# **EU Soil Health Law**

Legal principles underpinning the framework





#### **EU Soil Strategy for 2030**

On 17 November 2021, the European Commission adopted the EU Soil Strategy for 2030¹ to replace the former Thematic Strategy for Soil Protection.² Adopted in September 2006, the Soil Thematic Strategy³ included a proposal for a Soil Framework Directive with the objective of defining a common strategy for the protection and sustainable use of soil across the EU.⁴

The new EU Soil Strategy was initially announced in 2020 as a key component of the EU Biodiversity Strategy for 2030.<sup>5</sup> In April 2021, the European Parliament adopted a resolution on soil protection<sup>6</sup>, calling on the Commission to adopt a new EU law protecting European soils. Building on this, the new EU Soil Strategy sets a framework and objectives for the protection, restoration and sustainable use of soil, and creates a common vision for achieving healthy soils in Europe by the year 2050. To support these objectives, the EU Soil Strategy lays out key actions to be taken by 2030, including the development of a new Soil Health Law by 2023.<sup>7</sup>

The new EU Soil Strategy interacts with and complements other EU policies, such as the Farm to Fork Strategy<sup>8</sup> and the EU Biodiversity Strategy, contributing to the wider objectives of the European Green Deal<sup>9</sup> and the UN Sustainable Development Goals (SDGs). However, any soil protection that currently exists at the EU level does not come from a binding, soil-specific framework, but is instead a by-product of other initiatives focused on other environmental issues, goals and targets.<sup>10</sup> Therefore, an EU-wide law recognising the vital importance and multifunctionality of soil, and aiming specifically at protecting and restoring soils across Europe, is critically needed.

<sup>&</sup>lt;sup>1</sup> Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions – <u>EU Soil Strategy for 2030 Reaping the benefits of healthy soils for people, food, nature and climate (2021).</u>

<sup>&</sup>lt;sup>2</sup> European Commission, EU Soil policy, available at: <a href="https://ec.europa.eu/environment/soil/soil\_policy\_en.htm.">https://ec.europa.eu/environment/soil/soil\_policy\_en.htm.</a>

<sup>&</sup>lt;sup>3</sup> Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions – <u>Thematic Strategy for Soil Protection</u> (2006).

<sup>&</sup>lt;sup>4</sup> Recital 8 of the <u>Proposal for a Soil Framework Directive of the European Parliament and of the Council establishing a framework for the protection of soil and amending Directive 2004/35/EC (2006).</u>

<sup>&</sup>lt;sup>5</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and social Committee and the Committee of the Regions – <u>EU Biodiversity Strategy for 2030 Bringing nature back into our lives</u> (2020).

<sup>&</sup>lt;sup>6</sup> European Parliament resolution on soil protection (2021).

<sup>&</sup>lt;sup>7</sup> Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions – <u>EU Soil Strategy for 2030 Reaping the benefits of healthy soils for people, food, nature and climate (2021).</u>

<sup>&</sup>lt;sup>8</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and social Committee and the Committee of the Regions – <u>A Farm to Fork Strategy for a fair, healthy and environmentally friendly food system (2020).</u>

<sup>&</sup>lt;sup>9</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and social Committee and the Committee of the Regions – <u>The European Green Deal</u> (2019).

<sup>&</sup>lt;sup>10</sup> Commission Staff Working Document Accompanying the document Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions EU Soil Strategy for 2030 Reaping the benefits of healthy soils for people, food, nature and climate (2021).



### Why we need a Soil Health Law

Soil is a non-renewable natural resource of common interest to Europe, performing crucial functions for society and ecosystems alike. Soil provides more than just food security; amongst other functions, it plays a vital role in regulating water, carbon and nutrient cycles, and provisioning biological habitats above and below ground. Its broader societal significance is evident where mismanagement causes floods, siltation of waterways and infrastructures, widespread decline of biodiversity, pollution of water and air, and emission of greenhouse gases driving climate change.<sup>11</sup> Healthy soil resources are a clear necessity, and safeguarding their many functions should be a top priority for EU law and policymakers.

European environmental legislation is incomplete without soil policy. Failure to protect soil will hamper any efforts undertaken to achieve the objectives of the European Green Deal, such as climate neutrality, biodiversity restoration, zero pollution, healthy and sustainable food systems and a resilient environment. To achieve this, it is crucial for the EU to develop a soil legislative framework that takes into account the multifunctionality of soil – the continued performance of these essential functions depends on the health and sustainable use of soils in Europe. Thus, the same degree of legal protection accorded to air and water at the EU level must be extended to soil resources.

Following the objectives of the new EU Soil Strategy, the Commission is set to table a proposal for a new legislative initiative on soil health. Such an EU-wide legislative framework on soil is essential to harmonising efforts at soil protection and restoration, addressing threats to soil functionality and health, and tackling the transboundary impact of soil degradation across Europe.

#### The integration principle

EU actions in the field of soil protection should reflect the objectives enshrined in Article 11 of the Treaty of the Functioning of the EU (TFEU), namely the "integration principle". The principle of environmental integration has existed since 1997, first under Article 6 of the EC Treaty and presently under Article 11 TFEU:

Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development.<sup>14</sup>

Article 11 TFEU plays a fundamental role in promoting sustainability, creating a legal duty to integrate environmental considerations across all EU sectors and activities. The principle of environmental integration recognises that environmental policy alone cannot achieve the environmental improvements needed as part of sustainable development<sup>15</sup>; rather, environmental protection should be mainstreamed

<sup>&</sup>lt;sup>11</sup> Berge, H.F.M. ten, Schroder, J.J., Olesen, J.E. and Giraldez Cervera, J.V. (2017), <u>Research for AGRI Committee</u> – <u>Preserving agricultural soils in the EU</u>, *European Parliament, Policy Department for Structural and Cohesion Policies*, Brussels.

<sup>&</sup>lt;sup>12</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and social Committee and the Committee of the Regions – <u>The European Green Deal</u> (2019).

<sup>&</sup>lt;sup>13</sup> Public Consultation on the New EU Soil Strategy – healthy soil for a healthy life: ClientEarth response to the public consultation (2021).

<sup>&</sup>lt;sup>14</sup> Article 11 TFEU.

<sup>&</sup>lt;sup>15</sup> Commission Working Document, <u>Integrating environmental considerations into other policy areas- a stocktaking of the Cardiff process</u>, COM (2004) 394 final.



across all EU policy areas. As key actors in the EU legislative process, the European Commission, European Parliament and the Council are bound by this rule within their respective competences. <sup>16</sup> The Commission, acting as the main initiator of new legislative proposals, has a particular duty to promote sustainable development in the laws it proposes. <sup>17</sup> Article 11 TFEU – and before it, Article 6 EC Treaty – *is not merely programmatic; it imposes legal obligations* <sup>18</sup> and is a fundamental pillar of sustainable development. <sup>19</sup>

Indeed, under Article 11 TFEU, environmental protection requirements must be integrated into the definition and implementation of the European Union's policies and activities. <sup>20</sup> This lays down an obligation of environmental integration and of mainstreaming environmental protection across all policy areas. Article 11 TFEU is a "provision of general application" under Title II TFEU and should be read in conjunction with the principle of coherence in Article 7 TFEU. <sup>21</sup> Environmental legislation, environmental policies, and policies or legislation derived thereof can be deemed to be fully part of the environmental protection requirements falling under Article 11 TFEU, and the Union, including the Commission, is under a legal duty to facilitate consistency between these environmental protection requirements.

The environmental protection requirements that the Commission should integrate into the Union's policies and activities also include the commitments entered into by the European Union when ratifying the Paris Agreement.<sup>22</sup> According to the case law of the European Court of Justice, international treaties ratified by the European Union are an integral part of Union law.<sup>23</sup> Consequently, the Commission must, in accordance with Article 11 TFEU, take into account the commitments entered into the European Union when defining and implementing Union policies, including laws on soil protection.

It must also be noted that the obligation in Article 11 TFEU applies to the development of Union policies as well as to their implementation. While the Treaties regulate EU actions, a direct obligation of the Member States to comply with Article 11 TFEU exists when applying and implementing Union law. An indirect obligation of the Member States to comply with Article 11 TFEU – and, thus, to take into account EU environmental objectives when applying and implementing Union law – instead, stems from Article 4(3) subparagraph 3 of the EU Treaty ("duty of sincere cooperation"), which requires [t]he Member States [to]

<sup>&</sup>lt;sup>16</sup> Sjåfjell, B. (2015) <u>The Legal Significance of Article 11 TFEU for EU Institutions and Member States</u>, in Sjåfjell, B. and Wiesbrock, A. (eds.) *The Greening of European Business under EU Law: Taking Article 11 TFEU Seriously*, p. 59-60; *see also* Article 13(2) TEU.

<sup>&</sup>lt;sup>17</sup> Ibid; see also Article 294(1) TEU.

<sup>&</sup>lt;sup>18</sup> Opinion of Advocate General Francis G. Jacobs of 26 October 2000, *PreussenElektra AG v Schleswag AG*, C-379/98, ECLI:EU:C:2000:585, paragraph 23.

<sup>&</sup>lt;sup>19</sup> Next steps for a sustainable European future – European action for sustainability, COM (2016) 0739 final; cf: https://ec.europa.eu/environment/sustainable-development/SDGs/implementation/index\_en.htm with the link to the United Nations Sustainable Development Goals (UN SDGs) to achieving sustainable development in its three dimensions – economic, social and environmental – in a balanced and integrated manner, cf UN, A/RES/70/1, Resolution adopted by the General Assembly on 25 September 2015, Transforming our world: the 2030 Agenda for Sustainable Development, p. 3, cf: http://www.un.org/ga/search/view\_doc.asp?symbol=A/RES/70/1&Lang=E.

<sup>&</sup>lt;sup>20</sup> Judgement of the Court of Justice of 20 November 2018, *Commission v Council*, Joined Cases C-626/15 and 659/16, ECLI:EU:C:2018:925, paragraph 101.

<sup>&</sup>lt;sup>21</sup> Article 7 TFEU sets that [t]he Union shall ensure consistency between its policies and activities, taking all of its objectives into account and in accordance with the principle of conferral of powers.

<sup>&</sup>lt;sup>22</sup> Council Decision (EU) 2016/1841 of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change, OJ L 282, 19.10.2016, p. 1.

<sup>&</sup>lt;sup>23</sup> Judgment of the Court of Justice of 30 April 1974, *Haegemann v Belgian State*, C-181/73, ECLI:EU:C:1974:41, paragraph 2 et seq.



facilitate the achievement of the Union's tasks and refrain from any measure which could jeopardise the attainment of the Union's objectives.

The environmental integration principle is further supported by the 7<sup>th</sup> Environmental Action Programme (EAP),<sup>24</sup> a framework adopted by the European Parliament and Council to guide European environmental policy until 2020. The proposal for the 8th EAP, 25 which has yet to be adopted, builds on the objectives of the European Green Deal and the UN Sustainable Development Goals. In particular, the 8th EAP supports strengthening the integrated approach to policy development and implementation, notably by mainstreaming sustainability in all relevant initiatives and projects at national and EU level.<sup>26</sup> The Proposal for an 8<sup>th</sup> EAP, reflecting the outcome of the provisional agreement reached between the Council and the European Parliament,<sup>27</sup> requires the European Commission, the Member States, and local and regional authorities and stakeholders to enable conditions to achieve EAP priority objectives, including addressing land degradation and ensuring the protection and sustainable use of soil including by a dedicated legislative proposal on soil health by 2023.28 As the 8th EAP is formally a decision – which is "binding in its entirety" according to Article 288 TFEU - such a reference to a dedicated soil protection legislative instrument can be interpreted as a clear mandate to the European Commission, by the European Parliament and the Council, to put forward a soil framework law. This is a very positive development that seems to suggest that the Member States are currently more open than in the past to a framework law on soil protection and restoration.

### Principle of subsidiarity

#### General considerations

Environmental protection is a shared competence under the EU Treaties. This means that any action taken by the Union must satisfy the tests of subsidiarity.

The principle of subsidiarity – Article 5(3) of the Treaty on European Union<sup>29</sup> (TEU) and Protocol N. 2 on the application of the principles of subsidiarity and proportionality<sup>30</sup> – is essential to regulating EU action whenever the EU does not have exclusive competence. It authorises the Union to exercise its powers when the objective of the EU intervention cannot be effectively achieved at Member State level. The principle of subsidiarity developed in parallel with the expanding scope of EU policy competences and the increasing exercise of powers by the Union institutions. It was conceived as a "mediating concept" helpful

<sup>&</sup>lt;sup>24</sup> European Commission, Directorate-General for Environment – <u>General Union environment action programme to 2020: Living well, within the limits of our planet</u> (2014).

<sup>&</sup>lt;sup>25</sup> A proposal for the 8<sup>th</sup> Environment Action Programme to guide European environmental policy until 2030 was published by the European Commission on 14 October 2020.

<sup>&</sup>lt;sup>26</sup> Proposal for a Decision of the European Parliament and of the Council on a General Union Environment Action Programme to 2030.

<sup>&</sup>lt;sup>27</sup> This text, resulted after the trilogies, is available here: <u>8th EAP: member states endorse provisional political agreement reached with Parliament - Consilium (europa.eu)</u>.

<sup>28</sup> Article 3 (fg).

<sup>&</sup>lt;sup>29</sup> According to Article 5(3) TEU: Under the principle of subsidiarity, in areas which do not fall within its exclusive competence, the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level.

<sup>&</sup>lt;sup>30</sup> Protocol on the application of the principles of Subsidiarity and proportionality (2004).



to arbitrate the tension between the dynamics of political integration and decision-making proximity.<sup>31</sup> For this reason, it is a flexible principle, capable of adapting to the changing relationship between the EU and the Member States.

The principle of subsidiarity was officially included within the general principles of EU law in the Treaty of Maastricht<sup>32</sup> and gradually evolved alongside the proportionality principle<sup>33</sup> and the principle of conferral,<sup>34</sup> both of which it is intrinsically intertwined with. Compared to the principle of subsidiarity introduced under the Treaty of Maastricht, the Treaty of Lisbon maintains the same wording in its Article 5(3) TEU, though adding a reference to the regional and local levels. The Charter of Fundamental Rights as well mentions the principle of subsidiarity,<sup>35</sup> aiming to clarify the scope of the Charter, which applies primarily to the institutions and bodies of the Union, in compliance with the principle of subsidiarity.<sup>36</sup>

In light of the principle of subsidiarity, three conditions are necessary for the EU to act in accordance to the law: (i) the area concerned does not fall within the Union's exclusive competence; (ii) the objectives of the proposed action cannot be sufficiently achieved by the Member States; (iii) EU action has added value. As the division of competences is enshrined in the EU Treaties themselves, it can be said that the principle of subsidiarity does not enter into play at the stage of the delimitation of competences between the Union and the Member States, but rather at the stage of their actual implementation. Moreover, its interaction with the proportionality principle should be taken into account. While the subsidiarity principle defines the conditions under which the Union can legislate, the principle of proportionality informs the content of the EU action.

The application of the subsidiarity principle is further laid down in the Protocol on the application of the principles of subsidiarity and proportionality. The Protocol establishes that national parliaments are responsible for ensuring compliance with the subsidiarity principle through an *ex-ante* early warning mechanism.<sup>37</sup> The Court of Justice, instead, exercises an *ex-post* judicial scrutiny<sup>38</sup> on its application, either directly through an action for infringement or indirectly upon referral from the national courts in the context of preliminary ruling procedures. The European Committee of the Regions (the Committee) can

<sup>&</sup>lt;sup>31</sup> Lenaerts, K., The Principle of Subsidiarity and the Environment in the European Union: Keeping the Balance of Federalism, Fordham Journal of International Law, Vol. 17, N. 4, 1993, p. 856.

<sup>&</sup>lt;sup>32</sup> Please refer to Article 5 of this consolidated version of the Treaty.

<sup>&</sup>lt;sup>33</sup> Article 5(4) TEU: Under the principle of proportionality, the content and form of Union action shall not exceed what is necessary to achieve the objectives of the Treaties.

<sup>&</sup>lt;sup>34</sup> Article 5(2) TEU: Under the principle of conferral, the Union shall act only within the limits of the competences conferred upon it by the Member States in the Treaties to attain the objectives set out therein. Competences not conferred upon the Union in the Treaties remain with the Member States.

<sup>&</sup>lt;sup>35</sup> Article 51, Charter of Fundamental Rights.

<sup>&</sup>lt;sup>36</sup> The Court has confirmed that subsidiarity does not create individual rights under the Treaties as it only refers to the division of powers between the EU and the Member States. <u>Judgement of the Court (Third Chamber) C-221/10</u> P - Artegodan GmbH v European Commission, paragraph 75.

<sup>&</sup>lt;sup>37</sup> According to Article 7 of the Protocol, a draft EU legislative act must be reviewed within eight weeks and each national parliament has two votes. Although national parliaments cannot block a legislative proposal on the basis of a breach of the subsidiarity principle, two mechanisms are foreseen, traditionally identified as "yellow card" and "orange card" mechanisms. If one third of national parliaments' votes are against the legislation, the draft legislative act must be at least reviewed by the Commission. The draft legislative act can be maintained, amended or withdrawn. This procedure is the "yellow card". If simple majorities of the national parliament votes oppose the proposed legislation on the basis of subsidiarity arguments, the Commission will be required to produce a reasoned opinion to respond to the national concerns. This procedure is the "orange card".

<sup>&</sup>lt;sup>38</sup> According to Article 8 of the Protocol, the Court of Justice has jurisdictions in actions alleging the infringement of the subsidiarity principle by a legal act.



also challenge an EU act that it considers to be in breach of the principle of subsidiarity.<sup>39</sup> In the case of the Soil Health Law, opposition from the EU Committee of the Regions on the basis of the principle of subsidiarity seems unlikely. Indeed, in its recently adopted Opinion on the Zero Pollution Action Plan, the Committee has expressly welcomed the EU Soil Strategy and the announcement of the EU Soil Health Law, stating that supporting soil protection through a European framework is a crucial step towards climate neutrality, biodiversity restoration, zero pollution, as well as healthy and sustainable food system.<sup>40</sup>

In the context of soil protection, the misapplication of the principle of subsidiarity has been used by a minority of Member States to block the 2006 Soil Framework Directive. However, such a claim remains exclusively political and without a clear legal reasoning to support it. As the following paragraph shows, an EU-wide soil protection legislation would not only comply with the principle of subsidiarity but is also urgently needed.

#### Principle of subsidiarity and soil protection

Soil is certainly part of EU environmental policy, which is of shared competence between the Union and the Member States. This means that any legislative proposal on soil protection and restoration has to be tested against the principles of subsidiarity and proportionality. This is recognised by the EU Commission itself in its Soil Strategy for 2030, where it is clarified that the future proposal for a Soil Health Law will undergo a subsidiarity check.

The subsidiarity check that the Commission will carry out will be structured in accordance with the abovementioned requirements under Article 5 TEU. The Commission will prove that the objectives of the Soil Health Law (a) cannot be sufficiently achieved by the Member States and (b) "by reason of the scale or effects of the proposed action", they can be better achieved at EU level.

a) The objectives of the proposed action cannot be sufficiently achieved at Member State's level

Leaving soil protection for the domestic level does not seem adequate considering that soil degradation is widespread across all Member States, most of which have not implemented and/or adopted national legal frameworks to address the issue. To satisfy this "negative test" and prove that delegating the protection of soils to the Member States is not a viable solution, the Commission should insist on the transboundary negative effects of soil degradation. In this context, the meaning of "transboundary" should be intended as widely as possible. "Transboundary effects" do not refer solely to effects occurring on both sides of a country's border. <sup>41</sup> "Transboundary effects" entail looking at the broad consequences of inaction on climate, biodiversity and food security. Without

<sup>&</sup>lt;sup>39</sup> Article 8 of the Protocol: *In accordance with the rules laid down in the said Article, the Committee of the Regions may also bring such actions against legislative acts for the adoption of which the Treaty on the Functioning of the European Union provides that it be consulted. As detailed in the <u>Practical guide on the infringement of the subsidiarity principle</u> by the Legal Service of the Committee of the Regions, certain conditions must be satisfied for the Committee to initiate such a challenge: (a) the Committee for consulted on the legal act; (b) the challenged act is a legislative act; (c) the challenge must be brought within two months after the publication of the challenged legislation. For more details, please refer to Chapter II of the mentioned Guide.* 

<sup>&</sup>lt;sup>40</sup> European Committee of the Regions, <u>Opinion: EU Action Plan: 'Towards zero pollution for air, water and soil',</u> ENVE-VII/019, paragraph 58.

<sup>&</sup>lt;sup>41</sup> An example could be a case of groundwater contamination across two Member States due to polluting activities happening in one national territory.



healthy soils, the target of climate neutrality by 2050 – as enshrined in the EU Climate Law<sup>42</sup> – will not be attainable. This, in turn, will hinder progress towards the global adaptation goal established in Article 7 of the Paris Agreement. Harmonisation of soil protection across the Union is also key to ensure long term food security. Indeed, the loss of healthy soils, and, thus, of their ability to regulate nutrient availability and hydrological processes,<sup>43</sup> reduces agricultural yields and could result in a food production shortfall of 25% by 2050.<sup>44</sup>

b) The objectives of the proposed action, by reason of the scale or effects [...], [can] be better achieved at Union level

Factual evidence provides the strongest justification to satisfy this "positive test". Currently, it is estimated that about 60 to 70% of soils in the EU are not healthy<sup>45</sup>, which means that Member States have failed and that action at EU level is urgently needed. The added value of EU action stems also from the need to define healthy soils and identify common methodologies to assess their status. Several soil monitoring systems are present at Member State level;<sup>46</sup> however, data is fragmented and incomplete, and there is no systematic comprehensive monitoring of policy-relevant issues in many countries due to a lack of capacity or resources. Harmonisation of indicators and integration of monitoring methodologies into the activities carried out at Member State level is necessary to fill monitoring gaps.

The future Soil Health Law will not be in breach of the Treaties; rather, it will be key to filling a legislative void that is causing tremendous stress to our soils.

## Monitoring soil quality through LUCAS

The Statistical Office of the European Union (EUROSTAT) undertakes a regular survey of land use, land cover and changes over time across the European Union. The legal basis for this monitoring exercise has changed several times over the years, currently found in Decision 786/2004/EC of the European Parliament and the Council, which updates the two previous Decisions 2066/2003/EC and 1445/2000/EC. EUROSTAT works in close cooperation with the Directorate General for Agriculture and the Joint Research Centre to organise harmonised surveys across all Member States for gathering information on land cover and land use. This survey is known as LUCAS (Land Use/Cover Area frame statistical Survey), and it is based on *in-situ* monitoring repeated every few years.

LUCAS has evolved over time. While initially developed to provide early crop estimates for the European Commission, in 2009 it was extended to include an additional module on soil. LUCAS represents the first

<sup>&</sup>lt;sup>42</sup> Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law').

<sup>&</sup>lt;sup>43</sup> The loss of soil biodiversity reduces the infiltration capacity of the soil as well as its capacity to store water, lowering food production and worsening the impact of drought. Soil stores two thirds of the fresh water on the planet, and this function is determined by the level of organic matter in the soil. This water from soils supports 90% of the world's agricultural production. By 2025, an estimated 1.8 billion people will be living under water-stressed conditions. One estimate suggests that the loss of 1 g of soil organic matter decreases soil available moisture by 1 to 10 g.

<sup>&</sup>lt;sup>44</sup> IUCN, Conserving healthy soils.

<sup>&</sup>lt;sup>45</sup> European Commission, <u>Caring for soil is caring for life</u> (2020).

<sup>&</sup>lt;sup>46</sup> Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions – <u>EU Soil Strategy for 2030 Reaping the benefits of healthy soils for people, food, nature and climate</u> (2021), p. 21.



attempt to construct a pan-European<sup>47</sup> topsoil database, which can serve as a baseline for EU-wide soil monitoring. Today, LUCAS Soil is one of the world's largest and most comprehensive soil databases.<sup>48</sup>

LUCAS Soil has an invaluable potential for underpinning EU policies on soil, climate, biodiversity and agriculture, especially considering that soil inventories are currently very heterogeneous in the Member States. LUCAS is essential to evaluate the impact of agriculture on the environment and, therefore, to assess the performance of the Common Agricultural Policy; it can be used to substantiate climate adaptation and mitigation measures and to elaborate statistics in relation to the reduction of GHG emissions in the context of the LULUCF Regulation; it is key for the European Environment Agency, both for climate and biodiversity indicators, and will play a pivotal role for the Soil Health Law, both during its development and implementation. Indeed, data gathered through LUCAS Soil will ensure a robust, science-based decision-making process and will support the implementation of the law thanks to regular monitoring and reporting. Therefore, as the Commission itself acknowledges in its Soil Strategy for 2030, it will be essential to embed LUCAS Soil within the Soil Health Law, providing appropriate funding for its functioning, clarifying its legal basis and regulating its use. Ultimately, complementing satellite surveys and modelling with *in-situ* data through LUCAS Soil will be necessary to keep track of the progress made towards achieving European Green Deal targets.

<sup>47</sup> Since 2015, LUCAS Soil covers all the EU Member States.

<sup>&</sup>lt;sup>48</sup> LUCAS is a two phase sample survey. The LUCAS first phase sample is a systematic sample with points spaced 2 km apart in the four cardinal directions covering the whole of the EU's territory; it therefore includes around 1.1 million different points. This first phase sample can also be called the Master or Frame. Each point of the first phase sample is photo-interpreted and assigned a pre-defined land cover class. From the stratified first phase sample, a second phase sample of points, the field sample, is drawn. For more details, please visit: <u>LUCAS - Land use and land cover survey - Statistics Explained (europa.eu)</u>.



Gabriela Kolpak

Programme Officer – Agriculture

gkolpak@clientearth.org

www.clientearth.org

Dr. Lara Fornabaio

Legal expert – Agriculture Project Lead

Ifornabaio@clientearth.org

www.clientearth.org

Brussels Beijing Berlin London Warsaw Madrid Los Angeles Luxembourg

ClientEarth is an environmental law charity, a company limited by guarantee, registered in England and Wales, company number 02863827, registered charity number 1053988, registered office 10 Queen Street Place, London EC4R 1BE, a registered international non-profit organisation in Belgium, ClientEarth AISBL, enterprise number 0714.925.038, a registered company in Germany, ClientEarth gGmbH, HRB 202487 B, a registered non-profit organisation in Luxembourg, ClientEarth ASBL, registered number F11366, a registered foundation in Poland, Fundacja ClientEarth Poland, KRS 0000364218, NIP 701025 4208, a registered 501(c)(3) organisation in the US, ClientEarth US, EIN 81-0722756, a registered subsidiary in China, ClientEarth Beijing Representative Office, Registration No. G1110000MA0095H836. ClientEarth is registered on the EU Transparency register number: 96645517357-19. Our goal is to use the power of the law to develop legal strategies and tools to address environmental issues.