



# Proposal for a Directive on Soil Monitoring and Resilience (Soil Monitoring Law)

DG Environment  
D1 Land Use & Management

# Why do we need to act?

**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 CO<sub>2</sub>  
lost yearly by  
mineral soils  
under cropland

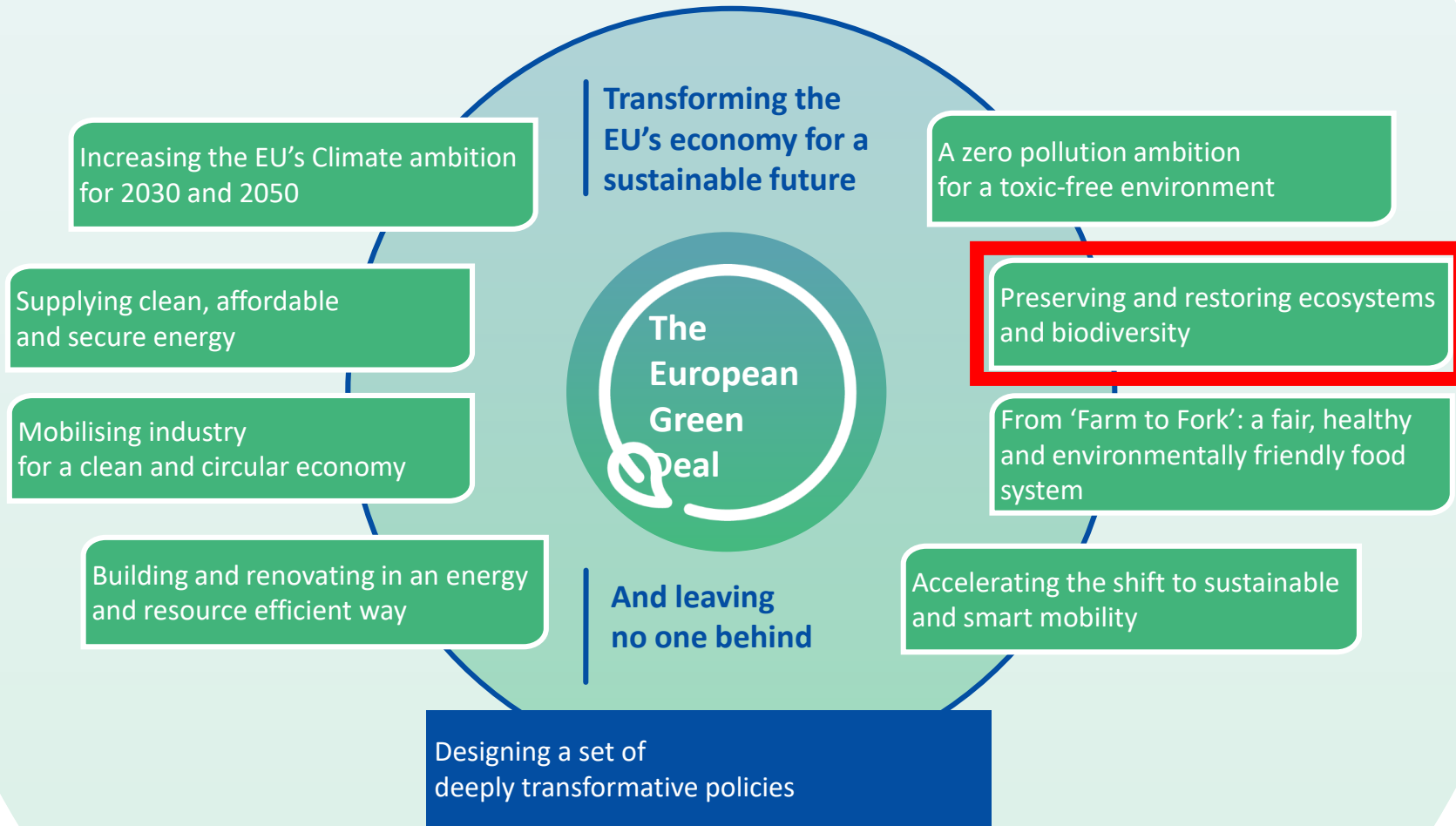
**390.000**  
contaminated  
sites to be  
remediated

**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, acidification, salinization, excess nutrients, desertification, land take and sealing



# European Green Deal (°11/12/2019)



The EU as a global leader

A European Climate Pact

EU Biodiversity Strategy (°20/05/2020)



EU Soil Strategy (°17/11/2021)

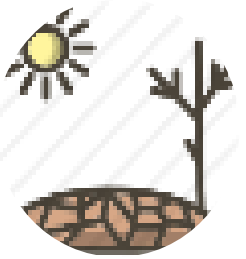


Proposal Soil Monitoring Law (°05/07/2023)

# Healthy soils as key contribution to 4 EGD objectives



Healthy soils for achieving the Union's overarching objectives concerning **climate change mitigation and adaptation** and **biodiversity**



Healthy soils for preventing and mitigating the impacts of **natural disasters** and increasing the **drought resilience**



Healthy soils for increasing/ensuring the EU's **long term capacity** to produce **sufficient, safe and nutritious food**



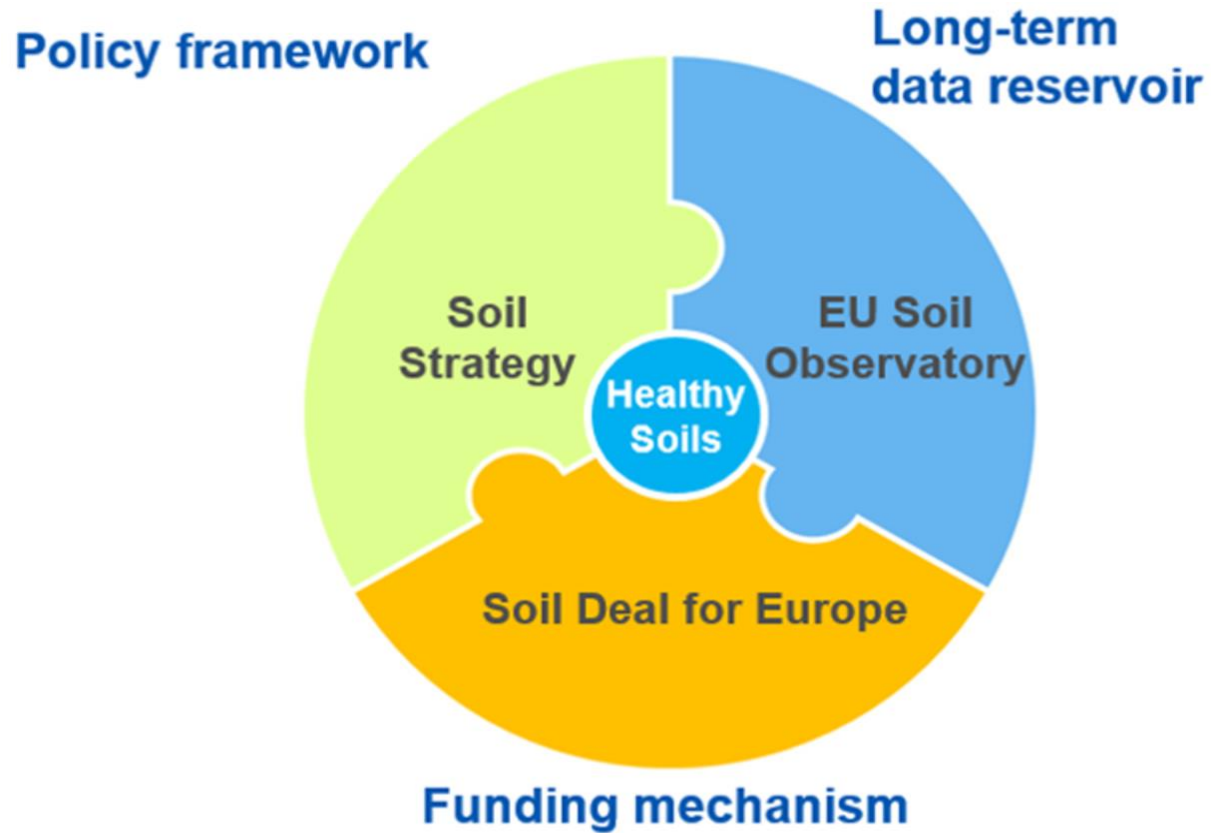
Healthy soils for protecting the **health** of EU citizens



# The commitment in the EU Soil Strategy

- 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 are essential to achieve **climate neutrality**, a clean and **circular economy**, revert **biodiversity loss**, safeguard **human health**, halt **desertification** and revert **land degradation**.
- Legislative proposal by 2023

# Science-policy framework





# European Parliament resolution on soil protection



**ENVI Committee Press**  @EP\_Environment · Apr 28



#EPlenary adopts @EP\_Environment resolution with 605  55  41   
calling on the @EU\_Commission to design an EU-wide common legal framework for the protection & sustainable use of soil

Press release 



MEPs call for EU common legal framework for the ...  
Parliament calls on the Commission to design an EU-wide common legal framework for the protection ...  
[europarl.europa.eu](https://europarl.europa.eu)

# Process

EU Soil Strategy: 17/11/2021

Call for evidence: 16/02/2022 – 16/03/2022 (189 replies)

Public consultation: 01/08/2022 – 24/10/2022 (5.782 replies)

Other consultation activities:

- EU soil expert group meetings: old & new composition
- Interviews
- Targeted questionnaire

Regulatory scrutiny board opinions: 17/02/2023 & 28/04/2023

Publication of the impact assessment and adoption of the proposal:  
05/07/2023





***“ Today, we are filling a major legal gap to bring soil under our legal acquis. This will become the first EU law on soil. Our ultimate objective is to achieve healthy soils by 2050. “***



**SUSTAINABLE USE OF  
NATURAL RESOURCES**



European Commission  
Commission européenne



Commission européenne  
European Commission





## Scope of the proposal

- Directive allows flexible and proportionate intervention
- All soils in the territory of Member States
- Staged approach
- Building on existing policies

# Soil Monitoring Law

Directive on soil monitoring and resilience

## 01

### Objectives

Healthy soils  
by 2050



## 02

### Definitions

Including criteria for  
healthy soil



## 03

### Monitoring & assessment

Descriptors, measurements,  
methodologies



## 04

### Services & support

Certification and data support



## 05

### Sustainable soil management

Principles and land  
take mitigation



## 06

### Contaminated sites

Identification, investigation, risk  
assessment, management,  
registration



## 07

### Reporting

Informing the public  
and evaluation





# Objectives

- Solid and coherent soil monitoring framework
- Healthy soils by 2050
- Providing ecosystem services
- Environment, social and economic needs
- Climate change, biodiversity, resilience against natural disasters, food security, human health



# Monitoring & assessment

- Soil districts & competent authorities
- Soil health descriptors and criteria
- Methodologies for sample survey and analysis of descriptors
- Regular monitoring and assessment



# Definitions

- Healthy soils: several soil descriptors with or without criteria
- One out all out principle
- Land take
- Specific terminology defined in article 3 and throughout the legal text



# Services and support

- Land Use/Cover Area frame Survey (LUCAS)
- Remote sensing through Copernicus
- Digital soil health data portal
- Voluntary soil health certification



# Sustainable soil management

- Basic principles for:
  - Sustainable soil management practices
  - Regeneration practices
- Synergies with other EU plans and programmes
- Public participation
- Advice, training, capacity building, awareness
- Land take mitigation principles





# Contaminated sites

- Risk-based approach
- Identification and investigation of potentially contaminated sites
- Risk assessment of contaminated sites
- Risk reduction measures for sites with unacceptable risks
- Public register and public involvement



# Reporting & final provisions

- Regular electronic reporting
- Transparency
- Evaluation and review
- Committee
- Access to justice and penalties
- Transposition

# Timeline for implementation

Entry into force	+1	+2	+3	+4	+5	+6	+7	+8	+9	+10	+11
Transposition	█	█★									
Establishing soil districts and appoint authorities	█	█★									
Establishing digital soil health data portal (COM and EEA)	█	█★									
Soil health certification scheme	█	█★									
First soil measurements (including LUCAS)	█	█	█	█★							
First soil health assessment					★						
First reporting to the Commission and EEA						★					
Establishing a register (potentially) contaminated sites	█	█	█	█★							
Establishing a risk-based approach	█	█	█	█★							
Identifying potentially contaminated sites	█	█	█	█	█	█	█★				
Investigating potentially contaminated sites	█	█	█	█	█	█	█	█	█	█	...
Managing contaminated sites	█	█	█	█	█	█	█	█	█	█	...
Defining SSM and regeneration practices	█	█	█	█	█	█	█	█	█	█	...
Evaluation of the Directive						★					
Second soil measurements					█	█	█	█	█★		
Second soil health assessment										★	
Second reporting to the Commission and EEA											★

# Thank you! Questions?

Env-soil@ec.europa.eu



© European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

