



EU Soil Strategy for 2030

Reaping the benefits of healthy soils for people, food, nature and climate

28 January 2022
CCIM Stakeholder Dialogue

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| EU Biodiversity Strategy to 2030

Commitments regarding soil:

- It is essential to step up efforts to protect **soil fertility**, reduce **soil erosion** and increase **soil organic matter**.
- This should be done by adopting **sustainable soil management practices**, including as part of the CAP.
- Significant progress is also needed on **identifying contaminated sites, restoring degraded soils, defining the conditions for their good ecological status, introducing restoration objectives, and improving the monitoring of soil quality**.
- To address these issues in a comprehensive way and help to fulfil EU and international commitments on land-degradation neutrality, the Commission will **update the EU Soil Thematic Strategy** in 2021.



The process

- Various stakeholder **conferences** in the past few years
- **EU soil expert group**: regular discussions on soil policy since 2015
 - Several questionnaires and MS input with most urgent actions for soil policy
- [Roadmap consultation](#): 4 weeks, closed on 10 December 2020, with 228 replies
- [Open public consultation](#): 12 weeks, closed on 27 April 2021 with 1673 replies
- **Adoption** on 17 November 2021
- Exchange of views on 6 December 2021 in the ENVI Committee of the **European Parliament** and on 20 December 2021 in the **Environment Council**



| The package

- **Communication** that provides a framework for the protection, restoration and sustainable use of soils with a long-term vision, a set of existing objectives and actions to achieve them. The Strategy answers to the request of the Parliament to propose a legal framework for soil.
- **Staff working document** containing the essence of the knowledge base underpinning the Soil Strategy, the history of the file, the positions of the other institutions and the summary of the stakeholder consultations.



Links with other policies



Policy context

- Soil degradation continues and aggravates in the EU, and has transboundary impacts
 - Common solutions necessary
- Soil recognized as a necessary solution for the climate and biodiversity crisis
 - Factual and political momentum
- Soil degradation costs more than 50 billion EUR per year in the EU. Costs of no action amount globally between EUR 5.4 and 8.6 trillion/year. Benefits of soil restoration outweigh costs 6 times.
 - Sense of urgency



Challenges: what do we need tackle?

60-70%
of soils are not
healthy

13%
of EU soils
suffer from high
erosion with
1.25 bEUR
yearly losses in
crop yield

78%
of land take
takes place in
agricultural
land

200 – 800 k
deaths globally
per year due to
soil
contamination

**7.4 million
tonnes**
of CO₂
lost yearly by
mineral soils
under cropland

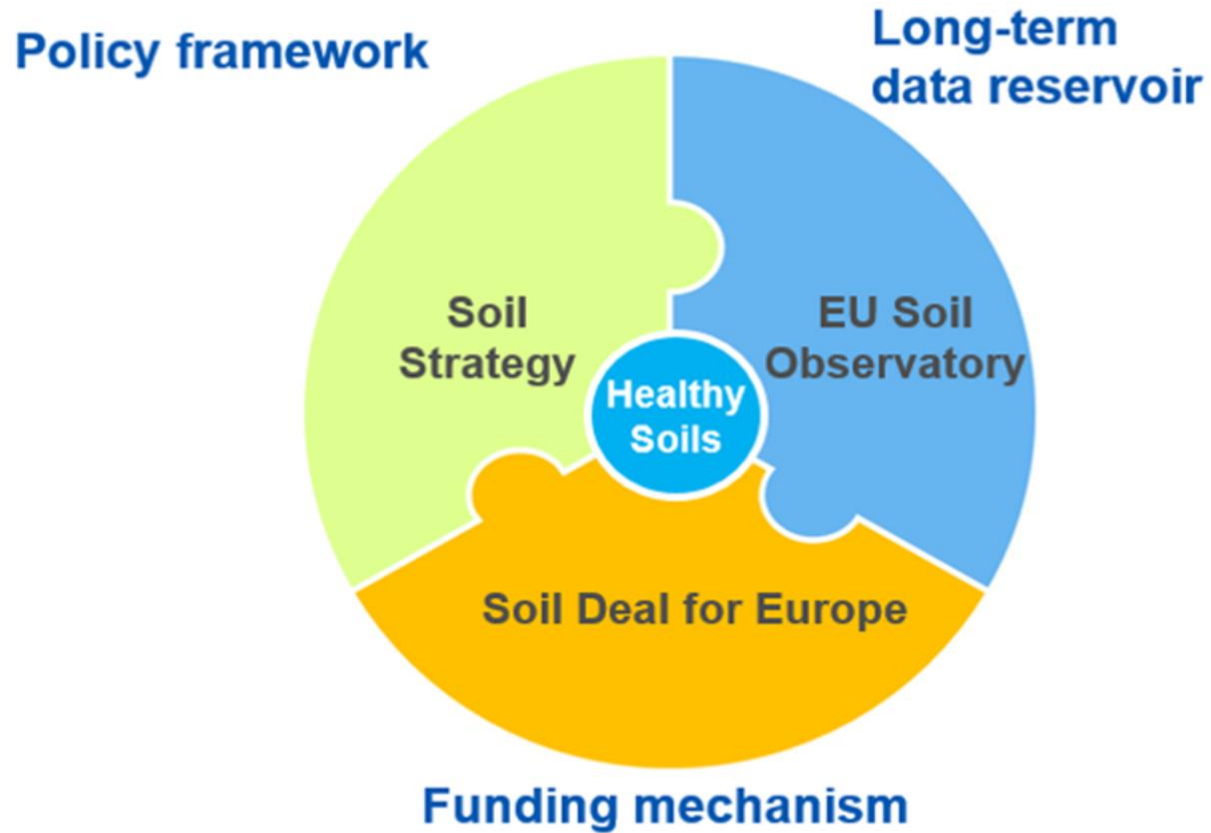
390.000
contaminated
sites to be
remediated

25%
of land in Southern,
central and Eastern
Europe at high or
very high risk of
desertification

Erosion, compaction, organic matter decline, pollution, loss of soil biodiversity, salinization, desertification, land take and sealing



Science-policy framework





The vision for soil

- By **2050**, all EU soil ecosystems are in **healthy** condition and are thus more **resilient**, which will require very **decisive changes** in this decade.
- By then, **protection, sustainable use and restoration of soil** has become the norm.
- Healthy soils contribute as key **solution to our big challenges** to achieve climate neutrality, a clean and circular economy, revert biodiversity loss, safeguard human health, halt desertification and revert land degradation.

Existing objectives (medium term)

- By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a **land degradation-neutral world** (Sustainable Development Goal 15.3).
- By 2030, significant areas of degraded and **carbon-rich ecosystems** are restored.
- By 2030, achieve an **EU greenhouse gas net removal** of 310 million tonnes CO2 equivalent for the land use, land use change and forestry (**LULUCF**) sector.
- By 2027, reach good ecological status and good chemical status in **surface waters** and good chemical status and good quantitative status in **groundwater**.
- By 2030, reduce **nutrient losses** by at least 50%, the overall **use and risk of chemical pesticides** by 50% and the **use of more hazardous pesticides** by 50%.
- By 2030, significant progress has been made in the **remediation of contaminated sites**.



| Existing objectives (long term)

- By 2050, reach **no net land take**.
- By 2050, **soil pollution** should be reduced to levels no longer considered harmful to human health and natural ecosystems and respect the boundaries our planet can cope with, thus creating a toxic-free environment.
- By 2050, achieving a **climate-neutral Europe**, and as the first step by 2035 to achieve land-based climate neutrality in the EU.
- By 2050, achieve a **climate-resilient** society, fully adapted to the unavoidable impacts of climate change.





What is a healthy soil?

Soils are healthy when they are in **good chemical, biological and physical condition**, and thus able to continuously provide as many of the following **ecosystem services** as possible:

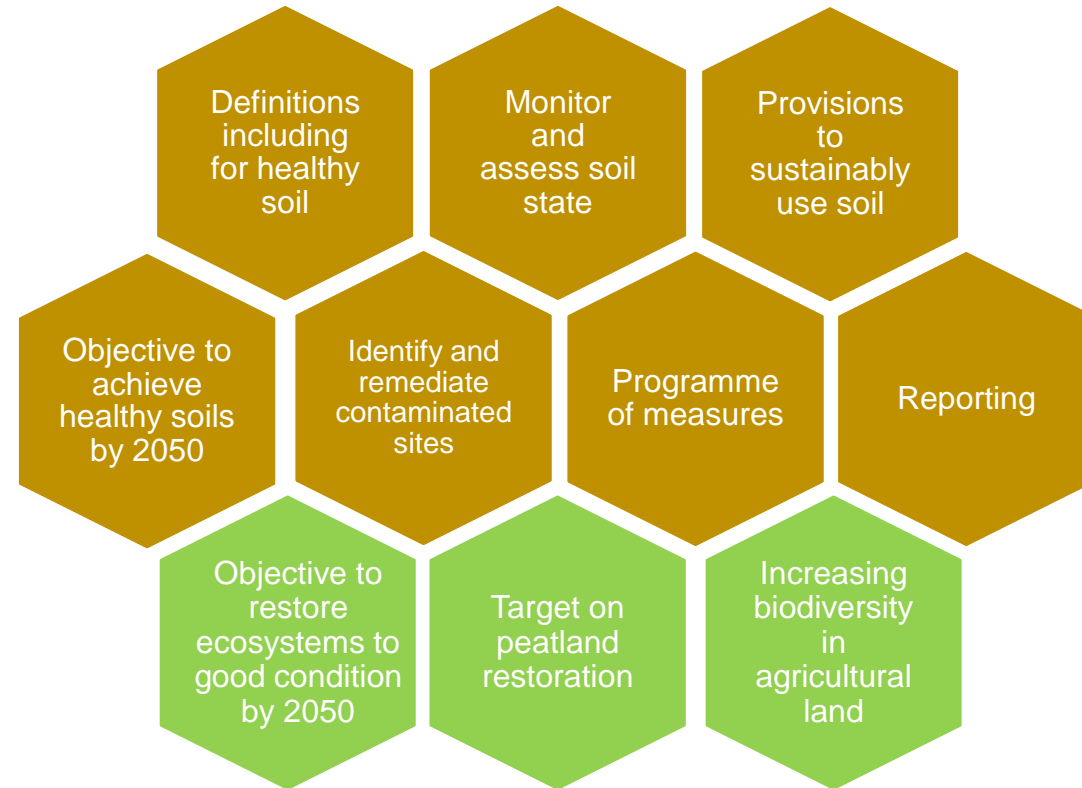
- provide food and biomass production, including in agriculture and forestry;
- absorb, store and filter water and transform nutrients and substances, thus protecting groundwater bodies;
- provide the basis for life and biodiversity, including habitats, species and genes;
- act as a carbon reservoir;
- provide a physical platform and cultural services for humans and their activities;
- act as a source of raw materials;
- constitute an archive of geological, geomorphological and archaeological heritage.

Solutions

- A basket of measures and actions:
 - Combination of voluntary and legally binding measures
 - At local, regional, national, EU and global level
- The concept of healthy soils: to be developed with MS and stakeholders
- Soil monitoring
- Sustainable soil management
- Restoration of degraded soils



Soil health law



Nature restoration law

| Key actions

- **Soil health for climate change mitigation and adaptation**



- Assess the **state of peatlands** in the Global Peatlands initiative
- Join the global **4 per 1000 initiative**
- Present **carbon farming initiative** (2021) and proposal on **carbon removal certification** (2022)

- **Soil health and the circular economy**



- Benchmark streams of **excavated soils** in the EU (2023)
- Promote the **land take hierarchy** and ask MS to **set targets** for 2030
- Provide guidance and exchange of practices to **reduce sealing** (2024)
- Close the nutrient and carbon circle by **safely recycling biowaste**

- **Soil biodiversity for human, animal and plant health**

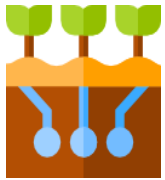


- Assess **soil biodiversity, antimicrobial resistance** (2022) and **invasive alien species**
- Put soil biodiversity on the **international agenda** (e.g. CBD COP 15, GSP)



| Key actions

- **Healthy soils for clean water**



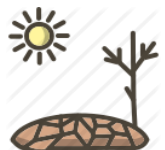
- Improve **soil-sediment-water nexus**
- Guidance on sustainable management of **sediment**
- Better integrate soil and land use management in the **River Basin Management Plans**

- **Making Sustainable Soil Management (SSM) the new normal**



- **Set of SSM practices** and criteria to phase out unsustainable practices
- Launch together with MS the **Test Your Soil For Free initiative**
- Promote **sustainable soil management through the CAP** and build a network of practitioners

- **Prevent desertification**



- Develop a common **methodology to assess desertification and land degradation** and report regularly
- Propose to declare the **EU as affected party under the UNCCD**
- Continue to support development projects **outside the EU**



| Key actions

• Prevent pollution



- Improve the **risk assessment of chemicals on soil quality** and of soil contaminants on human health and the environment
- **Restrict microplastics** (2022) and **PFAS** under the REACH Regulation, and develop a policy framework on bio-based, biodegradable and **compostable plastics** (2022)
- Revise the **SUP Directive**, evaluate the **Sewage Sludge Directive** (2022) and review the **Fertilising Products Regulation** (2026)

• Restore degraded soil and remediate contaminated sites



- Facilitate an exchange between MS on **risk assessment methodologies**
- Develop an **EU priority list for soil contaminants** (2024)
- Revise the **Industrial Emissions Directive** (2022) and evaluate the **Environmental Liability Directive** (2023)



| Key actions

- Improve digital knowledge, monitoring and research on soil



- Implement the **EU Soil Observatory**, the **Land Information System for Europe** and the **Soil Mission**

- Enable the transition to healthy soil

- With private finance and EU funding



- Publish a **guide** with an overview of EU funding opportunities for healthy soils (2022)
- Foster investments towards sustainable soil management through the **EU Taxonomy Regulation**

- Through soil literacy and societal engagement



- Launch a **soil literacy initiative**
- Exchange and **share best practices** in communication and engagement on soil
- Use the European common reference framework of **sustainability competences**



Thank you! Questions?

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