AND REVERSE SOIL DEGRADATION IN EUROPE: A PRIORITY FOR THE EUROPEAN GREEN DEAL

In the European Union, arable land extends over 110 million hectares, it is the basis for the supply of food and raw materials to the entire population and the economy: healthy **cultivated soils** are a strategic natural resource for food safety and security.

Forest soils cover 150 million hectares: many ecosystem services depend on these soils, from the supply of lumber and firewoods to the cycles of water, carbon and mineral nutrients. The **intact soils** covered by forests, together with those of pastures, peatlands, prairies, wetlands, moors, grasslands, preserve the largest continental stock of organic carbon and host the most significant repository of terrestrial biodiversity in the entire European continent.

Healthy and fertile soils, as a whole, are a **limited, irreplaceable and non-renewable environmental heritage**, of which any degradation represents a loss for present and future generations.

Soils in Europe are damaged or threatened by many improper and excessive uses related to:

- land cover by urban areas and infrastructures, causing habitat fragmentation and soil sealing: over 15 million hectares are sealed off by buildings, roads, quarries, landfills.
- Industrial pollution, leaks or spills that have occurred in last decades, which have contaminated hundreds of thousands of sites, many of which lack characterization and remediation.
- Use of chemicals in agriculture and animal husbandry, generating widespread contamination, damaging soil biodiversity and causing risks to human health and ecosystems.
- Transformation of intact soils and drainage of peatlands and wetlands, with serious losses of organic matter severely affecting soil carbon stocks and biodiversity, and erosion of mineral soils
- Unsustainable land management practices in intensive agriculture, such as the use of heavy machinery, over-tillage, monocultures, the export of crop residues, and soil left bare for long periods, leading to compaction, erosion, loss of organic matter and soil biodiversity.
- Unsustainable livestock density and excessive application of fertilizers in intensive agriculture, causing greenhouse gas emissions, acidification and eutrophication of soil and water.

Although land degradation has different regional features, **Europe as a whole, in every Member State, is not developing adequate efforts** to address the global challenge of halting soil and land degradation and **is not on track** for compliance with the UN 2030 Agenda targets. Overall, a quarter of European soils are exposed to severe degradation and desertification risks: an alarming data signaled by the environmental agencies, but so far unaddressed.

Moreover, Europe extends its ecological footprint on the soils of other continents, causing the loss of many millions of hectares of forest land, transformed into intensive cultivation, for EU imports of feed, meat, biofuels and raw materials, and pollution of large areas from which minerals and hydrocarbons are extracted. The European economy and consumption in fact **outsources soil degradation**, and this is no longer tolerable.

A large part of the EU27 budget is devoted to policies which directly affect soils, such as the Common Agricultural Policy. Therefore, the EU institutions share a strong responsibility for the degradation of European soils and, consequently, the duty to commit to stop it, supporting the regeneration of soils and the achievement of their good ecological status.

Protecting intact soils, halting and reversing the degradation of soils affected by urbanization, contamination and intensive agriculture are challenges for the entire European community, to

share with all member States, regions and local authorities. These should become central priorities for the European Green Deal, in line with the goals of the 2030 sustainability Agenda of the United Nations.

We, therefore,

welcome the upcoming Thematic Strategy for Healthy Soils, and we expect it to be effective in addressing the threats to soil and to promote its regeneration, upholding a change in European policies and programs affecting soils, aligned with the target on land degradation neutrality.

demand the establishment of mandatory objectives on conservation of intact soils and improvement of the ecological status of cultivated soils, identified on the basis of common definitions, monitored by a soil data platform implemented in cooperation between European and national agencies and research centers.

call for the implementation of European knowledge programs, including providing information to citizens, raising awareness towards policy makers, and delivering permanent training for professionals, land planners and farmers, focused on the ecological significance of soil, its quality and health, the related provision of ecosystem services and the sharing of good practices.

urge the European institutions to fully commit to the soil-related targets of the Green Deal strategies: reduce the application of fertilisers and chemicals in agriculture and animal husbandry in order to meet the limits of the environmental impact and load capacity, increase the land covered by organic farming and natural landscapes in rural areas, promote the agroecological transition of EU agriculture, reclaim and regenerate the soils of degraded sites.

demand the updating of the objective ‘zero net land take by 2050’, including a binding timeline for intermediate steps and targets for reuse of urban areas and regeneration of urban permeable and vegetated surfaces.

demand strong efforts to counteracting the spill-over of land degradation induced by the European import of agricultural, forest and mining raw materials from third countries, in particular we ask a strategy to bring animal husbandry within the sustainability boundaries of European continent, in order to avoid the massive import of feeds.

demand a roadmap towards a comprehensive legal framework on soil protection, in analogy with what is already in place for water and air quality, introducing common rules capable of influencing national policies and the behaviors of citizens and businesses, to aim to guarantee, as a whole, biodiversity, soil carbon sinks, food security, citizens' health and the quality and safety of European food production.

