

Towards climate-smart sustainable management of agricultural soils

Deliverable 8.9

Second Summary report of policy needs identified

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List of acronyms and abbreviations

WP Work Package EU European Union EI Expected Impact

MRV Monitoring, Reporting and Verification

LUC Land Use Change





1. Executive Summary

The information presented in this deliverable was collected from a variety of events and activities facilitated by WP8 including: i) a science to policy breakout session involving members of the EJP SOIL consortium during the EJP SOIL General Meeting in 2022 (M29), ii) a WP8 online survey targeting policy stakeholders which aimed to understand how they source their scientific information carried out in M28 – M32 and iii) three workshops facilitated by WP8 across a range of scales, an EU wide workshop on C Farming (M 28), a regional level workshop on Rewetting Peat Soils (M 27) and a national level workshop held in Latvia on Reducing GHG emissions from organic soils (M 27).

The WP8 breakout session held during the EJP SOIL General Meeting 2022, focused on identifying barriers and needs as they relate to persons within EJP SOIL when translating scientific findings into policy recommendations. The responses from attendees at this session were analysed and common themes were identified. Of greatest relevance was the different scales at which translation of scientific findings needs to occur, the framing of suitable messages for local, national and EU level policy stakeholders and how to achieve this in such a way that the message is relevant to the level it being communicated to. Another challenge for scientific communication was the social, environmental and economic diversity between countries and the need to develop messages based on these scientific findings that can be useful and applicable to all stakeholders despite differences in communication norms and varying degrees of relevance based on the country and region they live within.

Greater knowledge was required on indirect policy designers, as they are a highly influential group and have rarely been considered in stakeholder mapping exercises. To address this need, a survey designed and facilitated online by WP8 targeted at pre-policy cycle stakeholders and how they source their scientific information was carried out during M28 – M32. This informed WP8 of the priority needs of these stakeholders when it comes to accessing the available results of the EJP SOIL Programme. This group of stakeholders generally prefer to source their scientific information in person through workshops, panel discussions or interviews or via technical reports. Currently they mainly consult expert groups or regional/local specialists when sourcing their scientific information. This indicates a need for scientists to also promote scientific findings on a national level through experts in the relevant areas.

Several **key topics related to climate smart and sustainable soil management** have been identified as needing more opportunities for scientific knowledge sharing based on the outcomes of previous EJP SOIL WP8 deliverables (D8.3 "Summary report on needs identified") and discussions with stakeholders at EU and Member state levels. Among these topics, the sharing of scientific knowledge and policymaker perspectives related to carbon farming and rewetting peat soils have been addressed at EJP SOIL WP8 online workshops held in M28 and M27 as mentioned above. The refined needs obtained from the perspectives presented during these workshops is contained in this deliverable.

Key outputs of the workshops include the need for greater scientific support for the monitoring, verification and reporting associated with carbon farming schemes as well as greater clarification of emerging agricultural policy as it relates to carbon farming. Other relevant outcomes included that private-public partnerships are needed to support incentivisation of carbon farming schemes and that currently the main practices being rewarded by private schemes are no/ low tillage and cover crops.

On the topic of rewetting peat soils to mitigate greenhouse gas emissions and enhance habitat for biodiversity the key findings not only included biophysical, but accompanying socio-economic implications of raising the water table and the complicated ownership of lands with organic soils. The main driver currently perpetuating peatland degradation are payments for drainage-based agriculture. There is also a strong need fora co-ordinated policy framework for peatland management has been lacking.

Overall this deliverable presents findings that will inform further actions within WP8 "Science to Policy" throughout the EJP SOIL Programme, as the translation of scientific findings to policy relevant





information continues. It will also inform D8.10 "List of topics that need better dissemination or new research".

2. Overview of needs identified

Based on the analysis completed in D8.3 Summary report on Needs Identified, along with further feedback and discussion with stakeholders, several actions were identified and carried out to begin to address these needs throughout year 3 of the programme. This report presents the outcomes of some of these actions and a more refined list of topics that have been identified as key needs which will inform D8.10 List of topics that need better dissemination or new research that are related to current or developing EU and national policies.



2.1. Needs identified at Science to Policy Interface

The findings elaborated in greater detail in Section 0





Priority information and needs identified through WP8 activities, as well as feedback received from stakeholders in previous activities (Sub-Task 8.1.2 Needs Analysis, D8.3 First Summary Report on Needs Identified) present view points from scientists within the EJP SOIL Programme consortium and the policy stakeholders engaged by the EJP SOIL Programme. The analysis of these findings enables the identification of key needs within the science to policy interface and also possible strategies to address these needs.

Identified Needs	Possible strategies to help address these needs	
Translation from scientific language to policy relevant language suitable to different levels of policy stakeholders is needed	This should be accompanied by in-person interactions such as interviews, workshops and panels to support clarification of the information being provided based on responses received from stakeholders	
Create clear messages that can be easily disseminated to relevant countries	The format of these messages should be customized at a national level for the appropriate communication and dissemination strategies that work best in each country	
Identify most suitable persons in each country to share EJP SOIL findings with to maximise their use and promotion	Based on responses from stakeholders such persons include those that are involved in expert groups or are regional/national specialists	
Timing of events such as workshops and webinars so that findings can be presented at opportune moments to be useful to the creation of developing policies	Establish synergies with organisations involved in policy development at both an EU and national level in order to time events for maximum effect	

Figure 1 Science to policy interface needs and potential strategies to address these needs





2.2. Needs identified under the topic of Carbon Sequestration

The three workshops and outcomes detailed in Section 5 Priority information and needs identified through WP8 Workshops, focused on topics that can be placed under the umbrella of carbon sequestration: carbon farming, rewetting peat soils and reducing GHG emissions from organic soils. These workshops occurred across a range of scales (European, Regional and National) allowing for the comparison of identified issues across these scales when it comes to carbon sequestration.

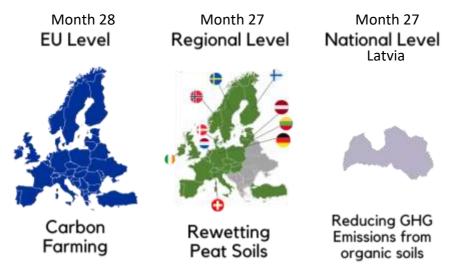


Figure 2 Diagram illustrating the different scales at which the workshops took place

An analysis of the workshop outcomes, presented in Section 5 Priority information and needs identified through WP8 Workshops of this report, highlighted three main needs in common across a national, regional and European scale.

Greater clarification of agricultural policies, as they relate to activities linked with carbon sequestration activities including carbon farming schemes, rewetting peat soils and management practices to reduce GHG emissions, is required at all levels.

Scientific and technical information and economic measures are essential to supporting farmers and land owners in their efforts to take up and implement new practices that facilitate carbon sequestration.

Increased accessibility to existing information and knowledge sharing on the long term benefits of practices that contribute to carbon sequestration.

These needs are central to informing future activities within WP8 and the EJP SOIL Programme as a whole. The carbon farming and rewetting peat soils workshops and their outcomes have been



Deliverable 8.9 Second Summary report of policy needs identified



summarised in internal reports and the information presented in these reports along with the information presented in this deliverable will be used to write policy briefs on each of these topics which can be disseminated to the relevant members of the EJP SOIL national policy stakeholders to help inform developing policies on these topics. These policy briefs will be well timed as the EC is currently working on the proposal for the certification of carbon farming schemes. WP8 will also work to facilitate follow up workshops when more relevant findings from the EJP SOIL research projects become available.





2.3. Overall list of needs identified that will inform D8.10

The synthesis of the findings and needs identified outlined in detail in this report have resulted in the shortlist of topics in Table 1 that require better dissemination or new research. These topics directly inform Deliverable 8.10 and will be explored in more detail there.

Topics that require better dissemination	Management practices that can be implemented by farmers to increase carbon sequestration.		
disserimation	Verified greenhouse gas (GHG) emission and removal data for land managers.		
	Policy options that provide a source of funding for activities that contribute to carbon sequestration.		
	Sustainable soil management practices to avoid land degradation.		
	Soil health indicators linked to soil function and soil ecosystem services.		
Topics that	Monitoring, reporting and verification methods for carbon farming		
require new research	schemes.		
research	Long-term outcomes of carbon farming schemes.		
	Carbon sequestration rates linked with management practices and land use.		
	Soil health indicator threshold levels that consider pedo-climatic differences.		
	Identification of soil and agricultural management practices to help with adaptation to climate change.		
	Establishing production chains and value chains that are key to promoting rewetting and paludiculture in peat soils.		
	Socio-economic impacts of raising the water table and identification of incentives to encourage and support peat soil rewetting.		
	Indicators for soil biodiversity.		

Table 1 List of needs identified that will inform D8.10





3. Ongoing needs being addressed

The following topics, associated with different expected impacts of the EJP SOIL Programme, were identified as needing more scientific knowledge sharing opportunities between researchers and policy stakeholders:

Topic	Expected Impact	Related/Developing Policies
Carbon Farming	EI 2 - Understanding how soil- carbon sequestration can contribute to climate change mitigation at the regional level and accounting for carbon.	Green Deal, Climate Action Plan, Carbon removals certification
Rewetting Peat Soils	EI 1 – Fostering understanding of soil management and its influence on climate change mitigation and adaptation, sustainable agricultural production and environment.	EU Soil Strategy, CAP
Soil Health Monitoring	EI 4 – Supporting harmonized European soil information, including for international reporting. EI 5 – Fostering uptake of soil management practices which are conducive to climate change adaptation and mitigation	EU Soil Strategy, Green Deal,
Avoiding Land Degradation	EI 1 - Fostering understanding of soil management and its influence on climate change mitigation and adaptation, sustainable agricultural production and environment.	EU Soil Strategy, Green Deal, Climate Action Plan
Soil Biodiversity	EI 1 - Fostering understanding of soil management and its influence on climate change mitigation and adaptation, sustainable agricultural production and environment.	EU Soil Strategy, Green Deal, Biodiversity Strategy, Nature Restoration Law

Table 2 Key topics requiring greater knowledge sharing activities and their associated EJP SOIL expected impacts





The future proposal of a Soil Health Law will be the focus of the 2nd EU Policy Forum (M38) and there will be a regional workshop on Avoiding Land Degradation (M39). Activities to address the topic of soil biodiversity are planned under Task 8.1.2 Fostering synergies with related initiatives between the relevant EJP SOIL internally funded projects and selected external organisations/initiatives/networks e.g. Global Soil Biodiversity Initiative over year four of the programme when the projects have achieved results that can be disseminated.

To address needs within the consortium, Work Package 8 conducted a breakout session during the EJP SOIL Annual Science Days 2022 in Palermo, Italy. During this session, feedback was garnered from different groups within the EJP SOIL Programme on the barriers and potential solutions they face when translating science to policy. This is elaborated on more clearly in Section 4.1 WP8 Breakout group feedback.

Additionally identified, based on discussions with the EJP SOIL advisory board and steering committee, was the need to engage with stakeholders that interact with the agenda setting stage of the policy cycle i.e. indirect policy designers, as this group play a significant role in getting sustainable soil management on the policy agenda. To this end WP8 designed and carried out a survey online during M28 – M32. The survey aimed to assess how this group of stakeholders uses and sources scientific information so that the findings of EJP SOIL could be better formatted to suit this group's needs. The results of this survey are presented in this report in Section 4.2 Indirect policy designer stakeholder survey.

To begin to address some of the topics listed in Table 2 Key topics requiring greater knowledge sharing activities and their associated EJP SOIL expected impacts, two online EU level workshops were facilitated by WP8 on the topics of carbon farming (M28) and rewetting peat soils (M27). A national workshop was also held in Latvia by (UL), which focused on some of the specific data needs for measuring GHG emissions from organic soils in this country. The key outcomes from these workshops are presented in more detail in Section 5 Priority information and needs identified through WP8 Workshops.

3.1. Availability and use of findings

The list of needs identified in this deliverable will be circulated in M44 within the EJP SOIL Consortium to assist with informing future activities across all Work Packages. Specifically within WP8, these needs will inform synergies with external initiatives and topics for future WP8 activities including workshops and webinars. In collaboration with WP9, this list of needs identified will be published on the website and circulated to key stakeholders according to the CDE strategy, so that it will be publicly available. The outputs of this deliverable will also form the basis for a policy brief that will be written and publicly disseminated via the EJP SOIL newsletter. While EJP SOIL Programme has responded to some of these needs and topics within their internal and external calls these needs can also inform topics for funding calls of future projects, e.g., inform the Soil Mission Board, inform the SOLO Soil Mission HE project. At national level they also highlight areas that require additional dissemination efforts.





4. Priority information and needs identified through WP8 activities

This section presents two main sets of findings within the science to policy framework of the EJP SOIL Programme. The first set of findings (Section 4.1 WP8 Breakout group feedback) was derived from within the consortium, it summarises the thematic findings of a brainstorming session conducted by WP8 at the EJP SOIL Annual General Meeting 2022. The second set of findings (Section 4.2 Indirect policy designer stakeholder survey) was derived from external indirect policy stakeholders who were asked to complete a survey that explored how they use scientific information and where they source it from. The aim was to enable WP8 to better understand how to format, frame and present the scientific findings produced within the EJP SOIL Programme for this specific type of policy stakeholder.

4.1. WP8 Breakout group feedback

Participants at the WP8 breakout session at the EJP SOIL Annual General Meeting 2022 were arranged into small groups of approximately 10 persons based on three criteria: i) if they worked on projects, ii) if they worked within an EJP SOIL WP, or iii) if they worked on the board of programme managers (BPM). The four groups that resulted (2 project groups, one WP group and one BPM group) were asked to brainstorm the various barriers and potential solutions to those barriers when translating science to policy. Their responses were discussed as a group and their written comments were collected, analysed and coded to identify common themes or issues¹. This thematic analysis resulted in five key topics (Figure 3) of varying relevance surrounding the barriers associated with translating science to policy.

¹ Virginia Braun & Victoria Clarke (2006) Using thematic analysis in psychology, Qualitative Research in Psychology, 3:2, 77- 101



Scale of Translation

- •Science results need to be transcribed in simpler data considering a range of policy stakeholder perspectives at different levels (local, regional, national, European)
- •Translation of key findings from EJP SOIL to a universal/ general audience using easy to understand language

Diversity

- Different priorities per country, in communication strategies both with respect to themes that are relevant and ways in which information is dissemminated
- •Challenge to address the diveristy of science to policy interfaces across different countires
- •Creation of 1 key message that reflects the diversity of policy stakeholders at EU level

Dissemination Methods

- •Need for correct contacts to help feed the knowledge to relevant persons
- •Need for appropriate partnerships that can use the information being produced

National Level Issues

- •The frequencey of interactions with national level policy makers, to stay up to date but avoid stakeholder fatigue
- •Need to align national initiatives with EJP SOIL initiatives

Timing

- •Scientific solutions take a few years from conception to ressearch to usable and implementable results
- •Science is very process oriented, which is important to researchers but less relevant to policy makers

Figure 3. Themes identified from qualitative feedback received during the WP8 breakout group brainstorming session.

4.2. Indirect policy designer stakeholder survey

The EJP SOIL Programme has previously conducted surveys of policy stakeholder needs for scientific information to inform policy development or design, implementation and evaluation. For the purposes of WP8 within EJP SOIL a **policy stakeholder** is defined as any person/entity involved in or affected by the policy cycle and the implementation of policies. There are four categories of policy stakeholders:

- ➤ **Policy designer** Person or entity involved in conceptualisation and creation of polices and clarifies the objectives and goals of the policy being created e.g. politicians
- ➤ Policy evaluators Persons or entities with the technical scientific knowledge required to assess policies and determine if the policy will achieve the desired outcome based on the current science e.g. researchers
- Policy implementers Persons or entities typically Government Organisations, that oversee the implementation, monitoring, reporting and verification of policies at regional / national or EU level e.g. local government
- ➤ Indirect policy designers Persons or entities that influence the policy cycle, in particular the policy conceptualization and design phase e.g. lobbyists

It has been identified by WP8 Science to Policy, that **indirect policy designers** were not previously mapped as well as other groups of stakeholders. Indirect policy designers play an important role in the agenda setting stage (during which policies are conceptualised and designed) of the policy cycle and have the ability to influence the emergence of new policy topics. Work Package 8 conducted a survey aimed at identifying the scientific information used by and the needs of indirect policy designers with a focus on agricultural soils.

The survey was sent out to WP8 contacts within the EJP SOIL consortium, each of these contacts was asked to identify possible indirect policy designers (those stakeholders that are able to influence and suggest what topics gain importance in the area of policy making) within their national list of mapped stakeholders and ask them to complete the survey. Snowball sampling² was used to disseminate the link where each stakeholder contacted was asked to forward the link to 5 other relevant persons working in similar indirect policy designer roles to theirs. This sampling approach was chosen to ensure the targeted group (indirect policy designers) were the main respondents to the survey. A total of 38 responses were received from 12 countries across the EJP SOIL consortium.

² Johnson, T.P. (2014). Snowball Sampling: Introduction. In Wiley StatsRef: Statistics Reference Online (eds N. Balakrishnan, T. Colton, B. Everitt, W. Piegorsch, F. Ruggeri and J.L. Teugels).



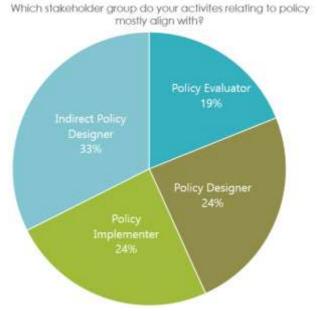


Figure 4. Distribution of respondents based on policy stakeholder classification group (n=38).



Figure 5. Distribution of respondents based on their country of residence (n= 38).



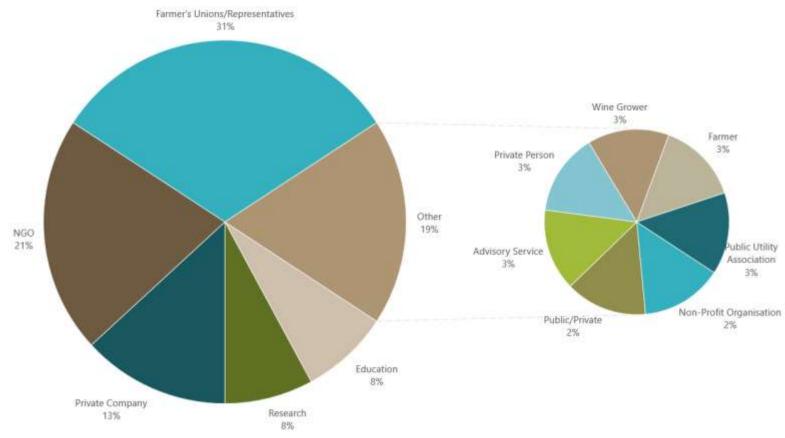


Figure 6. Distribution of respondents based on the type of organisation they represent (n=38).

The majority of respondents classified themselves as indirect policy designers, which were the targeted group for this survey. Those who identified as policy implementers and direct policy designers made up equal proportions of the respondents while policy evaluators were the least represented classification (Figure 4). Respondents were distributed throughout the geographic range of the consortium, with the majority of respondents coming from the Mediterranean region (Figure 5). In terms of organisations, Farmer's Unions / Representatives made up the majority of respondents followed by NGO's and then private companies (Figure 6).

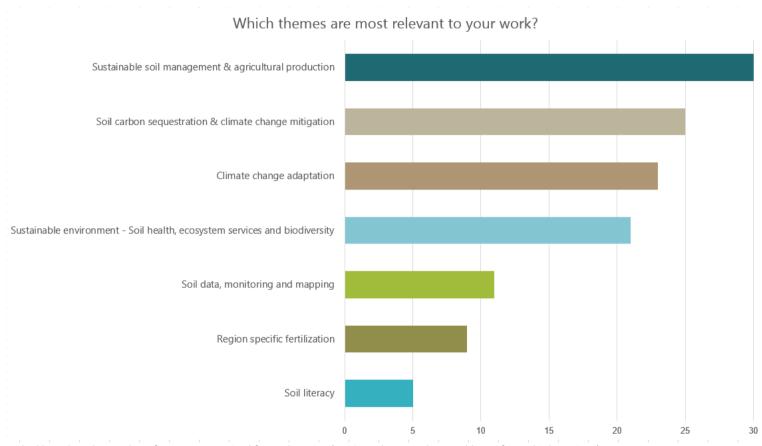


Figure 7. Themes ranked based on the number of responses received for each option (n=38, each respondent could vote for multiple options)

The top three themes most relevant to this group of respondents were found to be sustainable soil management & agricultural production, soil carbon sequestration & climate change mitigation and, climate change adaptation (Figure 7). Least relevant to this group were the themes relating to region specific fertilization and soil literacy. This may be as a result of the geographic bias of respondents.





What is your level of engagement in the agenda setting stage of the policy cycle?

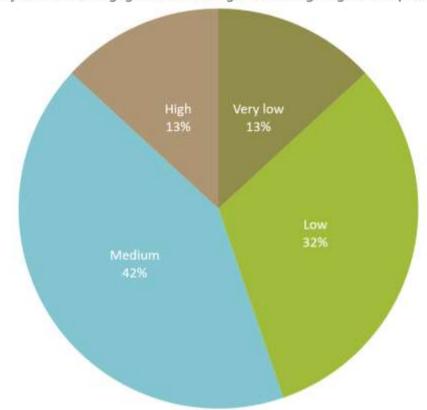


Figure 8. Level of engagement of respondents in the agenda setting stage of the policy cycle (n=38).

The majority of respondents (42%) indicated a medium level of engagement in the agenda setting stage. The second greatest proportion of respondents (32%) reported a low level of engagement in this stage. The remaining 26% of were evenly split between a high and very low level of engagement at this stage (Figure 8).



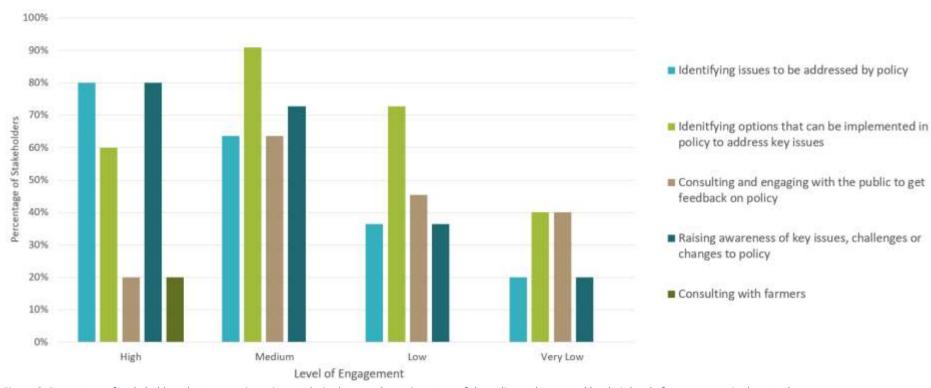


Figure 9. Percentage of stakeholders that engage in various tasks in the agenda setting stage of the policy cycle grouped by their level of engagement in those tasks.

The main activities of those stakeholders with a high level of engagement in the agenda setting stage of the policy cycle include identifying issues to be addressed by policy and raising awareness of key issues, challenges or changes to policy. Those with a medium and low level of engagement in this stage are mostly involved in the activity of identifying options that can be implemented in policy to address key issues. Those with a very low level of engagement mainly identify options that can be implemented in policy to address key issues and consult and engage with the public to get feedback on policy (Figure 9).

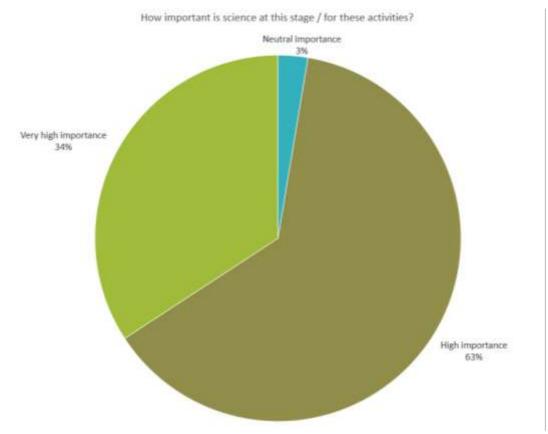


Figure 10. The degree of the importance of science for the activities carried out by respondents at the agenda setting stage of the policy cycle (n = 38)

The majority of respondents (63%) indicated that science was of high importance when it came to the agenda setting stage and the activities involved there in. Science was viewed as being of very high importance by 32% of respondents and of neutral importance by 3% of respondents (Figure 10).



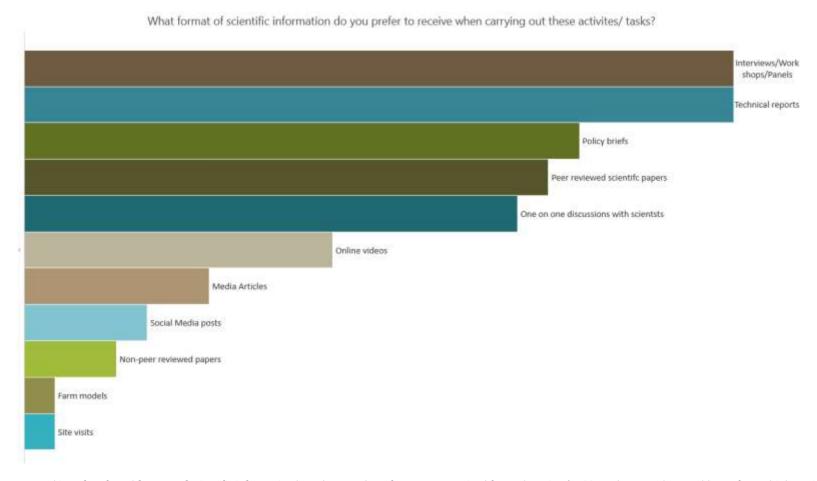


Figure 11. Ranking of preferred formats of scientific information based on number of responses received for each option (n=38, each respondent could vote for multiple options)

In-person interactions through interviews or workshops or panels were ranked as highly as technical reports for being the preferred format of scientific information that respondents would like to receive when engaging in their activities at this stage of the cycle. Policy briefs ranked lower than technical reports at this stage and for this particular group of stakeholders (Figure 11). All respondents (100%) indicated that they use science to support their activities. Follow



up questions then sought to elucidate who/ what were the sources of this scientific information. The top three ranked sources of scientific information used among respondents were expert groups, local/regional specialists and projects (Figure 12).

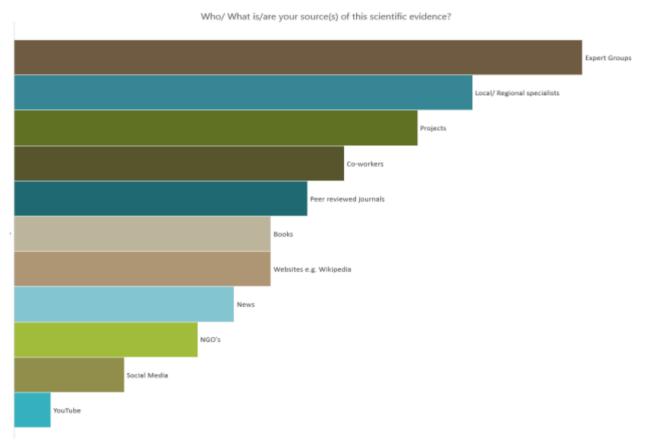


Figure 12. Sources of stakeholders' scientific information ranked based on the number of responses received for each option (n=38, each respondent could vote for multiple options)



Overall, it can be concluded that indirect policy designers prefer technical reports to policy briefs and source their scientific information through direct interactions with scientists or experts or directly from project findings. Science is considered to be of great importance to stakeholders at this stage and it is important that the EJP SOIL presents its findings through the formats indicated by the results of this survey when targeting these types of stakeholders.



5. Priority information and needs identified through WP8 Workshops

5.1. Carbon Farming Workshop

In M28 (May 2022), WP8 facilitated an EU level workshop on carbon farming that brought together perspectives from research, industry, policy and finance. Over the duration of the workshop, there were 274 distinct attendees from 34 different countries. The majority of these attendees classified themselves as researchers (48%), followed by those that classified themselves as policy makers at any level (18%)³. Participants were surveyed at the end of both session one and session two of the event and some of the key findings from these polls are presented below.

Which stakeholder perspective(s) require(s) further elaboration?

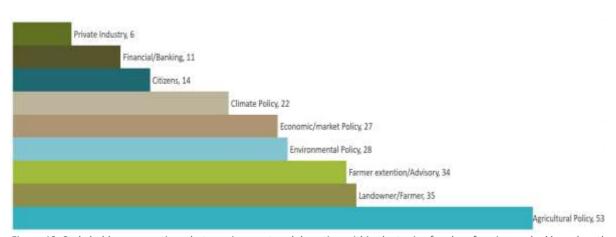


Figure 13. Stakeholder perspectives that require greater elaboration within the topic of carbon farming ranked based on the number of votes received (n=86, respondents could vote for multiple options).

The workshop participants indicated the greater need for elaboration on the perspectives of those stakeholders that are involved in agricultural policy, that are landowners/farmers and those that work in advisory services and farmer extension within the area of carbon farming (Figure 13). Carbon farming schemes directly depend on implementation by these stakeholder groups and so greater clarification on how such schemes fit into agricultural policy and how they can be supported and implemented by advisors and farmers respectively is of high importance.

³ Internal Summary Report on EU Carbon Farming Workshop





Figure 14. Aspects of carbon farming that require further supporting scientific information to enable uptake of carbon farming schemes based on responses from attendees (n=86 respondents could vote for multiple options).

When specifically asked about aspects of carbon farming that require further scientific support, monitoring, reporting and verification (MRV) was at the top of the list. Following MRV, management practices that farmers can implement and certification of carbon farming schemes were both identified as also needing further scientific support (Figure 14). This feedback presents the need for further research in these specific areas as well as a need for access to already available results to those stakeholders that are tasked with implementing such schemes.



Figure 15. Aspects of carbon farming that more examples of schemes or tools could help to bring greater understanding (n = 52, respondents could vote for multiple options).

During the second session several examples were presented to the audience of various carbon farming schemes and carbon farming projects that are in progress. The poll at the end of the second session asked for feedback on which aspects of carbon farming required greater understanding potentially through more examples. In a close result, the long term outcomes of carbon farming schemes was followed by the implementation of the schemes themselves (Figure 15).



Other key responses and needs from this workshop are represented in Fig. 4 below.

The main challenges associated with carbon farming are

- Providing access to verified emission and removal data for all land managers
- 2. Upscaling carbon farming across Europe.

Practices such as no/reduced tillage and cover crops are currently the main practices being rewarded and measured in carbon farming scheme examples presented by Rabobank and Natais. There is a need for a list and ranking of best practices by land use and environment.

Public-private partnerships are important for allowing the economic support required to assist farmers in the transitioning to best practices, which is essential to the uptake of practices on a larger scale.

The issue of double counting needs to be clarified as the new CAP has mechanisms in place to financially support carbon sequestration included under Specific Objective 4 (SO4). The Good Agricultural and Environment Conditions (GAEC) obligations also provide a source of funding for activities that contribute to carbon sequestration.

Farmers are aware of the link between increased soil organic matter and soil fertility and by extension are aware of the importance of increased carbon in soil. Messages around 'carbon farming' itself, are still unclear for farmers.

Figure 16. Key findings from the presentations and discussions at the carbon farming workshop

5.2. Rewetting Peat Soils Workshop

The regional online EU policy workshop on "Rewetting Peat Soils: Why and How?" was held in M27 (April, 2022) and attended by 55 persons from 11 countries. This was an invitation only workshop that was specifically targeted at policy stakeholders at the national level government organizations of those countries within the EJP SOIL consortium that have a significant area of organic soils, in addition to these persons, researchers at institutions involved in the INSURE project were also invited. The main aim of this workshop was to facilitate knowledge sharing between different EU countries who are at different stages of policy development and implementation concerning peatland conservation and rewetting. The workshop aimed to identify the needs for scientific information by the national and EU policy makers and to provide an opportunity for countries to learn from one another. Another key outcome was the assessment of the state of peatland conservation / rewetting across these various countries which can be found in the workshop summary report⁴ and also to make them aware of the EJP SOIL INSURE project and the potential findings it will produce.

The financial, social, biophysical and environmental impacts of rewetting of peat soils and the uncertainty that surrounds them have been identified as some of the main barriers to the implementation of this effective GHG mitigation activity. The INSURE project will seek to minimize some of these risks by developing measurable indicators for the selection of sites which would increase the success rate of rewetting, the acceptability of wet agricultural management of peat soils and subsequently the number of sites available for rewetting.

Key findings from speakers during this workshop include:

- The majority of EU countries with significant areas under organic soils are already engaging
 with planning for rewetting activities both directly through incentives specifically targeted at
 rewetting and indirectly through incentives targeted at reducing GHG emissions (as a major
 contributor to national GHG emissions reduction).
- All levels of stakeholders (land owners, rural dwellers, policy designers and researchers) need
 to be consulted when identifying peatland areas to be rewetted so that clear targets can be
 set-out and adjusted over the longer term. A combination of schemes to provide both direct
 support for Land Use Change (LUC) as well as indirect incentives that promote land conversion
 are beneficial.
- The Danish case study, demonstrates the importance of involving stakeholders and planning
 for long term perspectives as processes take time, to set clear targets and adjust plans
 incrementally. Targeted use of voluntary activity based schemes and a combination of multiple
 schemes, both direct incentives to change land use and indirect ones to facilitate conversion.
- Establishing production chains and value chains are key to facilitating and promoting peat soil rewetting and paludiculture.
- The main driver currently perpetuating peatland degradation are payments for drainage-based agriculture as they counteract major policy targets for climate, biodiversity, soil and water. A co-ordinated policy framework for peatland management has been lacking.

⁴ Internal Summary Report on the Rewetting Peat Soils Workshop



- Better alignment of new EU CAP based on national strategic plans submitted by EU member states will provide better opportunities for country specific measures address in organic soils including wet management/ paludiculture.
- Information, knowledge transfer and advisory support to farmers and landowners is required to increase adoption of carbon farming measures associated with peat soil rewetting and management for protections of soil carbon stocks.
- Key issues reported by multiple countries include land consolidation, socio-economic impacts
 of raising the water table and sufficient incentives to encourage and support rewetting,
 difficulties with the complex ownership of lands with peat soils.
- Social and economic analysis and technical information on water table management is required prior to implementation of rewetting schemes for peat soils on a local and regional basis. Information on the effects of peatland rewetting on wider rural society living in these peatland areas and the rural economy is required. This will inform investment requirements, rural regeneration programmes and incentive schemes prior to implementation of peatland rewetting policies.





5.3. Latvian National Workshop

A national forum was held in M27 by UL was attended by 19 stakeholders from nine organisations including policy makers, farmer's unions, and education and research organisations. The forum aimed to identify the scientific support needed to help policy stakeholders and farmers to reduce GHG from organic soils and to determine the quality of the data available for GHG calculations in Latvia on organic soils.

Needs Identified for measuring GHG Emissions from organic soils in Latvia

There is a need for:

- Specific EU policy framework is needed to address emissions from organic soils
- Greater overall synergies between existing agri-environmental policies that address soil, water and air
- The standardization and harmonization of the existing data that is available
- Greenhouse gas emissions data from long-term assessments in Latvia that can be used to constrain models and inform GHG calculations
- Updated and digitized information available for the underpinning of spatially explicit GHG emissions calculations from organic soils
- Policy indicators to be determined in such a way that production is not necessarily limited when reducing emissions on organic soils



6. Conclusion

This deliverable presents a refined and summarised report on priority scientific information and needs relevant to the work of the EJP SOIL. Needs for new research and needs surrounding access to available results were outlined for the topics addressed to date i.e. carbon farming and rewetting peat soils. These findings were based on one EU level workshop on carbon farming and an EU regional workshop on rewetting peat soils. The needs concerning management of organic soils were further supported by a national workshop in Latvia, as this country is currently working to develop policy in this area. Information collected from a survey targeted at pre-policy cycle stakeholders was also analysed to identify needs regarding the best ways to make the findings of EJP SOIL accessible to stakeholders. Internal consortium needs were also identified with respect to converting scientific findings into policy relevant outputs based on feedback received from the breakout group at the EJP SOIL general meeting of 2022.

The findings presented in this deliverable will inform further actions within WP8 Science to Policy throughout the EJP SOIL, as the translation of scientific findings to policy relevant information continues. The needs for new research presented on the topics of carbon farming and rewetting peat soils can potentially be addressed by projects within the EJP SOIL. The needs of the consortium when translating their science into policy can also be addressed by WP8 activities to assist and maximize the promotion of the findings of the EJP SOIL among policy stakeholders at all levels.