

Destination - Innovative governance, environmental observations and digital solutions in support of the Green Deal

Taking advantage of the use, uptake, and deployment of environmental observations as well as digital and data-based green solutions, assessed through the European Green Deal's 'do no harm' principle, is key for innovative governance models and for designing, implementing and monitoring science-based policy. To maximise impacts of R&I on the ground and spark behavioural and socio-economic change, the knowledge and innovation produced throughout the whole cluster should be widely disseminated to and exchanged between the key stakeholders and end users. In particular, the Agricultural Knowledge and Innovation Systems (AKIS) need to be strengthened in line with the 2023-2027 CAP to accelerate the required transformative changes.

Innovating with governance models and supporting policies

Transformative changes such as those required within the European Green Deal are dynamic processes that require appropriate governance. At the same time, to ensure coordination and for collaborative and informed decision-making, governance requires multiple channels and networks that provide readily available and robust data and information from different sources.

R&I activities under this destination aim to both: experiment with new ways to govern the transition process and strengthen the governance, in particular by ensuring i) appropriate and inclusive engagement with stakeholders, e.g. civil society and regional and local actors, ii) environmental observations coverage, and iii) that information and knowledge is made available and accessible. R&I for governance to support the European Green Deal should provide insights into the opportunities to overcome potential institutional barriers such as lock-ins, path dependency, political and cultural inertia, power imbalances and the ways to strengthen the effectiveness and efficiency of regulatory pathways. It should also help create synergies and linkages between different policy instruments and funding opportunities.

Innovative governance supporting the European Green Deal objectives needs to recognise, cope with and promote resilience and inclusiveness in the face of on-going shocks and disruptions across Europe and the world, whether these be climatic, ecological, economic, social, geopolitical or related to agricultural inputs and resources, food, health, bio-based sectors or the wider bioeconomy. The creation of networks with the public (citizen engagement) and researchers, including also through digital technologies, can step up transformation and enhance resilience in different areas, such as food. Critical risk assessment and reduction strategies need to be incorporated, including the diversification of infrastructures, resources and knowledge through more self-sufficiency and autonomy. Innovative governance will: i) support social innovation in the bioeconomy and bio-based systems (e.g. revitalisation of local communities with innovative bio-based business models and social innovation, or with co-creation and trust-building measures for biotechnology and bio-based innovation systems); ii) assess existing and emerging trade-offs of land and

biomass; and iii) strengthen the national bioeconomy networks in countries taking part in the Central-Eastern European Initiative for Knowledge-Based Agriculture, Aquaculture and Forestry in the Bioeconomy (BIOEAST Initiative)⁴¹².

The new **partnership ‘Agriculture of Data’** will help improve the sustainability performance of agricultural production and strengthen policy monitoring and evaluation capacities through using the full potential of Earth and environmental observation and data technologies. It will address public and private sector interests in a synergetic way. This will be done through responsible R&I delivering data-based green solutions and through establishing governance structures which allow for systemic approaches to capitalising and using data. The **partnership for a ‘Climate-neutral, sustainable and productive Blue Economy’** will enable a just and inclusive transition to a climate-neutral, sustainable and productive blue economy providing for a healthy ocean, people’s wellbeing, and a blue economy that is in harmony with nature and whose benefits are distributed fairly.

Deploying and adding value to environmental observations

Data and information obtained through environmental observation is of great value when assessing the state of the planet and is crucial to supporting the European Green Deal and the climate and ecological transitions. Integrating this information from different sources (space-based, airborne including drones, in-situ and citizens observations) with other relevant data and knowledge while ensuring (better) accessible, interoperable or deployable information, provides the information necessary for shaping the direction of policy development in the broad context of Cluster 6A strong link to Copernicus, the European Earth observation and monitoring part of the EU Space programme (in Cluster 4 - Digital, Industry and Space) and the European Space Agency’s (ESA) Earth observation programme, as well as support to the Group on Earth Observation (GEO), its European regional initiative (EuroGEO), the Global Earth Observation System of Systems (GEOSS) and the European Commission initiative *DestinationEarth*⁴¹³, is foreseen for topics on environmental observations under this destination. R&I activities relevant to the ocean, seas and coastal waters will complement and support the UN Decade of Ocean Science for Sustainable Development and the UN Decade on Ecosystem Restoration, the G7 Future of the Seas and Oceans Initiative, the European Global Ocean Observing System (EOOS) and the GOOS 2030 strategy.

Digital and data technologies as key enablers

Digital and data-based innovation, in complementarity with activities supported by Cluster 4 and the Digital Europe Programme, should bring benefits for citizens, businesses, researchers, the environment, society at large and policymakers. The potential of the ongoing digital transformation, and its wider impacts – both positive and negative – need to be better understood and monitored in view of future policy design and implementation, governance, and solution development. The potential for digital and data technologies, including AI-, IoT-, and augmented reality-based solutions, to increase the sustainability and resilience of

⁴¹² <https://bioeast.eu/>.

⁴¹³ <https://digital-strategy.ec.europa.eu/en/policies/destination-earth>.

production and consumption systems, as well as industry and services, in sectors covered by this Cluster will be exploited. This destination will contribute to the development, support and take up of innovative digital and data-based solutions to support communities, economic sectors relevant for this cluster and society at large to achieve sustainability objectives. The focus is on overall sustainable solutions tailored to the needs of end-users and/or the systems. More specifically, R&I activities will contribute to economic circularity by promoting reuse of materials and waste reduction, adding value to existing knowledge and increasing cost-effectiveness, safety and trustworthiness of innovative environmentally-friendly technologies in and across primary production sectors, food systems, bio-based sectors, bioeconomy, and sectors related to the oceans and biodiversity.

It will also increase attention given to precision and collaborative technologies and contribute to the human-centric twin green and digital transitions. This is a key policy objective that is also supported by the cross-cutting objective pursued by the CAP, the EU digital strategy, the European industrial strategy, the circular economy action plan, the SME strategy and the European data strategy.

Strengthening agricultural knowledge and innovation systems (AKIS)⁴¹⁴

Knowledge and advice to all actors relevant to this cluster are key to improving sustainability. For instance, primary producers have a particular need for impartial and tailored advice on sustainable management choices. Agriculture Knowledge and Innovation Systems (AKIS, which are at the heart of the 2023-2027 CAP's cross-cutting objective, go beyond agriculture, farming and rural activities and cover environment, climate, biodiversity, landscape, bioeconomy, consumers and citizens, i.e. all food and bio-based systems including value chains up to the consumer. R&I actions under this destination will support effective AKIS as a key driver to bridge the gap between science and practice and to enhance co-creation. This will speed up innovation and the take-up of results needed to achieve the European Green Deal objectives and targets.

This includes promoting interactive innovation and co-ownership of results by users as well as strengthening synergies with other EU funds, especially the CAP, boosting the multi-actor approach and setting up structural networking within national/regional/local AKIS. In addition, social innovation also has the potential to achieve the objectives set in this destination, as it strengthens the resilience of communities, increases the relevance, acceptance and uptake of innovation, and helps bring about lasting changes in social practices, therefore acting as a system changer.

Where appropriate, proposals are encouraged to cooperate with the European Commission Knowledge Centre on Earth Observation (KCEO)⁴¹⁵, in order to e.g. disseminate and exploit results.

Expected impact

⁴¹⁴ AKIS refers to the organisation and knowledge flows between persons, organisations and institutions who use and produce knowledge for agriculture and interrelated fields.

⁴¹⁵ https://knowledge4policy.ec.europa.eu/earthobservation_en.

Proposals for topics under this destination should set out a credible pathway contributing to innovative governance and sound decision-making on policies for the green transition and more specifically to one or more of the following impacts:

- innovative governance models enabling sustainability and resilience notably to achieve better informed decision-making processes, societal engagement and innovation;
- areas related to the European Green Deal benefit from further deployment and exploitation of environmental observation data, products and “green” solutions;
- a strengthened Global Earth Observation System of Systems (GEOSS)⁴¹⁶;
- sustainability performance and competitiveness in the areas covered by Cluster 6 are improved through further deployment of digital and data technologies as key enablers;
- stakeholders and end users including primary producers and consumers are better informed and engaged thanks to effective platforms such as AKIS;
- strengthened EU and international science-policy interfaces to achieve the Sustainable Development Goals.

When considering their impact, proposals also need to assess their compliance with the “Do No Significant Harm” principle according to which the project’s R&I activities should not support or carry out activities that cause a significant harm to any of the six environmental objectives of the EU Taxonomy Regulation⁴¹⁷.

Topics under this destination will have impacts in the following areas:

- “Climate change mitigation and adaptation”;
- “Clean and healthy air, water and soil”;
- “Enhancing ecosystems and biodiversity on land and in water”;
- “Sustainable food systems from farm to fork on land and sea”;
- “High quality digital services for all”;
- “A Competitive and secure data-economy”.

Social innovation is recommended when the solution is at the socio-technical interface and requires social change, new social practices, social ownership or market uptake. In this cluster, it is envisaged that topics will be coordinated with European Space Agency (ESA)

⁴¹⁶ The European Commission is a member and co-chair of the Group on Earth Observations (GEO), as such the European Commission adopted the [GEO Canberra Declaration](#) and Commission Decision C(2019)7337/F1, and committed to contribute to the GEO objectives, including to the Global Earth Observation System of Systems (GEOSS).

⁴¹⁷ As per Article 17 of Regulation (EU) No 2020/852 on the establishment of a framework to facilitate sustainable investment (EU Taxonomy Regulation).

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actions so that ESA space data and science can be proactively integrated into the relevant research actions of the WP.

The following call(s) in this work programme contribute to this destination:

Call	Budgets (EUR million)		Deadline(s)
	2023	2024	
HORIZON-CL6-2023-GOVERNANCE-01	130.00	20.00	23 Mar 2023
HORIZON-CL6-2023-GOVERNANCE-02	4.00		21 Sep 2023
HORIZON-CL6-2024-GOVERNANCE-01		133.50	28 Feb 2024
Overall indicative budget	134.00	153.50	

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Conditions for the Call

Indicative budget(s)⁴¹⁸

Topics	Type of Action	Budgets (EUR million)		Expected EU contribution per project (EUR million) ⁴¹⁹	Indicative number of projects expected to be funded
		2023	2024		
Opening: 22 Dec 2022 Deadline(s): 23 Mar 2023					
HORIZON-CL6-2023-GOVERNANCE-01-1	COFUND	20.00	20.00	Around 40.00	1
HORIZON-CL6-2023-GOVERNANCE-01-10	CSA	2.00		Around 2.00	1
HORIZON-CL6-2023-GOVERNANCE-01-11	RIA	9.00		Around 9.00	1
HORIZON-CL6-2023-GOVERNANCE-01-12	RIA	7.00		Around 7.00	1
HORIZON-CL6-2023-GOVERNANCE-01-13	RIA	10.00		Around 5.00	2
HORIZON-CL6-2023-GOVERNANCE-01-14	CSA	5.00		Around 5.00	1
HORIZON-CL6-2023-	RIA	5.00		Around	1

⁴¹⁸ The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023 and 2024.

⁴¹⁹ Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

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GOVERNANCE-01-15				5.00	
HORIZON-CL6-2023- GOVERNANCE-01-16	RIA	10.00		Around 5.00	2
HORIZON-CL6-2023- GOVERNANCE-01-17	RIA	8.00		Around 4.00	2
HORIZON-CL6-2023- GOVERNANCE-01-18	CSA	4.00		Around 2.00	2
HORIZON-CL6-2023- GOVERNANCE-01-19	CSA	6.00		Around 3.00	2
HORIZON-CL6-2023- GOVERNANCE-01-2	RIA	6.00		Around 6.00	1
HORIZON-CL6-2023- GOVERNANCE-01-20	CSA	5.00		Around 5.00	1
HORIZON-CL6-2023- GOVERNANCE-01-21	CSA	4.00		Around 4.00	1
HORIZON-CL6-2023- GOVERNANCE-01-22	CSA	4.00		Around 4.00	1
HORIZON-CL6-2023- GOVERNANCE-01-3	RIA	3.00		Around 3.00	1
HORIZON-CL6-2023- GOVERNANCE-01-4	RIA	6.00		Around 6.00	1
HORIZON-CL6-2023- GOVERNANCE-01-5	RIA	5.00		Around 5.00	1
HORIZON-CL6-2023- GOVERNANCE-01-6	CSA	1.50		Around 1.50	1
HORIZON-CL6-2023- GOVERNANCE-01-7	RIA	4.00		Around 4.00	1
HORIZON-CL6-2023- GOVERNANCE-01-8	CSA	3.50		Around 3.50	1
HORIZON-CL6-2023- GOVERNANCE-01-9	CSA	2.00		Around 2.00	1
Overall indicative budget		130.00	20.00		

General conditions relating to this call	
<i>Admissibility conditions</i>	The conditions are described in General Annex A.
<i>Eligibility conditions</i>	The conditions are described in General Annex B.
<i>Financial and operational capacity and exclusion</i>	The criteria are described in General Annex C.
<i>Award criteria</i>	The criteria are described in General Annex D.
<i>Documents</i>	The documents are described in General Annex E.
<i>Procedure</i>	The procedure is described in General Annex F.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G.

Innovating with governance models and supporting policies

Proposals are invited against the following topic(s):

HORIZON-CL6-2023-GOVERNANCE-01-1: European partnership of Agriculture of Data

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 40.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 40.00 million.
<i>Type of Action</i>	Programme Co-fund Action
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other data and services may additionally be used).

<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>The funding rate is 30% of the eligible costs.</p> <p>Beneficiaries may provide financial support to third parties. The support to third parties can only be provided in the form of grants. As financial support provided by the participants to third parties is one of the primary activities of this action in order to be able to achieve its objectives, the 60 000 EUR threshold provided for in Article 204 (a) of the Financial Regulation No 2018/1046 does not apply. The maximum amount to be granted to each third party is EUR 10 000 000 for the whole duration of Horizon Europe.</p>
<i>Total indicative budget</i>	<p>The total indicative budget for the duration of the partnership is EUR 100 million.</p>

Expected Outcome: A successful proposal will contribute to the objectives of the Agriculture of Data partnership proposal including the strategic research and innovation agenda. This partnership aims to enhance climate, environmental and socio-economic sustainability and productivity of agriculture and to strengthen policy monitoring and evaluation capacities through exploiting the potential of Earth and environmental observation and other data, in combination with data technologies.

Proposals are expected to contribute to all of the following outcomes (as listed in the partnership document⁴²⁰):

- Increased sharing and harmonisation of data across different actors (e.g. scientists, technicians, policymakers, practitioners, businesses, farmers, end users) and countries based to the extent possible on FAIR⁴²¹ data principles, and exploitation of synergies through better integration of the digital Earth, environmental observation, space observation and agricultural communities within Europe, transforming both the R&I and economic systems to deliver more and better data-based solutions to the end users;
- Increased environmental, climate and socio-economical sustainability performance of the agriculture sector;
- Enhanced contribution from the agriculture sector to the important need for protecting the environment, halting and, if possible, reversing biodiversity loss in Europe and globally, as well as to the reduction of greenhouse gas emissions from agriculture;
- Enabling the sector and strengthen its capacity to adapt to climate change and to meet the objectives set by sustainability-related policies, considering e.g. risk analyses/indicators, such as environmental, technical, economic or social risks;

⁴²⁰ https://ec.europa.eu/info/sites/default/files/research_and_innovation/funding/documents/ec_rtd_he-partnership-agriculture-data.pdf

⁴²¹ <https://www.go-fair.org/fair-principles/>

- Contribution to creating structures and/or its concept under the umbrella of the partnership Agriculture of Data that includes data infrastructure needed to provide data-based solutions for both policy-making and the agriculture sector (including to strengthening the sector's economic performance);
- Strengthened capacities to evaluate the effectiveness of policies (with reference to agriculture, environmental- and market-related policies and the combined potential effects of them).

Scope: Sustainable agricultural production and policy monitoring needs can be supported through the provision of tailored data and data-based solutions; especially, through Earth/environmental observation and in combination with other data and data technologies. At the same time, the agricultural sector at farm level produces data during digitalised farming practises, as also does the public administration. This data can be capitalised to strengthen capacities of the agricultural sector in the public and the private domains. Integrating different sources of data, for instance Copernicus⁴²² data, precision farming data, Integrated Administration Control System (IACS⁴²³)-data and other reference data, would lead to even more relevant information in this context and provide scope for the development, delivery and uptake of agri-digitalisation products and services, such as decision-making support systems.

Proposals should pool the necessary financial resources from the participating national (or regional) research programmes with a view to implementing joint calls for transnational proposals resulting in grants to third parties.

The successful proposal should:

- Exploit the potential of public and private data, including in the combination with data technologies (including AI) for the agricultural sector in the public and private domain;
- Build on results of existing (ongoing or finished) initiatives and projects;
- Foster EU-wide solutions, scaling up⁴²⁴ of use-cases and applications close to deployment stage;
- Develop data-based solutions and digital applications in support of achieving the expected impacts of the partnership;
- Consider the necessary technical systemic elements related to e.g. digital and data infrastructure and interoperability;
- Demonstrate how the expected result contribute to the European Green Deal objectives and the ambition of better policy-making⁴²⁵;

⁴²² <https://www.copernicus.eu/en>

⁴²³ https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/financing-cap/financial-assurance/managing-payments_en

⁴²⁴ Scaling up should be considered as both the scaling up in TRL or scaling up in geographical outreach

- Demonstrate how it will align to the ongoing work of the Horizon Europe partnership on Agriculture of Data and the projects granted under call HORIZON-CL6-2022-GOVERNANCE-01-11: Upscaling (real-time) sensor data for EU-wide monitoring of production and agri-environmental conditions⁴²⁶.

A successful proposal is expected to explore the potential for achieving synergies with relevant topics/ projects, partnerships and/ or missions particularly within Cluster 6 and Cluster 4 of the Horizon Europe programme, as well as with the digital Europe programme, the EU space programme and the common agricultural policy.

The strategic research and innovation agenda for the partnership on agriculture of data will give further guidance on possible specific elements to be addressed within the proposal.

The Commission envisages to include new actions in its future work programmes to provide continued support to the partnership for the duration of Horizon Europe.

HORIZON-CL6-2023-GOVERNANCE-01-2: Advancing analytical capacity and tools to support EU agri-food policies post 2027

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 6.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 6.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

Expected Outcome: In line with the European Green Deal, the European Commission aims at more sustainable food systems that reduce their negative impact on climate change and biodiversity loss, while ensuring that farmers and consumers can benefit from it and our long-term food security and public health. Successful proposals will advance analytical capacity and tools to support future evidence-based policies to accelerate the transition to sustainable food systems. While the focus is on agri-food policies, European Green Deal actions relating to climate and environment should also be integrated in the assessment/approaches where relevant.

⁴²⁵ https://ec.europa.eu/info/law/law-making-process/planning-and-proposing-law/better-regulation-why-and-how_en

⁴²⁶ <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-cl6-2022-governance-01-11>

Project results are expected to contribute to all of the following expected outcomes:

- Improved analytical capacity and tools (including models) to assess short-term and long-term impacts of future EU agri-food policies on food systems (and on their actors);
- Enhanced evidence-based knowledge supporting analysis and design of agri-food policies.

Scope: Various studies recently published, analysed the possible effects of some elements of the farm to fork and biodiversity strategies on EU agriculture⁴²⁷. The studies provide both the scientific community and policymakers with a valuable insight on the choice of policy tools to minimize trade-offs and maximise synergies between the impacts. However, the models used in the studies all have their limitations. They do not comprehensively address all the components of the European Green Deal in order to adequately support policy analysis. In view of that, the proposals should address these limitations and:

- Build and/or advance analytical capacity to support the quantitative assessment of impacts of future agri-food policies on economic, social (including health), environmental and climate sustainability of food systems;
- Address the modelling gaps that were not taken into account in previous studies¹⁸⁴ to enable analyses of the effects of the agri-food policies on sustainability (including public health) of food systems under diverse scenarios, with particular attention to trade-offs and synergies that they may entail in order to improve policy coherence;
- Further develop, expand and improve the models covered under iMAP, also by exploiting linkages and integrations with other models. New approaches should be developed for further advancing the state of the art by modelling, e.g., input use and costs, uptake of new knowledge, practices and innovations, supply chains, consumer behavioural changes, circular economy, health care system, public health, etc.
- Particular attention should be given to capturing shifts in supply and demand, and feedback loops throughout the food system – upstream and downstream of agriculture. Further advancing the state of the art by modelling, e.g., input use and costs, uptake of new knowledge, practices and innovations, supply chains, consumer behavioural changes, circular economy, etc. Linkages between economic and bio-physical models should be improved.
- Moreover, alternative quantitative approaches to modelling should be developed, especially for improving the capacity to assess:
 - o interrelations (e.g., absence of pure and perfect competition) and impacts on different actors across the food systems, e.g., farmers, SMEs, consumer, food supply chains, etc.;

⁴²⁷ European Green Deal targets for 2030 and agricultural production studies (February 2022).
https://ec.europa.eu/info/sites/default/files/food-farming-fisheries/key_policies/documents/factsheet-farmtofork-comparison-table_en.pdf

- o nature-based approaches, cost of no action, biomass balance, etc.
- Collaborate and complement the projects funded under Horizon 2020 (e.g., SFS-49-2017: SUPREMA⁴²⁸; RUR-03-2018: CONSOLE, Contract2.0 and EFFECT; RUR 04-2018-2019: Mind Step, BESTMAP, AGRICORE and BATModel) and Horizon Europe (e.g., BrightSpace and LAMASUS).
- Guide long-term model developments, identify new potential interesting models, preserve and build stable bridges between models, integrate models and enable improved multi-disciplinary research related to the European Green Deal or other relevant future policy initiatives.
- Ensure consistency with modelling tools used to monitor and evaluate environmental and climate policies in related fields (e.g. emissions and removals in LULUCF and agriculture sectors for greenhouse gas inventories).

This project requires a multi-disciplinary approach/teams encompassing economics, environment and climate, health and other social policies.

It is key also to establish a regular dialogue with the European Commission regarding objectives, timeline and main deliverables with the goal to provide analytical tools and evidence-based knowledge to support implementation and future developments of agri-food policies, notably the common agricultural policy (CAP) post 2027 and the future EU legal framework for sustainable food systems.

Collaboration with the JRC is strongly encouraged. The possible participation of the JRC in the project will ensure that the approach proposed will advance jointly the state of the art, and be compatible and effectively integrated with the tools used at the European Commission. Project duration should not be shorter than four years.

HORIZON-CL6-2023-GOVERNANCE-01-3: Towards CAP post 2027: evidence on nudging farmers to leverage more sustainable practices and behaviours

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 3.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 3.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility</i>	The conditions are described in General Annex B. The following

⁴²⁸

<https://www.suprema-project.eu/images/RoadMap-Conclusions-PolicyBrief1.pdf>

<i>conditions</i>	exceptions apply: The Joint Research Centre (JRC) may participate as member of the consortium selected for funding. The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
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Expected Outcome: In line with the European Green Deal, notably the farm to fork and EU biodiversity strategies, the fit for 55 legislative package, the EU action plan: 'towards zero pollution for air, water and soil' and the common agricultural policy (CAP), the successful proposals should support the development of policies, business models and market conditions that enable sustainable, productive and climate-neutral agricultural systems. The farming systems should provide consumers with healthy and sustainable food affordable for all, improving public health, minimising pressure on and enhancing biodiversity and ecosystem services, contributing to climate neutrality, and generating fair economic returns for farmers.

Proposals results are expected to contribute to all of the following expected outcomes:

- Innovative green nudges efficiently contribute to move farmers and foresters towards more sustainable practices that enhance climate action (i.e. reduce greenhouse gas emissions and increase carbon removals), biodiversity protection and restoration, and the reduction of emissions or concentrations of air pollutants;
- Models of social innovation and innovative co-operation along the value chains which nudge farmers and foresters towards more sustainable behaviours;
- New effective nudging solutions are provided to policymakers to better address sustainability goals;
- Green nudges are used to complement environmental, food and bioeconomy policies towards more sustainable and circular production systems;
- New policies are designed taking into account farmers' environmental attitudes, risk aversion, inequality aversion, cognitive strategies and the importance of non-monetary benefits.

Scope: According to the prediction of the Food and Agriculture Organization, food supply must increase by almost 70% by 2050, with tremendous consequences in terms of land depletion, natural capital and resource use, and greenhouse gas emissions. The current agri-food system is inadequate to the need to cope with this increased demand while also preserving the environment.⁴²⁹ Although the EU has made strides in improving the sustainability of agriculture, substantial efforts are still needed to achieve the ambitious targets of the European Green Deal, in particular the bioeconomy strategy, EU farm to fork

⁴²⁹ [Can nudging improve the environmental impact of food supply chain? A systematic review - ScienceDirect.](#)

and biodiversity strategies 2030, the communication on sustainable carbon cycles, farm to fork strategy, circular economy action plan (CEAP) and the objectives of the 2023-2027 CAP. The common agricultural policy is a key tool to achieve a sustainable transformation, and it puts farmers at the core of its actions. We currently know very little about the role of behavioural factors in determining farmers choices and whether non-pecuniary mechanism, such as policy nudge⁴³⁰, can be used effectively in policy design. Evidence about the adoption of nudging tools in promoting environmentally sustainable practices along the food supply chain, including the role of circular bio-based options⁴³¹, are still relatively sparse. In particular, nudges that have been proved to work efficiently on the consumer side (e.g., default nudges, social norm nudges, choice architecture) do not translate well to farmers, and farmers may respond to nudges in a heterogeneous manner, based on their specificities⁴³².

An in-depth understanding of farmers' nudges is key to spurring large-scale and lasting shifts to sustainable farming systems.

Proposals should take a comprehensive behavioural approach and investigate proximal and distal factors to better understand farmers' behaviour in decision-making, in order to inform the design and implementation of EU policies (in particular the CAP) and the European Green Deal initiatives with particular focus on farm to fork, biodiversity strategies and climate action.

Proposals should:

- Investigate whether green nudges are able to generate robust and durable behavioural change in farmers and foresters and look into existing and efficient nudging practices in agriculture and forestry sectors to create best practices and develop recommendations for EU policymakers on nudging in public policies of concern for farmers and foresters.
- Investigate, identify and test innovative nudging practices to help farmers and foresters move into sustainable farming systems, also considering behavioural factors that could influence farmers/foresters deciding or not to engage in these practices.
- Investigate these behavioural factors and identify innovative tools to enlarge knowledge in this field and to improve farmers and foresters' self-regulatory capacity. Test appropriate policy mechanisms for incorporating the perception of farmers and foresters in decision-making and assess the potential for upscaling innovative nudging practices.
- Create policy recommendations to the decision-makers, including to the AKIS Coordination Bodies in member States, to adapt and tailor CAP AKIS interventions accordingly.

⁴³⁰ Nudges is defined as an intervention which leads to a predictable change in behaviour by reinforcing the intentions to act in a sustainable way or by indirectly suggesting adoption of new practices that are easy to implement and do not fundamentally change the incentives of individuals or groups of individuals.

⁴³¹ Complementary to the topic HORIZON-CL6-2023-GOVERNANCE-XX: Revitalisation of European local (rural / peri-urban) communities with innovative bio-based business models and social innovation

⁴³² <https://publications.jrc.ec.europa.eu/repository/handle/JRC122308>.

Proposals should explore social innovation and innovative forms of cooperation, including multi-stakeholder/multi-actor partnerships along the value chains, as well as how interactions within value chains/sectors contribute to or hinder the adoption of relevant sustainability-oriented innovations. The proposals are expected to use the multi actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.

The JRC participation could involve contributing to the investigation, identification and design of nudging practices and eventually participate in the testing phase in one country.

Proposals should include a dedicated task, appropriate resources and a plan on how they will collaborate with other projects funded under this or other topics (i.e. but not limited to projects funded under topic HORIZON-CL6-2021-FARM2FORK-01-08)

Beyond open access to scientific publications and research data, open access to software, models, workflows, etc. is required to ensure accelerated uptake of innovation, increase research transparency, support immediate and extensive re-use of research materials, and support collaborative and interdisciplinary work, among others.

HORIZON-CL6-2023-GOVERNANCE-01-4: Developing an interdisciplinary and inclusive pan-European academic network for food system science

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 6.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 6.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.</p> <p>The following additional eligibility criteria apply: the proposals must establish a pan-European network and carry out inter- and transdisciplinary research, as well as policy research, support education and outreach.</p>

Expected Outcome: In line with the objectives of the European Green Deal, the farm to fork strategy for a fair, healthy and environment-friendly food system, the Food 2030 priorities and the EU’s climate ambition for 2030 and 2050, the successful proposal will contribute to the transformation and sustainability of EU food systems by supporting the establishment of

innovative governance models notably to achieve better-informed decision-making processes and facilitate inter- and transdisciplinary research methods.

Successful proposals will develop an interdisciplinary and inclusive pan-European academic network for food system science that integrates the social sciences and humanities (SSH), design, engineering and natural and applied sciences. Central to the work of the academic network is the concept of Responsible Research and Innovation (RRI). In particular, successful proposals will set out how the network and its members can work to improve and/or develop: new methods and tools, data access and knowledge sharing, inter- and transdisciplinary research and the assessment of impacts in complex and interconnected food systems. The network will act as a European building block in fostering improved food system governance at all scales and will connect with related key international fora. By deepening engagement amongst researchers, scientific disciplines and science performers, this initiative will build capacity to strengthen the role of science and knowledge for sustainable food systems transition in Europe and beyond.

Project results are expected to contribute to all of the following expected outcomes:

- Establish a broad pan-European interdisciplinary academic network.
- Foster inter-, transdisciplinary, participatory, policy and regulatory research to develop new insights, findings, models, methods and tools to assess and manage the full systemic complexity of food systems.
- A strengthened European Research Area for sustainable food systems transformation for co-benefits, which federates a wide diversity of scientific actors across Europe, promotes gender equality in research, attracts young talents and fosters inclusiveness and cooperation across scientific disciplines, and promotes education and outreach.
- Contribution to the farm to fork objectives and Food 2030 priorities: nutrition for sustainable healthy diets, climate, biodiversity and environment, circularity and resource efficiency, innovation and empowering communities (e.g., meeting the needs, values and expectations of society in a responsible and ethical way).

Scope: Food systems face the triple challenge of providing food security and nutrition for a growing global population, and livelihoods to farmers (OECD, 2021).⁴³³ To meet these challenges, a food system transformation is needed to make the EU food system future-proof, in line with the farm to fork strategy and the European Commission's food 2030 initiative.

The project will build an interdisciplinary and inclusive pan-European academic network for food system science, that will integrate the social sciences and humanities, design, engineering and natural and applied sciences. The aim of the network is to federate research performers including universities, national science academies and research centres, academics and researchers across Europe to work together on sustainable food systems transition by

⁴³³ OECD (2021), *Making Better Policies for Food Systems*, OECD Publishing, Paris, <https://doi.org/10.1787/dfba4de-en>.

carrying out inter- and transdisciplinary research, developing and applying new methods, models and tools, improving data and knowledge sharing, fostering debate and providing advice to policy makers for improved decision-making at all levels – from global to local, as needed.

Proposed activities should cover all of the following aspects:

- Establish a broad pan-European interdisciplinary network of researchers, scientists, and research performers including national science academies, universities and research centres representing diverse and interconnected food systems-related disciplines.
- The network will conduct different types of research: inter-, transdisciplinary and participatory research, as well as policy/regulatory research.
- Interdisciplinary research activities will develop new systems science insights, models, methods and tools to assess and manage the full systemic complexity of food systems, their multiple drivers and dynamics, with the aim of providing research outcomes that deliver co-benefits and minimise adverse effects. The research will also increase understanding of how food systems interact with other bioeconomy demands on biological resources (e.g., energy system, bio-based industry, climate mitigation and adaptation, supply of ecosystem services, etc.).
- Transdisciplinary and participatory research activities will foster collaboration with different food systems stakeholders (e.g., public authorities, local and regional communities, civil society organisations, the private sector, consumers, etc.) to identify knowledge gaps, high priority research needs, and collaborative responses to them. This may include the organization of iterative stakeholder workshops, interviews, questionnaires and the collaboration with existing or future food policy/living labs.
- Policy and regulatory research activities will be designed to provide evidence to support systemic policy and decision making, as needed. In this respect, research is welcome on how to transition to a true cost of food that adequately embeds social and environmental externalities at all levels (global to local).
- Building on the RTD/2020/SC/022 study “Promote education, training and skills across the bioeconomy”, the network will develop open access educational material/curricula to be used by Higher Education Institutes to help strengthen their existing food systems-related teaching and research with an inter- and transdisciplinary systems dimension.
- Support the training, mobility, mutual learning and knowledge sharing amongst researchers (including masters to post-doc levels) and foster open science approaches that also accelerate gender equality, attract young talents, foster inclusiveness and reuse of research knowledge (including the sharing of FAIR and open digital research or educational output). This will also include the organization of a high-level annual summer camp/school providing inter- and transdisciplinary food systems and bioeconomy science training open to youth from all over Europe.

- Organise an international bi-annual conference dedicated to advancing integrated food systems science. In this context special attention will be placed on awarding excellence amongst young researchers, including young women researchers.
- Establish a high-level liaison with EU and relevant international initiatives acting at the science-policy interface for improved food systems governance.
- Proposals are encouraged to cooperate with actors such as the European Commission’s Joint Research Centre (JRC). The JRC may provide expertise on how to strengthen the relationship between scientists and European policy makers and to promote research and collaboration on food systems science.

Proposals should include a dedicated task, appropriate resources and a plan on how they will collaborate with the projects funded under the work programme from WP2021-2022, namely HORIZON-CL6-2021-GOVERNANCE-01-02 (FOSTER, Fostering food system transformation by integrating heterogeneous perspectives in knowledge and innovation within the ERA) and with the living labs and lighthouses foreseen under the Horizon Europe Mission ‘A Soil Deal for Europe’. Projects should also build on the findings of the European Commission’s High Level Expert Group (HLEG) that addressed needs and options to strengthen the international science policy interface for improved global food system governance.

Collaboration and complementary with the European Partnership on “Sustainable Food Systems for People, Plant and Climate” is encouraged. In order to achieve the expected outcomes, international cooperation is encouraged.

Efforts shall be made to ensure that the data and the educational output produced in the context of this topic is FAIR (Findable, Accessible, Interoperable and Re-usable).

HORIZON-CL6-2023-GOVERNANCE-01-5: Revitalisation of European local (rural / peri-urban) communities with innovative bio-based business models and social innovation

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 5.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 5.00 million.
<i>Type of Action</i>	Research and Innovation Actions

Expected Outcome: Successful proposals will contribute to the expected impacts of Destination ‘Innovative governance, environmental observations and digital solutions in support of the Green Deal, and the European policies it supports, by supporting the

establishment of the innovative governance models notably to achieve better-informed decision-making processes, social engagement and innovation. Furthermore, it will contribute to strengthened EU and international science-policy interfaces to achieve the Sustainable Development Goals.

Proposal results are expected to contribute to all following expected outcomes:

- Higher impact of bio-based innovation to accelerate the transition from a linear fossil-based economy, which leads to overuse and depletion of natural resources, into a resource-efficient and circular bio-based systems operating within safe planetary boundaries.
- Improved and informed public awareness, governance and especially social innovation contributing to reduced resource consumption and increased innovation capacity of all actors, in respect to circular bio-based sectors, reduced risk of leaving anyone behind, particularly in the areas and communities in need of revitalization (focus on rural and peri-urban areas).
- Higher level of innovation at local scale and inclusive engagement of all actors (especially focusing on the ‘social enterprise’ model relevant for vulnerable populations).

Scope:

- Proposals will benefit from social creativity and economic opportunities at local/regional scale unleashed for bio-based systems, taking care of their high environmental performances, in terms of local bio-based feedstock, resources, processes, skills, materials and products. Impacts and trade-offs, such as lower carbon footprint and environmental impacts of the whole value chains shall be part of the assessment of the bio-based systems.
- Communication and dissemination activities need to take into account the inclusive nature of engagement of local actors (e.g., use of languages, mutual learning process, trust building measures), to achieve exchange of best practice at European level, and connection to appropriate local governance structure.
- Integration of regional, local, or macro-regional policy makers is considered essential, as is the involvement of civil society (NGOs, consumer organisations, etc). This should include the assessment of robustness of existing governance schemes, to allow replication across Europe (taking into account the issues such as the income generation for all stakeholders, labour conditions, environmental indicators, social engagement, innovation parameters etc).
- The development of novel bio-based models shall involve economic actors, primarily SMEs, but also rural entrepreneurial structures (e.g., cooperatives, professional associations). Digital solutions to connect and inform all stakeholders, including consumers, shall be given due consideration.

- Projects should build on past or parallel activities, e.g., Horizon 2020 projects Power4Bio, BE-Rural or the projects funded under the call HORIZON-CL6-2021-GOVERNANCE-01-09: Revitalisation of European local communities with innovative bio-based business models and social innovation, as well as the past/on-going projects under the Bio-based Industries Joint Undertaking (BBI JU), seeking synergies and links with upcoming activities of the Circular Bio-based Europe Partnership⁴³⁴, as well as Horizon Europe calls⁴³⁵.
- In order to avoid the risk of duplication of efforts and to limit the focus to rural and peri-urban actions, the present topic excludes blue (marine and maritime) bio-based activities from its scope.
- International cooperation should be considered, aiming at exchange of best practice.
- Social innovation is recommended when the solution is at the socio-technical interface and requires social change, new social practices, social ownership or market uptake. Proposal should explore intersectionality approaches and consider aspects like gender, ethnicity, migrant or refugee status, social class, sexual orientation and disability to ensure inclusion of marginalised groups in citizen engagement and the development of tools and guidelines.
- This topic requires the effective contribution of SSH disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

HORIZON-CL6-2023-GOVERNANCE-01-6: Co-creation and trust-building measures for biotechnology and bio-based innovation systems

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 1.50 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 1.50 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Legal and financial set-up of the Grant</i>	The rules are described in General Annex G. The following exceptions apply:

⁴³⁴ www.bbi.europa.eu/about/circular-bio-based-europe-joint-undertaking-cbe-ju.

⁴³⁵ E.g., under the Destination – Resilient, inclusive, healthy and green rural, coastal and urban communities e.g., see topic HORIZON-CL6-2024-COMMUNITIES-02-1-two-stage: Innovating for climate-neutral rural communities by 2050.

<i>Agreements</i>	Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁴³⁶ .
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Expected Outcome: Successful proposal will contribute to the expected impacts of Destination ‘Innovative governance, environmental observations and digital solutions in support of the Green Deal’, and the European policies it supports, by supporting the establishment of the innovative governance models notably to achieve better-informed decision-making processes, social engagement and innovation.

Projects results are expected to contribute to all following expected outcomes:

- Developing a co-creation programme and guidelines on improved knowledge exchange and awareness raising for biotechnology with focus on bio-based innovation.
- Improvement of innovation uptake for modern and emerging key enabling technologies, in particular (industrial) biotechnology and related bio-based value chains across the EU, supporting the EU Bioeconomy Strategy Action Plan⁴³⁷ and the Industrial Strategy.
- Creation of the forum to foster an inclusive, science-oriented mutual learning platform, engaging all actors, especially those in the advisory capacity, policy makers at all levels, the civil society and the biotechnology sector.
- Reinforcing the evidence-based understanding of potential positive (benefits) and negative impacts of biotechnology.
- Development of the transparent and inclusive trust building measures for the implementation of industrial biotechnology, and bio-based innovation according to the UN Sustainable Development Goals.

Scope:

- Transparent and informed governance and innovation, such as industrial- and other types of biotechnology, based on evidence and underpinned by public trust, could contribute to improved resource efficiency, limit the wastage, enable an increased innovation capacity of all actors, and contribute to industrial competitiveness with new products and services.

⁴³⁶ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁴³⁷ Action 3.1.3. Study and analysis of enablers and bottlenecks and provide voluntary guidance to the deployment of bio-based innovations.

- The key priorities in this regard are the consumer and environmental safety, both in terms of respecting the planetary boundaries (e.g., limiting the potential higher resource consumption), and a capacity to transparently address the risks through the risk analysis framework, while taking into account diverse social attitudes and understanding especially regarding environmental (e.g., biodiversity) considerations.
- Proposals will benefit from social creativity and engagement and will seek to support the improved understanding at all scales to unleash the innovation for bio-based systems, taking care to address their potential advantages in terms of feedstock, resources, processes, materials and products. Impacts and trade-offs, such as resource efficiency, carbon and biodiversity footprint and potential negative health and environmental effects of the whole value chains shall be considered⁴³⁸.
- The proposals will seek complementarities with related actions on governance of bio-based innovation and ensure inclusiveness and engagement of all actors⁴³⁹.
- International cooperation is encouraged, aiming at exchange of best practice at global level.
- This topic requires the effective contribution of SSH disciplines and the involvement of SSH experts, institutions as well as the inclusion of relevant SSH expertise, in order to produce meaningful and significant effects enhancing the societal impact of the related research activities.

HORIZON-CL6-2023-GOVERNANCE-01-7: Integrated assessment of land use and biomass demands to contribute to a sustainable healthy and fair bioeconomy

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 4.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.

⁴³⁸ See parallel topic HORIZON-CL6-2023-ZEROPOLLUTION-01-5: Industrial biotechnology approaches for improved sustainability and output of industrial processes.

⁴³⁹ E.g., see parallel topic HORIZON-CL6-2024-CircBio-01-9: Bioeconomy project development assistance, other topics in this Destination and activities of the Circular Bio-based Europe JU.

	The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
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Expected Outcome: In line with the European Green Deal priorities, the EU's climate ambition for 2030 and 2050 and the bioeconomy strategy vision of an economic system that acts within environmental and social boundaries, the successful proposal will aim to develop or improve land use models and tools, enabling sustainability assessments to support better-informed policy- and decision-making processes, particularly on a national and regional level. European Green Deal related policy domains will benefit from further deployment and exploitation of this Environmental Observation data.

Project results are expected to contribute to all of the following expected outcomes:

- Better understanding, methods and tools for determining the potential and limits of land and biomass to contribute to the climate, biodiversity, environmental, as well as social and economic objectives of the European Green Deal.
- Enhanced knowledge on the policy pathways for maximising the climate benefit of bioeconomy solutions within ecological boundaries and improved decision-making for ensuring policy coherence on the national and regional level.

Scope:

- Improve understanding of direct and indirect implications of current and future regional, national or EU policies and targets on land and biomass use, including an assessment of existing and emerging trade-offs, using and improving existing databases with high resolution data.
- Develop methodologies as well as tools for national and regional policy- and decision-makers to carry out integrated bioeconomy assessments of land and biomass use. The assessments will integrate existing and future EU, national and regional climate, environmental and food policies with projections on industrial biomass demand, and assess their implications on land and biomass use, taking into account trade-offs and synergies.
- Using the methodologies, quantify and project the land and biomass use and its climate mitigation potential, including the substitution effect of bio-based products and land impacts of diets, in at least four case study regions covering different socio-economic situations and climate/ecological zones in the EU and Associated Countries. The data should also cover, but not be excluded to, land use intensity and management types and their respective areas as well as biomass stocks and flows.
- Take into account biophysical and as far as possible, legal and socioeconomic constraints determining possible land use and biomass potentials.

- Seek to understand and identify factors determining land management practices and enabling nature-based solutions that maximise the co-production of ecosystem services, biodiversity restoration and preservation, enhanced climate mitigation and net primary production.
- Seek to understand and identify optimum/sustainable land-dependent and land-independent food supply for healthy, safe and sustainable diets.

The proposals must use the multi-actor approach by involving a wide diversity of bioeconomy actors and conducting trans-disciplinary research.

Where relevant, activities should build and expand on the results of past and ongoing research projects. The project requires an active collaboration with the JRC on the development of the necessary methods and approaches for the activities described in the scope of the topic.

HORIZON-CL6-2023-GOVERNANCE-01-8: Mobilising BIOEAST networks for the development of national bioeconomy action programmes in support of the European Green Deal

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 3.50 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 3.50 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁴⁴⁰ .

⁴⁴⁰ This [decision](#) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link:

Expected Outcome: In line with the European Green Deal priorities, the EU's climate ambition for 2030 and 2050 and the bioeconomy strategy vision of an economic system that acts within environmental and social boundaries, the successful proposal will support R&I to strengthen the national bioeconomy networks in BIOEAST⁴⁴¹ countries for the development of national bioeconomy action programmes and engage relevant stakeholders in the development of the action plans. The successful proposal will contribute to the expected impacts of Destination 'Innovative governance, environmental observations and digital solutions in support of the Green Deal', and the European policies it supports, by supporting the establishment of the innovative governance models notably to achieve better informed decision-making processes, social engagement and innovation.

Project results are expected to contribute to all of the following expected outcomes:

- Strengthened human capacity and competitiveness of the BIOEAST public administrative bodies (ministries, research funding organisations, research institutions etc.) for attracting professionals to ensure an adequate number of experts working on bioeconomy issues/coordinating bioeconomy policy development in each Member State.
- Connecting experts and policy makers in national bioeconomy networks for better engagement of stakeholders (ministries, regional authorities, research funding organisations, research organisations, civil society, NGOs and others) and BIOEAST thematic working groups, raising awareness and facilitating communication at the regional, national, macro-regional and EU level.
- Mobilisation and increased linkages of national and regional capacities to leverage investments in education, research, innovation, and the development of bioeconomy programmes.
- Facilitating the development of inclusive national bioeconomy action programmes, such as dedicated bioeconomy programmes in education, national bioeconomy research and innovation framework programmes, national bioeconomy development operational programmes.
- Increased participation and innovation capacity of the BIOEAST Member States and stakeholders in the EU framework programmes and structural funds to leverage their full R&I potential in support of the European Green Deal.
- Improved coherence of policies to build a sustainable bioeconomy within ecological boundaries, contributing in particular to climate and biodiversity policies and targets.

https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁴⁴¹ www.bioeast.eu The Central-Eastern European Initiative for Knowledge-based Agriculture, Aquaculture and Forestry in the Bioeconomy – BIOEAST – offers a common political commitment and shared strategic research and innovation framework for working towards sustainable bioeconomies in the Central and Eastern European (CEE) countries (Czech Republic, Hungary, Poland, Slovakia, Bulgaria, Croatia, Latvia, Lithuania, Estonia, Romania, Slovenia).

Scope:

- Engage with policy makers and address specific barriers to improve the continuity and coordination of bioeconomy policy development in BIOEAST countries. Bring together national stakeholders in deploying and fostering the bioeconomy-related research and development sector by engaging local actors in macro-regional and European thematic networks and towards building the common European Research Area.
- Better integration of stakeholders into national bioeconomy hubs with the aim of providing a framework and assuring compliance with the EU policy objectives. The proposal should strengthen the role of young generations and start-ups in bioeconomy.
- Provide advisory support for the development of inclusive national bioeconomy action programmes in support of the European Green Deal, ensuring a transparent and inclusive stakeholder engagement at all levels.
- Identify the possibilities to increase national investment in research and development sector and in education related to bioeconomy, e.g. by targeting political commitment, attracting private investors and entrepreneurs and fostering cooperation within countries and across the macro-region.
- This action is expected to contribute to the implementation of the BIOEAST Initiative vision paper with its related action plan. Proposals will cooperate with and support the BIOEAST Initiative.
- Proposals should include a dedicated task, appropriate resources and a plan on how they will collaborate with the BIOEASTsUP project developed under Horizon 2020, and ensure synergy with relevant activities carried out under other initiatives in Horizon Europe⁴⁴², seek complementarities with related actions and past projects on bioeconomy governance and ensure inclusiveness and engagement of all actors.⁴⁴³ It is also relevant to cooperate and establish links with the Circular Bio-based Europe (CBE) JU.
- The proposal should include all 11 BIOEAST Member States' and, if possible, the main⁴⁴⁴ bioeconomy coordinating bodies. BIOEAST countries not participating as beneficiaries of the action should benefit from the activities carried out by the project.
- Social innovation is recommended when the solution is at the socio-technical interface and requires social change, new social practices, social ownership or market uptake.

⁴⁴² HORIZON-CL6-2021-GOVERNANCE-01-10: Raising awareness of circular and sustainable bioeconomy in support of Member States to develop bioeconomy strategies and/or action plans.

⁴⁴³ Taking into account the results and activities of relevant Horizon 2020 projects, in particular Bioeconomy Policy Support Facility, BIOEASTSUP, POWER4BIO and BE-RURAL, and/or projects funded under call HORIZON-CL6-2021-GOVERNANCE-01-10: Raising awareness of circular and sustainable bioeconomy in support of Member States to develop bioeconomy strategies and/or action plans, or call HORIZON-CL6-2021-GOVERNANCE-01-08: Improving understanding of and engagement in bio-based systems with training and skills development, as well as the activities of the Circular Bio-based Europe (CBE) JU.

⁴⁴⁴ <https://cordis.europa.eu/project/id/862699>.

- The proposals must use the multi-actor approach by involving a wide diversity of bioeconomy actors and conducting trans-disciplinary research.
- This topic requires the effective contribution of SSH disciplines.

Deploying and adding value to environmental observations

Proposals are invited against the following topic(s):

HORIZON-CL6-2023-GOVERNANCE-01-9: Coordination and supporting action to increase synergies in the dissemination and exploitation of climate observations by World Meteorological Organization and its affiliated bodies

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 2.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 2.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.</p> <p>The following additional eligibility criteria apply: International organisations with headquarters in a Member State or an Associated Country are exceptionally eligible for funding.</p>
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025).⁴⁴⁵.</p>

⁴⁴⁵ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

Expected Outcome: A successful proposal will be contributing to the further deployment, uptake and exploitation of Environmental Observation data and products in the context of the European Green Deal.

Proposals are expected to contribute to all of the following outcomes:

- Strengthened collaboration and complementarity between the World Meteorological Organization (WMO), the Group on Earth Observations (GEO), the Intergovernmental Panel on Climate Change (IPCC) and the Global Climate Observing System (GCOS) on climate observations.
- Analysis, streamlining and creation of synergies between Work Programmes of above-mentioned bodies and with the objectives of the European Green Deal.
- Promotion of the collection, improvement, dissemination, and exploitation of observations on climate, climate change and its impacts from operational and research observational networks.

Scope: WMO hosts the GEO, IPCC, and GCOS secretariat which are organisations and Joint Programmes whose activities are crucial for the delivery of climate actions under the European Green Deal – in particular the Horizon Europe Mission on Climate Adaptation and Copernicus⁴⁴⁶ – and in this context it is becoming utmost important that the EU can rely on and benefit from well-articulated actions between those organisations.

This coordination and supporting action (CSA) is intended to support WMO, its affiliated bodies GCOS and IPCC, together with GEO in their common endeavours to establish a global system for standardised, open and interoperable climate observations and to exploit them so that they become available as services to the societies and citizens of the world to support their actions to adapt to climate change. The activities of WMO, and its affiliated bodies such as IPCC or GCOS in collaboration with GEO should also contribute to delivering the required information needed in the relevant services of the European Commission to implement its climate related policies.

The CSA should contribute to promoting the development, implementation, and improvement of climate services as per Article 7 of the Paris Agreement, including initiatives such as the Global Framework for Climate Services (GFCS), the Copernicus Climate Change Service (C3S), the Emergency Management Service (CEMS) and the Marine Service (CMEMS), as well as the Global Earth Observation System of Systems and through the prominent contributions to GCOS and the Architecture for Climate Monitoring from Space, by the Copernicus Programme, and the Climate Change engagement priority of GEO. In particular, the CSA should demonstrate the respective strengths and complementarity of the individual organisations and programmes on specific aspects of global climate observations and support the exploitation of synergies.

⁴⁴⁶ <https://www.copernicus.eu/en>.

The successful consortium should collaborate on scientific inputs to high-level climate-related policy processes, including on high-impact events and their associated loss and damage and measures to avert them, the state of the climate and atmosphere, the emerging Ocean and Climate Change Dialogue in UNFCCC and science-based adaptation and mitigation strategies.

The CSA should in a first phase:

- Do the necessary mapping of the respective work programmes and initiatives of the GFCS, C3S, CEMS, CMEMS, GCOS and GEO;
- Identify cross cutting priorities, areas for further collaboration and potential duplications;
- Organise at least one synthesis workshop, associating all the partners and external experts.

The CSA should in a second phase:

- Develop a concrete action plan in collaboration with the respective secretariats of the entities mentioned above;
- Organise a high-level leadership workshop where decisions and firm commitments are to be taken. This second & final workshop should be organised back-to-back with the GEO Plenary meeting.

HORIZON-CL6-2023-GOVERNANCE-01-10: Support to EuroGEO initiative coordination/establishing a EuroGEO secretariat

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 2.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 2.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the

	Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁴⁴⁷ .
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Expected Outcome: The successful proposal will be strengthening GEO-related coordination mechanisms at European and national levels. The focus will be on supporting increased innovation, space application development and the reinforcement of a space data ecosystem concept within Europe, whilst pursuing international cooperation to help stimulate the market and promote European technology and services. The successful proposal will be contributing to the European Green Deal objectives by further deploying and exploiting the use of environmental observations⁴⁴⁸ and to a strengthened Global Earth Observation System of Systems (GEOSS)⁴⁴⁹.

Proposals are expected to contribute to all of the following outcomes:

- Support to the EuroGEO⁴⁵⁰ community, including supporting and cooperating with the EuroGEO Action Groups, on innovation and services and where possible link with existing and future the GEO/EuroGEO infrastructure components;
- Establishment of organisational support, e.g., coordination of EuroGEO communication activities and events. This includes the increase of synergies among EU funded projects in the context of environmental observations and other topics related to EuroGEO, providing a solid base for evidence-informed allocation of EU research funding through sound monitoring of ongoing research funding activities in Europe and beyond;
- A more developed and better monitored execution of the EuroGEO Implementation Plan in the GEO Work Programme and visibility and exposure to European lead Flagships and Initiatives in the global GEO WP - linking their thematic products and services to relevant European Policy priorities. This includes support to preparing the contribution of EuroGEO to the next GEO Strategic Plan covering the period post-2025;
- Assistance to the development of a sustainability concept for the EuroGEO initiative;
- Further developed research policies, guidelines and where possible standards in close relation with the EC Knowledge Centre on Earth Observation⁴⁵¹;

⁴⁴⁷ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁴⁴⁸ The capacity to observe the environment, including space-based, in-situ-based (air, sea, land) observation, and citizen observations.

⁴⁴⁹ <https://www.earthobservations.org/geoss.php>.

⁴⁵⁰ https://ec.europa.eu/info/research-and-innovation/knowledge-publications-tools-and-data/knowledge-centres-and-data-portals/eurogeo_en.

⁴⁵¹ https://knowledge4policy.ec.europa.eu/earthobservation_en.

Scope: This action aims to prepare the transition of the existing EuroGEO initiative into a sustainable endeavour, by setting up a secretariat.

The successful proposal should propose actions for the secretariat to:

- Further strengthen and promote the three EuroGEO priorities: combining, cooperating and coordinating;
- Serve as the basis for evidence-informed allocation of research funding by monitoring ongoing research funding activities in Europe and beyond;
- Provide professional support in organising EuroGEO events and meetings of EuroGEO bodies (Coordination Group and Action Groups);
- Guide the dialogue with relevant stakeholders and initiatives and (further) build connections, including raising awareness of and interest in the EuroGEO initiative.

The successful proposal should carry out an in-depth investigation resulting into a sustainability plan offering options for the long-term operationalisation and sustainability of the EuroGEO initiative, with the GEO Member States and GEO Participating Organisations of Europe.

The proposed sustainability plan should include a suggested pathway towards implementation, such as the implementation of a European Digital Infrastructure Consortium (EDIC)⁴⁵².

The organisational and logistical support of a secretariat should maximise the unique and long-term impact of EuroGEO by strengthening Europe's leading role in the successful deployment of Earth Observation applications in the global context.

The maximum duration of the funded project is 24 months.

HORIZON-CL6-2023-GOVERNANCE-01-11: Reducing observation gaps in the land-sea interface area

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 9.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 9.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility</i>	The conditions are described in General Annex B. The following

⁴⁵² <https://digital-strategy.ec.europa.eu/en/policies/europes-digital-decade>.

<i>conditions</i>	exceptions apply: If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other data and services may additionally be used).
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Expected Outcome: The successful proposal will be contributing to the European Green Deal objectives including the need to address climate change mitigation and adaptation, pollution and biodiversity loss, through up-taking, integrating, further deploying and exploiting environmental observations.

The successful proposal will be contributing to the European strategy for data, the European digital strategy and support Destination Earth with the development of Digital Twins. It will also be contributing to a strengthened Global Earth Observation System of Systems (GEOSS)⁴⁵³ and improvement of data and modelling services provided by European programmes such as Copernicus⁴⁵⁴ - marine, climate, land, and emergency services and the European Marine Observation and Data network (EMODnet)⁴⁵⁵ - and ensure enhanced coordination with ESA relevant activities as part of the EC-ESA Earth System Science Initiative⁴⁵⁶ and in particular with the activities of the ESA Ocean Science Cluster (oceansciencecluster.esa.int).

The successful proposal is expected to contribute to all of the following outcomes:

- Increased availability of integrated in-situ observations at the land-sea interface, with particular emphasis on river mouths, estuaries and deltas in Europe;
- Improved hydrological, biogeochemical, ecological and coastal modelling based on the integration and combination of these new sources of in-situ observations remote sensing data and their combination at the land-sea interface;
- Enhanced networking between the relevant observation communities (in-situ, airborne, satellite, citizen science, etc.) and training of the citizen science community in the approach to the observation of the land-sea interface making use of newly developed low-cost instrumentation;
- Strengthened coordination between Earth observation communities in the land and marine domains, including hydrology, and between the in-situ data collection and satellite ocean communities (e.g., ESA Ocean Science cluster activities), and better integration of observation and modelling science communities working on applications close to shore, to ensure consistency and cross-validation of different types of observations and foster complementarity and enhanced integration into advanced products and multisource information.

⁴⁵³ <https://www.earthobservations.org/geoss.php>.

⁴⁵⁴ <https://www.copernicus.eu/en>.

⁴⁵⁵ <https://emodnet.ec.europa.eu/en>.

⁴⁵⁶ <https://eo4society.esa.int/communities/scientists/ec-esa-joint-initiative-on-earth-system-science/>.

Scope: Fit for purpose in-situ Earth observations are essential for understanding environmental systems and assessing feedback loops/impacts in important interfaces, as is the land-sea interface at the coastal zones. Especially through the contribution of satellite data, there are still important gaps to be addressed to integrate in-situ Earth observations from the terrestrial and marine domains. There is a need for increased capacity to assess trans-domain impacts, develop and validate detailed models and forecasting applications in the land-sea interface. In the framework of the Digital Twin Ocean (DTO) and Destination Earth (DestinE)⁴⁵⁷, the development of integrated observation capacities between land and sea, in the coastal zones and beyond, is necessary to address priorities. These can include the decrease of pollution, protection and conservation of biodiversity and prediction/adaptation to climate change effects related to e.g., erosion, to the loss of land and ecosystems, land and coastal marine heatwaves, acidification, storm surges, floods and salinization. Specific attention should be given to the sea effect on coastal lands (loss of land, habitat, soil salinisation, etc.), the lateral flux of carbon from terrestrial to coastal ecosystems and marine carbon stocks at the coast, observations gaps and integration (suitability of land observations to measure impact at sea and vice versa).

Proposals should address the following:

- Assessment of current in-situ observing capabilities and protocols of the terrestrial and marine domains, including hydrology, with emphasis on the coastal zones and focus on terrestrial/hydrological input to the sea (delta's, river input, agricultural and other runoff, etc.), including issues of spatial and temporal resolution, identification of important gaps and proposals for viable, long-term approaches to address them;
- Development of methods, tools, technologies and processes to fill the identified gaps following the assessment and to increase integrated observing capacity in the coastal zones and in the land-sea interface (including hydrological inputs). These developments should also contribute to upgrading, enhancing and interconnecting the existing observing networks, developing new capacity when necessary;
- Development of interoperability standards between terrestrial and marine data and coordination of existing observation services and networks (EMODnet, Copernicus, GEOSS, WISE, LUCAS, INSPIRE etc.) to promote freely available and uninhibited flows of FAIR⁴⁵⁸ data and to support the creation of data products in the land-sea interface; combination of in-situ observation from land and sea with satellite observation to fill otherwise unaddressed gaps;
- Advance forecasting and modelling capacity in the coastal zones, including for predicting hazardous events, addressing habitat and biodiversity loss, assessing lateral carbon fluxes across the land ocean continuum, addressing shoreline issues such as erosion, detecting/quantifying/managing the impacts of human activity and extreme events due to climate change, and the better integration of river runoffs into marine-

⁴⁵⁷ <https://digital-strategy.ec.europa.eu/en/policies/destination-earth>.

⁴⁵⁸ <https://www.go-fair.org/fair-principles/>.

related predictions (including the inflow of plastic and nutrient loads through rivers and estuaries);

- Developing close coordination and collaboration across scientific communities (e.g., in-situ data, satellite base observations) ensuring data consistency, cross-fertilisation and enhanced data integration.

This topic is part of a coordination initiative between ESA and the EC on Earth System Science. The EC-ESA Earth System Science Initiative enables EC and ESA to support complementary collaborative projects funded on the EC side through Horizon Europe and on the ESA side through the FutureEO programme ⁴⁵⁹.

The applicants under this topic shall enter into contact with the ESA Ocean Science Cluster⁴⁶⁰ of the FutureEO programme, and include in their proposals activities to ensure coordination with ESA relevant actions.

Collaboration with the relevant existing European Research Infrastructures (such as JERICO or Danubius-RI) is highly recommended.

A strong cooperation, through e.g. networking and exchanges of information with relevant projects ⁴⁶¹ and HORIZON-MISSION-2021: “EU Public Infrastructure for the European Digital Twin Ocean and HORIZON-MISSION-2021-05-01: “Underlying models for the European Digital Twin Ocean” is expected.

HORIZON-CL6-2023-GOVERNANCE-01-12: Empowering citizens to monitor, report and act in partnership with relevant public authorities to protect their environment in the context of environmental compliance assurance

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 7.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 7.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply:

⁴⁵⁹ https://www.esa.int/Applications/Observing_the_Earth/FutureEO.

⁴⁶⁰ <https://eo4society.esa.int/communities/scientists/esa-ocean-science-cluster>.

⁴⁶¹ In particular HORIZON-CL6-2021-BIODIV-01-03 (Understanding and valuing coastal and marine biodiversity and ecosystems services); HORIZON-CL6-2021-BIODIV-01-04 (Assess and predict integrated impacts of cumulative direct and indirect stressors on coastal and marine biodiversity, ecosystems and their services) and HORIZON-CL6-2022-BIODIV-01-01: Observing and mapping biodiversity and ecosystems, with particular focus on coastal and marine ecosystems”.

	<p>The Joint Research Centre (JRC) may participate as member of the consortium selected for funding.</p> <p>If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other data and services may additionally be used).</p>
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Expected Outcome: A successful proposal will be contributing to the wide deployment of, and adding value to, environmental observations for ‘environmental compliance assurance’^{462, 463} by empowering citizens⁴⁶⁴ to promote, monitor, and act in partnership with relevant public authorities, thus contributing to the European Green Deal objectives (in particular to zero-pollution, protecting biodiversity and preventing deforestation).

Proposals are expected to contribute to all of the following outcomes:

- An increase in empowered citizens, communities and intermediaries that are equipped with guidance and tools to act on protecting their environment and increase awareness among citizens of environmental compliance;
- More relevant (*in-situ*) datasets and information, to be used in the context of policy shaping and the use of geospatial intelligence⁴⁶⁵ for environmental compliance assurance;
- Tested FAIR data governance and management mechanisms that enable the sharing, community validation and use of citizen generated data and information in combination with authoritative data and information as part of the European Green Deal Data Space;
- Better/larger engagement of citizens and communities with regional and local authorities to develop local actions for green and digital transformation (e.g., via the Living Labs for green digital solutions⁴⁶⁶) as well as Living Labs established in Missions, Partnerships and other initiatives.

Scope: Successful proposals are expected to support citizen engagement in particular by encouraging the validation and uptake of citizen observations by relevant public authorities for environmental compliance assurance. This includes the establishment of trusted data governance approaches in the context of the European Green Deal Data Space and, where

⁴⁶² https://ec.europa.eu/environment/legal/compliance_en.htm.

⁴⁶³ The three principal components of a compliance assurance system: compliance promotion, compliance monitoring, and enforcement against violations, Source: [ENSURING ENVIRONMENTAL COMPLIANCE – ISBN 978-92-64-05958-0 – © OECD 2009](#).

⁴⁶⁴ [Understanding the Citizen Science Landscape for European Environmental Policy: An Assessment and Recommendations](#).

⁴⁶⁵ Action 5. Being smart – using geo-spatial intelligence of the “[Endorsed work programme 2020-2022 to improve environmental compliance and governance](#)”, Environmental Compliance and Governance Forum.

⁴⁶⁶ [Join us in building the European way of Digital Transformation for 300 million Europeans | Living in EU \(living-in.eu\)](#).

possible, creating synergies with the citizen science development efforts of the Destination Earth initiative, and with the European Open Science Cloud (EOSC) European Partnership.

Capacity building for citizens, communities and intermediaries (training the trainer) to collect data and monitor their environment in addition to the data and information collected by other means of observation (statutory reporting, space-based, airborne, etc.), should be part of the proposal (e.g., through online or local learning and training modules), as well as awareness raising activities on environmental compliance assurance.

Digital and data technologies as key enablers

Proposals are invited against the following topic(s):

HORIZON-CL6-2023-GOVERNANCE-01-13: Open source solutions for edge, cloud and mixed model applications to strengthen production and administrative capacities in agriculture

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 5.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 10.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>The following additional eligibility criteria apply: Due to the scope of this topic, legal entities established in non-associated third countries and/or regions are exceptionally eligible for Union funding.</p> <p>The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.</p>
<i>Technology Readiness Level</i>	Activities are expected to achieve TRL 5-7 (according to the activity) by the end of the project – see General Annex B.
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Beneficiaries may provide financial support to third parties. The support to third parties can only be provided in the form of grants. The maximum amount to be granted to each third party is EUR 60 000.</p>

Expected Outcome: In line with the farm to fork strategy, the common agricultural policy post 2022, and the headline ambition of a digital age, the European strategy for data⁴⁶⁷ in particular, a successful proposal will contribute to transition to a fair, healthy and resilient agriculture. It will direct and/ or indirectly contribute to the enhancement of the sustainability performance of the sector and competitiveness in agriculture through supporting the further deployment of digital and data technologies as key enablers through research and innovation.

Project results are expected to contribute to all of the following expected outcomes:

- Enhanced sustainability performance and competitiveness of the sector, and a strengthened position of producers through tailored open-source digital solutions;
- Increased and enhanced use of digital tools in areas with weak connectivity;
- Improved energy balance of data-based solutions used in agricultural production;
- New approaches towards the development of software for the agriculture contributing to improving operational effectiveness and efficiency in the sector through real- time data processing;
- Facilitated deployment of digital applications for farmers and actors related to the agricultural sector;
- Decision-making support, particularly for policymakers, farm advisors, farmers, and public administration.

Scope: Digital and data technologies can improve the sustainability performance and competitiveness of the agricultural sector. There are still a number of factors hampering the uptake of digital technologies by farmers, including a lack of affordability of digital tools, a lack of digital skills and trust in data sharing, scepticism towards the “black box phenomenon” of digital applications and the lacking transparency in the development of algorithms, and the risk of vendor lock-ins. Digital solutions following the open-source principle can lead to reduced prices for digital applications and enhance transparency in production advice based on digital applications.

One frequent challenge to the use of certain digital technologies in agriculture, especially in remote areas, is weak connectivity, which hampers the full exploitation of their potential. Edge solutions may facilitate real-time applications also in areas with weak connectivity; they may, however, be run with less and/or other input data potentially resulting in another performance than cloud-based solutions or solutions following a mixed model of edge and cloud components. As data storage, processing and transfer goes along with energy consumption, the overall environmental performance of the different models for digital applications also varies and is also influenced by the number of users of a certain application.

⁴⁶⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions - A European strategy for data ([EUR-Lex - 52020DC0066 - EN - EUR-Lex \(europa.eu\)](#))

This factor may influence the choice and or support for a certain digital application in agriculture.

Proposals should address the following:

- Development of open-source based digital applications for farmers following a dual and comparative approach with edge, cloud and mixed solutions under consideration of the potential of advanced Internet of Things (IoT) solutions; whereby the focus is on (remote) outdoor production processes, where frequently weak connectivity is given, as well as on reducing administrative burden for producers (TRL 5-7).
- Development of software solutions following an open-source principle involving (semi-professional) close-to-practice IT experts/ farmers and advisors with advanced digital skills to capitalise daily-work experiences and enhance user-orientation and increase digital capacities in the sector (TRL 5-7).
- Comparison of the performance of edge and cloud solutions in their effectiveness, efficiency and energy performance under consideration of various biogeographic and socio-economic framing conditions at farm and farm community level at regional and national scale.
- Development of a decision-making support tool, particularly targeting policymakers, farm advisors, farmers, and the public administration facilitating the comparing the performance of edge-, cloud-, and mixed model-based open source solutions for agriculture along several socio-economic and environmental parameters, including administrative capacities needed for their deployment, at the level of the farm, and the farm community at regional national scale.

Proposals must implement the ‘multi-actor approach’ including a range of actors to ensure that knowledge and needs from various stakeholder groups, including farmers, farm advisors, IT experts and scientists are well reflected. Proposals should involve the effective contribution of social sciences and humanities (SSH) disciplines. This is required in particular to achieve a high level of user-friendliness of the developed applications and to develop accompanying training material for the different targeted user groups. Proposals are expected to take into consideration the results of other related Horizon 2020/ Europe projects as well as of other relevant EU funded projects and initiatives. When exploring opportunities to reduce administrative burdens for farmers, proposals should consider possibilities to facilitate reporting obligations and use production data for other processes along the value chain, e.g. marketing. Proposals are strongly encouraged to consider (evolving) technical solutions and (forthcoming) requirements⁴⁶⁸ in the field of data interoperability and switchability and to contribute to enhanced interoperability. In order to benefit from the experiences gained in the development of digital applications focused on within this topic and to foster the upscaling of

⁴⁶⁸ (Forthcoming) requirements in the fields of data interoperability and switchability may concern horizontal/ cross-sectoral or sector-specific provisions as well as legislation or voluntary regimes, such as code of conducts. For instance, the proposal for a Data Act, brought forward by the European Commission early 2022 may lead to requirements in those fields.

the outreach of the use of the developed digital applications, international cooperation is encouraged.

Proposals may involve financial support to third parties e.g. to academic researchers, hi-tech start-ups, SMEs, and other multidisciplinary actors, to, for instance, develop, test or validate developed applications. Consortia need to define the selection process of organisations, for which financial support may be granted. A maximum of 20% of the EU funding can be allocated to this purpose.

HORIZON-CL6-2023-GOVERNANCE-01-14: Digital and data technologies for livestock tracking

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 5.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 5.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁴⁶⁹ .

Expected Outcome: In line with the farm to fork strategy, the headline ambition of a Digital Age – the EU data strategy strategy⁴⁷⁰ in particular - and the common agricultural policy (CAP), a successful proposal will support capacities to understand, develop and demonstrate the potential of digital and data technologies for livestock tracking in the public and private domains. It is therefore expected to indirectly support the enhancement of the sustainability performance and competitiveness in agriculture, the development of innovative governance models, and strengthened capacities for implementing, monitoring and evaluating common

⁴⁶⁹ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁴⁷⁰ COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS - A European strategy for data (see: [EUR-Lex - 52020DC0066 - EN - EUR-Lex \(europa.eu\)](https://eur-lex.europa.eu/eli/comm/communication/2020/1120/full)).

policies through research and innovation and through interlinking actors and relevant initiatives.

Project results are expected to contribute to all of the following expected outcomes:

- Strengthened sustainable livestock production through increased capabilities for the generation of livestock related data sets (including in the field on animal health and disease prevention);
- Strengthened the resilience and transparency of supply chains through the use of digital technologies;
- Enhanced capacities in policy monitoring and evaluation in the field of agriculture, environment, climate, and sustainable finance.

Scope: Data and digital technologies are currently used for many purposes in and for livestock farming, both in the public and private domains. Livestock and its attributes are tracked for instance in the context of implementing the CAP, for disease prevention and mitigation, as well as to facilitate production and the management of supply chains. Sensors, for instance, allow for collecting multiple information, e.g. on health conditions or medical treatments of livestock, location and environmental conditions. They may facilitate, e.g. more tailored and precise treatment of animals and to reduce inputs, of e.g. antibiotics, and costs. Livestock tracking may also e.g. support climate mitigation by assessing livestock density against land carrying capacity and reduce soil disturbance and compaction. It may also facilitate the provision of information to consumers on the products offered and enhance transparency along the supply chain and offer a means to against legal commitments of livestock densities, e.g. in the context of CAP strategic plans.

Frequently (public) registers are not interlinked and approaches towards data collection on livestock across Member States vary. Private sector efforts in livestock tracking are frequently not systemised and not scaled up. The potential for synergies between public and private sector initiatives in livestock tracking appears not to be fully explored and exploited.

Proposals should address the following:

- Elaborate on the potential for the generation of data sets through the development and applications of digital solutions to track livestock.
- Elaborate the opportunities of linking tracking efforts to sensor information providing information on animal health (and welfare) using the potential of innovative technologies;⁴⁷¹
- Develop concepts for data-based solutions for the private and public sector to track livestock and its conditions (including geospatial information) under consideration of multiple possible application cases, such as administrative purposes and legal

⁴⁷¹ A successful proposal may take advantage of the opportunity to integrate new phenotypes issued from tracking and sensors in certain breeding programmes.

commitments, labelling, predator and pest prevention; this activity should include an assessment of possible socio-economic and environmental effects, including the potential for reducing administrative costs and for policy monitoring, which could be achieved through the use of the data sets.

- Highlight the potential of and elaborate concepts for upscaling of data-based digital solutions for livestock tracking to EU (and international) level.
- Bring together key stakeholders from the public and private domain to explore – among others - opportunities to implement identified data-based and digital solutions, as well as to share data.

Proposals should consider existing and forthcoming data bases/ registers related to livestock as well as (forthcoming) sector-specific and horizontal legal requirements in the EU, including in the field of digital and data technologies. Proposals are expected to take stock of livestock tracking initiatives in the private domain, including in third countries and to draw lessons learnt, as well as of digital tracking technologies used in other sectors/ domains. Proposals are encouraged to explore interlinks with other innovative technologies, such as genomics, and application cases, such as recording breeding traits. Proposals are encouraged to reflect on the aspect of affordability of digital technologies as well as on the potential effects of livestock tracking for producers, food processors, and consumers. Proposals are encouraged to involve representatives of the public administration from all EU Member States and of relevant EU institutions,⁴⁷² as well as to link up to/ exchange with relevant EU funded projects, including projects funded under Horizon Europe and the Digital Europe Programme.

In this topic, the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement.

HORIZON-CL6-2023-GOVERNANCE-01-15: Digitalisation in agriculture and forestry: markets for data, and digital technologies and infrastructure – state of play and foresight in a fast changing regulatory, trade and technical environment

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 5.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 5.00 million.
<i>Type of Action</i>	Research and Innovation Actions

⁴⁷² Here, the involvement of representatives of all EU Member States and relevant EU institutions does not refer to the formation of the consortium but to the involvement of those actors in the work of the project. The European Commission can support a selected proposal in establishing contact to relevant EU institutions.

<i>Technology Readiness Level</i>	Activities are expected to achieve TRL 3-5 by the end of the project – see General Annex B.
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Expected Outcome: In line with the European Green Deal, the farm to fork strategy in particular, and the headline ambition of a Digital Age, a successful proposal will support the capacities to understand and forecast the development of markets and the use of data and digital technologies in agriculture and forestry, particularly through the development of innovative assessment and modelling approaches. It will therefore support decreasing the risk of investing into digital infrastructure, and indirectly contribute to the enhancement of the sustainability performance and competitiveness in agriculture through further deployment of digital and data technologies as key enablers, and to the development of innovative governance models.

Project results are expected to contribute to all of the following expected outcomes:

- Analyses of global markets through innovative approaches including trends, potential barriers and risks associated with investments in data, digital and data technologies in the agriculture and forestry sectors.
- Increased transparency in data sharing and in the markets for digital and data technologies in the agricultural and forestry sectors in support of healthy competition.
- Contribution to an increased uptake of digital and data technologies in agriculture and forestry including through reduced investment risks; this is expected to indirectly contribute to an increase in environmental and economic performance of the sectors through increased and enhanced used of data, and digital and data technologies.
- Strengthened policy-making and -monitoring and foresight capacities.

Scope: The potential of digital and data technologies in the agricultural and forestry sectors to enhance their sustainability and economic performance and working conditions has been acknowledged. The uptake of digital technologies in the sectors and the development of supplementing data- and data-technology-based solutions in the EU are increasing. However, there is hardly comprehensive, independently collected data about the actual uptake and use of digital technologies by farmers and foresters, about the trade of sector-related data and digital technologies, and about the extent and structure of the provision of digital and data services in the agricultural and forestry supply chains, which are of global outreach.

At the same time, policies and the regulatory framework directly or indirectly influencing the deployment of digital and data technologies in the EU are evolving in a fast pace and will continue to do so.⁴⁷³ Also trade regimes are continuously changing. For stakeholder in the agricultural, forestry and the digital sectors to invest in digital and data technologies, it is important to be able to assess the possible implications of changing regulatory and market conditions on the development, purchase and use of data, and digital and data technologies.

⁴⁷³ See, e.g. the announcements in the Digital package published by the European Commission in February 2020: <https://ec.europa.eu/digital-single-market/en/policies/building-european-data-economy>.

This is also supported by an increase in information on markets and related actor networks, and information on the storage and the flows of goods and data, through increased transparency and a strengthened position of users and consumers. Such information as well as capacities in modelling and in carrying out foresight analyses for the development of markets and of the situation in the agricultural sector is also one pre-requisite for tailored policy-making.

Fostering the provision of insights into markets of data, and digital and data technologies in the agricultural and forestry sectors, the proposals should address the following:

- Development of innovative approaches to assess the uptake of digital technologies and digital infrastructure (incl. platforms) in the agricultural, and forestry sectors globally with special attention to the situation in the EU and Associated Countries.
- Development of innovative approaches to forecast the markets of data, digital technologies and digital infrastructure (including platforms) and the uptake of digital technologies globally with special attention to the situation in the EU under consideration of fast-changing regulatory framing conditions in the fields of data-, digital and machinery technologies and of agricultural and forestry policies.
- Demonstration of the qualitative and quantitative implications of market and technology trends in the fields of data, digital technologies and digital infrastructure for the use of digital and data technologies by farmers, foresters and other actors along the supply chains in a way that demonstration results can be steadily adapted to changing framing conditions. Demonstrations should allow for the reflection of scenarios and provide input to policy-making.

Project(s) are expected to consider innovation in digital technologies brought onto the market during the life-time of the project. It is expected that the project(s) are working with targeted stakeholders, including farmers, foresters, agri-businesses, farm advisors, policy-makers etc. to test demonstration and communication tools.

For the assessment of the uptake of digital technologies by farmers and foresters, statistical approaches evolving in the EU are to be considered, if applicable; assessment approaches may vary between continents.

In this topic, the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement.

HORIZON-CL6-2023-GOVERNANCE-01-16: Digital technologies supporting plant health early detection, territory surveillance and phytosanitary measures

Specific conditions	
<i>Expected EU contribution per</i>	The Commission estimates that an EU contribution of around EUR 5.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a

<i>project</i>	proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 10.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other data and services may additionally be used).</p> <p>The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.</p>

Expected Outcome: In line with the objectives of the biodiversity and farm to fork strategies, a successful proposal will contribute to transition to fair, healthy and resilient agriculture and forestry, notably the target to reduce by 50% the overall use and risk of chemical pesticides. Proposals will support Regulation (EU) 2016/2031⁴⁷⁴ on protective measures against plant pests.

Project results are expected to contribute to all of the following expected outcomes

- Increase the availability of large-scale and robust plant scanning methods to monitor plant pests, to assist territorial surveillance and help with timely eradication or optimisation of containment measures;
- Enhance innovative and cost-efficient integration of methods, including remote sensing and networks of traps that are available for surveillance of EU regulated plant pests affecting agriculture, forestry, other activities and areas (e.g., urban areas);
- Strengthen capacities to prevent entry and spread and to monitor EU regulated plant pests and support plant health territorial surveillance;
- Foster transdisciplinary cooperation in the fields of plant health, environmental sciences and earth observation.
- Support relevant EU and Associated Countries' plant health policies.

Scope: Pest monitoring is typically performed through costly and time-consuming on-site visits, resulting in certain cases in limited spatial and temporal resolution. Consequently, there is a need for more cost-effective approaches to detect and discriminate infested plants, including trees, at large spatial scales and within reasonable time frames. The advent of new

⁴⁷⁴ Regulation (EU) n. 2016/2031 (<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32016R2031>) and Regulation (EU) n. 2019/2072 (https://eur-lex.europa.eu/eli/reg_impl/2019/2072/oj).

technology in remote sensing, sensor technologies, robotics, remotely piloted aerial systems (RPAS), the internet of things (IoT), and artificial intelligence (AI), opens opportunities for monitoring continuously, more widely, and remotely. These technologies have the potential to guide and help to target on site surveillance and early detection activities and other phytosanitary measures.

Proposals should:

- Develop and test early detection strategies by exploiting digital technologies, e.g., networks of sensors and remote sensing, to improve the surveillance efforts and the delimitation of affected areas by regulated pests allowing a regular and rapid monitoring of large areas that might be difficult to reach;
- Enhance and optimize the use of insect traps in a network setting for an IoT approach;
- Develop user-friendly and accessible tools or methods, including through the use of robotics to monitor a suite of known stress-processes in plants (chlorosis, changes in fluorescence, loss of transportation, etc.) that can be used in plant pest detection and/or to monitor occurrence of pests;
- Contribute to disentangle biotic and abiotic stresses, enabling the early detection of pests, by pushing further the current (and the new generation of satellite missions, e.g., FLEX⁴⁷⁵) capabilities of remote sensing (measurements taken by hand-held, towers, drones, and satellite data), AI, and other digital strategies;
- Collect standardised and comprehensive data (e.g., field observations, laboratory measurements, remotely sensed data, etc.) that contribute to monitor plant health and pests and to develop an early warning surveillance system;
- Assess the cost-benefits of the proposed methods;
- Integrate citizen science as a tool to monitor pests, developing robust methods to use its data for systematic analysis, and increasing public and stakeholder engagement.

Proposals should identify common standards and common indicators to collect data, as well as interoperability and metadata standards. Proposals should develop recommendations on how to make the best use and scale up digital technologies for plant pests early detection and territorial surveillance applications.

Proposals must implement the ‘multi-actor approach’ including a range of actors to ensure that knowledge and needs from various sectors such as research, plant health services, farming/forestry sectors, other relevant authorities, and industry are brought together.

Proposals should build on the results of relevant projects funded under Horizon 2020. Proposals should specify how they plan to collaborate with other proposals selected under this

⁴⁷⁵ <https://earth.esa.int/eogateway/missions/flex>.

and, if feasible, with other relevant topics⁴⁷⁶, e.g., by undertaking joint activities, workshops or common communication and dissemination activities. Proposals should allocate the necessary resources to cover these activities.

If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS. Other data and services may be used in addition. All in-situ data collected through actions funded from this call should follow INSPIRE principles and be available through open access repositories supported by the European Commission (Copernicus, GEOSS).

This topic is part of a coordination initiative between ESA FutureEO programme for agriculture⁴⁷⁷ and the EC on Earth System Science. Applicants are encouraged to coordinate with the relevant ESA projects and in particular those of the ESA Agriculture Science Cluster Activities (agriculturesciencecluster.esa.int) in their proposals. Where relevant, creating links and using the information and data of the European Earth observation programme Copernicus are encouraged.

In this topic the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement.

HORIZON-CL6-2023-GOVERNANCE-01-17: Data-driven solutions to foster industry’s contribution to inclusive and sustainable food systems

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 8.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.

Expected Outcome: This topic will enhance the sustainability performance and competitiveness in the domains covered by Cluster 6 through further deployment of digital and data technologies as key enablers. It will help to achieve better informed decision-making

⁴⁷⁶ HORIZON-CL6-2024-FARM2FORK-02-3-two-stage: Tools to increase the effectiveness of EU import controls for plant health

⁴⁷⁷ More details about relevant existing and planned ESA activities and projects can be found in <https://agriculturesciencecluster.esa.int>.

processes, social engagement, governance, and innovation. It will help deliver solutions to advance the European Green Deal priorities, the EU's climate targets for 2030 and 2050 and the farm to fork strategy for a fair, healthy and environmentally friendly food system. It will contribute to the food 2030 priorities: nutrition for sustainable healthy diets, climate, environment, circularity and resource efficiency, innovation and empowering communities and improving the data economy for food systems and enhance transparency.

There is already commitment in the private sector to drive change towards more sustainable food systems. One example is the “EU Code of Conduct on Responsible Food Business and Marketing Practices⁴⁷⁸”, an integral part of the farm to fork strategy. Many businesses have already signed the voluntary agreement⁴⁷⁹. This commitment also includes an R&I dimension that can be expanded to the respective topic.

Data-driven solutions in food systems also may support the European open data directive to share public data⁴⁸⁰ and foreseen data spaces⁴⁸¹ as well as provide a base of Artificial Intelligence (AI) deployment as enablers of the European Green Deal objectives.

Projects results are expected to contribute to all the following expected outcomes:

- Increased insights into the potential benefits and feasibility of data and technology employed by the private sector together with public stakeholders to drive sustainable food system transformation while respecting the relevant legal and policy frameworks;
- Enhanced transition towards sustainable healthy diets for all by using data driven solutions in the food sector.

Scope: Data are key to drive citizens’ sustainability practices. Several actors in the private food sector have access to valuable sustainability-related data, for example grocery retail, food processing and delivery services with huge potential to be used to foster the transition to sustainable food systems. At the same time, there is potential in mapping possible beneficial data not yet tested and a vision of a new spectrum of data overcoming availability bias. Data can be used to foster citizens’ sustainability practices, for example as a contributor to positively influence and monitor dietary changes. Industry contribution to the transition to sustainable food systems by engaging citizens in such transition can be very impactful while keeping the integrity of private intellectual property of the businesses. By democratizing data, private actors might gain a competitive advantage and activate other players to fulfil the need of transparency and proof of sustainability efforts for citizens.

Proposals are expected to address the following:

⁴⁷⁸ EU Code of Conduct on Responsible Food Business and Marketing Practices [f2f_sfpd_coc_final_en.pdf \(europa.eu\)](#), 2021.

⁴⁷⁹ https://single-market-economy.ec.europa.eu/news/farm-fork-strategy-65-companies-and-associations-sign-eu-code-conduct-responsible-food-business-and-2021-07-05_en.

⁴⁸⁰ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L1024&from=EN>
⁴⁸¹ [Digital Europe Work Programme 2021-2022](#).

- Analyse current systems of private data sharing in the food system (monetary incentives, actors involved...etc.);
- Initiate first tests of potential data sharing, also with SMEs and potentially start-ups, to identify potential impacts and benefits and serve as a lighthouse;
- Explore ‘new’ types of data and identify relevant data within the food system by also ‘unconventional players’ to tap into unused data sources, point out the main value pool for data sharing, outline potential needs of data gathering/harmonisation and map out an enhanced data framework and data collection strategy including needed technology (AI, Robotics, IoT) to drive sustainable food system transformation;
- Make use of analytics, forecast and AI to identify influential factors for making sustainable choices;
- Analyse the impacts on the sustainability of food systems of the proposed solutions considering the entire food supply chain and the different dimensions of sustainability;
- Define ways to use data to inform and guide consumer choices at the point of purchase in line with EU food law and policies;
- Set-up a potential framework for sharing non-competitive data that defines principles and collect good practices to foster sustainable food system objectives that ensures the protection of private data and sensitive business data and explore how this data can be integrated in the ‘Smart communities data space’⁵;
- Proposals must implement the 'multi-actor approach' and ensure adequate involvement of relevant stakeholders also in the health domain, such as doctors and nurses, and SMEs and start-ups;
- Proposals should include a dedicated task, appropriate resources and a plan on how they will collaborate with other projects funded under this topic and under the topic 2022-GOVERNANCE-10 “Piloting approaches and tools to empower citizens to exercise their “data rights” in food and nutrition” and HORIZON-CL6-2024-FARM2FORK-01-8 “Preventing and reducing food waste to reduce environmental impacts and to help reach 2030 climate targets”;
- Include social innovation as the solution is at the socio-technical interface and requires social change, new social practices and social ownership;
- This topic should involve the effective contribution of SSH disciplines.

Strengthening agricultural knowledge and innovation systems (AKIS)

Proposals are invited against the following topic(s):

HORIZON-CL6-2023-GOVERNANCE-01-18: Broaden EIP Operational Group outcomes across borders by means of thematic networks to compile and share knowledge ready for practice

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 2.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 4.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁴⁸² .

Expected Outcome: In support of the European Green Deal, the EU climate policy, the common agricultural policy (CAP) and the farm to fork strategy objectives and targets, the successful proposals will focus on knowledge sharing in a language that is easy to understand and targeted to farmers and foresters. They will address the necessity of primary producers for impartial and tailored knowledge on the management choices related to the needs, challenges or opportunities they experience. They will also speed up innovation and the uptake of results, and will be key to improving sustainability.

They will contribute to effective Agriculture Knowledge and Innovation Systems (AKIS⁴⁸³), thereby adding value to the knowledge and cost-effectiveness of innovative practices and

⁴⁸² This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁴⁸³ AKIS means the organisation and knowledge flows between persons, organisations and institutions who use and produce knowledge for agriculture and interrelated fields (Agricultural Knowledge and Innovation).

techniques in and across primary production sectors, food and bioeconomy systems, and lead to more informed and engaged stakeholders and users of project results.

Despite the continued funding of scientific projects, new knowledge, innovative ideas and methods from practice are not sufficiently captured and spread. The research findings are often not integrated into agricultural and forestry practice. The proposals, acting at EU level to remedy this, are essential because national and sectoral agricultural knowledge and innovation systems (AKISs) are insufficiently connected and organised to fully meet the challenge of intensifying thematic cooperation between researchers, advisors and farmers/foresters. This exchange of knowledge will foster economically viable and sustainable agriculture and forestry and build trust between the main AKIS actors. It will scale local solutions up to the EU level and may even influence policy design wherever useful.

Project results are expected to contribute to all of the following outcomes:

- Contribution to the cross-cutting objective of the CAP on modernising the sector by fostering and sharing of knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake⁴⁸⁴, as well as to the European Green Deal and farm to fork Strategy objectives and targets.
- Collection and distribution of easily accessible practice-oriented knowledge on the thematic area chosen, in particular the existing innovative solutions, best practices and research findings that are ready to be put into practice, but not sufficiently known or used by practitioners.
- Maintenance of practical knowledge in the long-term – beyond the project period – in particular by using the main trusted dissemination channels which farmers/foresters most often consult.
- Increased flow of practical information between farmers/foresters in the EU in a geographically balanced way, creating spill-overs and taking account of the differences between territories.
- Greater user acceptance of collected solutions and a more intensive dissemination of existing knowledge, by connecting actors, policies, projects and instruments to speed up innovation and promote the faster and wider co-creation and transposition of innovative solutions into practice.

Scope: Proposals should address the following activities:

- Build on the experiences and outcomes of at least 5 EIP-AGRI Operational Groups of at least 3 Member States and choose a common theme related to the themes of the 5 Operational Group projects.

⁴⁸⁴ Art 5 CAP post 2020 proposal.

- Tackle the most urgent needs of farmers and foresters. Collect, summarise, share and translate the existing knowledge from science and practice, resulting from the EIP operational Groups and beyond, in an easy-to-understand language for practitioners.
- Compile a comprehensive description of the state of current farming practices on the chosen theme to explain the added value of the proposal and the relevance of the theme. Proposals must focus on the cost/benefit aspects of the practices collected and summarised, and clarify how the project avoids duplication with ongoing or completed projects and networks.
- Deliver an extensive range of useful, applicable and appealing end-user material for farmers and foresters. This info should be easy to access and understand, and feed into the existing dissemination channels most consulted by farmers and foresters in the countries.
- Deliver as much audio-visual material and as many “practice abstracts” in the common EIP-AGRI format as possible, also including education and training materials.
- All materials should also be provided to the European Innovation Partnership (EIP-AGRI) 'Agricultural Productivity and Sustainability' in the common 'practice abstract' format, as well as to national/regional/local AKIS channels and to the EU wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24) in the requested formats.
- In addition to giving the details on the EIP Operational Groups whose involvement is strongly recommended⁴⁸⁵, wherever possible and relevant to the chosen theme, provide also details on how further synergies will be built with future EIP Operational Groups and interactive innovation groups operating in the context of the EIP-AGRI.
- Proposals must implement the 'multi-actor approach', with a consortium based on a balanced mix of actors with complementary knowledge clearly activating farmers/foresters, farmers' groups and advisors and run for a minimum of 3 years.
- In order to better reach and capture knowledge from the targeted farmers/foresters, the networks may organise 'cross-fertilisation' through sub-networks covering, for example, a region, a language or a production system.

HORIZON-CL6-2023-GOVERNANCE-01-19: Thematic networks to compile and share knowledge ready for practice

Specific conditions	
<i>Expected EU contribution per</i>	The Commission estimates that an EU contribution of around EUR 3.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a

⁴⁸⁵ According to the requirements of the multi-actor approach.

<i>project</i>	proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 6.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁴⁸⁶ .

Expected Outcome: In support of the European Green Deal, the EU climate policy, the common agricultural policy (CAP) and the farm to fork strategy objectives and targets, the successful proposals will focus on knowledge sharing in a language that is easy to understand and targeted to farmers and foresters. They will address the necessity of primary producers for impartial and tailored knowledge on the management choices related to the needs, challenges or opportunities they experience.

They will also speed up innovation and the uptake of results, and will be key to improving sustainability. They will contribute to effective Agriculture Knowledge and Innovation Systems (AKIS⁴⁸⁷), thereby adding value to the knowledge and cost-effectiveness of innovative practices and techniques in and across primary production sectors, food and bioeconomy systems, and lead to more informed and engaged stakeholders and users of project results.

Despite the continued funding of scientific projects, new knowledge, innovative ideas and methods from practice are not sufficiently captured and spread. The research findings are often not integrated into agricultural and forestry practice. Proposals, acting at EU level to remedy this situation, are essential because national and sectoral AKISs are insufficiently

⁴⁸⁶ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁴⁸⁷ AKIS means the organisation and knowledge flows between persons, organisations and institutions who use and produce knowledge for agriculture and interrelated fields (Agricultural Knowledge and Innovation).

connected and organised to fully meet the challenge of intensifying thematic cooperation between researchers, advisors and farmers/foresters. This exchange of knowledge will foster economically viable and sustainable agriculture and forestry and build trust between the main AKIS actors.

Project results are expected to contribute to all of the following outcomes:

- Contribution to the cross-cutting objective of modernising the sector by fostering and sharing knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake⁴⁸⁸, as well as to the European Green Deal, including climate change mitigation or adaptation, and farm to fork strategy objectives and targets.
- Collection and distribution of easily accessible practice-oriented knowledge on the thematic area chosen, in particular the existing innovative solutions, best practices and research findings that are ready to be put into practice, but not sufficiently known or used by practitioners.
- Maintenance of practical knowledge in the long-term – beyond the project period – in particular by using the main trusted dissemination channels that farmers/foresters most often consult.
- Increased flow of practical information between farmers/foresters in the EU in a geographically balanced way, creating spill-overs and taking account of the differences between territories.
- Greater user acceptance of collected solutions and a more intensive dissemination of existing knowledge, by connecting actors, policies, projects and instruments to speed up innovation and promote the faster and wider co-creation and transposition of innovative solutions into practice.

Scope: Proposals should address the following activities:

- Tackle the most urgent farmers' or foresters' needs by summarising, sharing and presenting – in a language that is easy to understand and is targeted to farmers and foresters – the existing best practices and research findings that are ready to be put into practice, but not sufficiently known or used by practitioners. The specific themes of the networks can be chosen in a 'bottom-up' way on the condition that they contribute to the relevant EU policy objectives, including climate mitigation and adaptation.
- Compile a comprehensive description of the state of current farming/forestry practices on the chosen theme to explain the added value of the proposal and the relevance of the theme. Proposals must focus on the cost/benefit aspects of the practices collected and summarised, and clarify how the project avoids duplication with ongoing or completed projects and networks.

⁴⁸⁸ Art 5 of the post 2020 CAP regulation.

- Deliver an extensive range of useful, applicable and appealing end-user material for farmers and foresters. This info should be easy to access and understand, making use of audio-visual material wherever possible, including also materials serving education and training and automatic translation services that allow dissemination beyond language barriers;
- This range of material should feed into the existing dissemination channels most consulted by farmers and foresters in the countries.
- As many “practice abstracts” in the common EIP-AGRI format as possible, as well as other types of materials should be provided to the European Innovation Partnership (EIP-AGRI) 'Agricultural Productivity and Sustainability', as well as to national/regional/local AKIS channels and to the EU-wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24);
- Besides giving the details on the EIP Operational Groups whose involvement is strongly recommended⁴⁸⁹, wherever possible and relevant to the chosen theme, provide also details on how further synergies will be built with future EIP Operational Groups and interactive innovation groups operating in the context of the EIP-AGRI.
- Proposals must implement the 'multi-actor approach', with a consortium based on a balanced mix of actors with complementary knowledge clearly activating farmers/foresters, farmers' groups and advisors; and run for a minimum of 3 years.
- In order to better reach and capture knowledge from the targeted farmers/foresters, the networks may organise 'cross-fertilisation' through sub-networks covering, for example, a region, a language or a production system.

HORIZON-CL6-2023-GOVERNANCE-01-20: Developing an EU advisory network on organic agriculture

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 5.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 5.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must

⁴⁸⁹ According to the requirements of the multi-actor approach.

	use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁴⁹⁰ .

Expected Outcome: A successful proposal will support the objectives of the European Green Deal, and notably its farm to fork and biodiversity strategies, and the sustainable carbon cycle communication, to transition to fair, healthy, climate and environmentally-friendly food systems from primary production to consumption, in particular the objective to promote organic farming in Europe. Activities will support the implementation of the action plan on the development of organic production⁴⁹¹ and of the common agricultural policy (CAP).

The successful proposal will focus on exchanges between farm advisors across the EU in order to increase the speed of knowledge creation and sharing, capacity building, demonstration of innovative solutions in organic farming, as well as helping to bring them into practice in order to accelerate adoption of these solutions.

Project results are expected to contribute to all of the following outcomes:

- Accelerated progress towards achieving the policy objectives linked to the farm to fork strategy’s target on organic farming, and in particular those identified under the Action Plan on the Development of Organic Production, as well as the new CAP;
- Supported implementation in Member States of the CAP’s cross-cutting objective of modernising the sector by fostering and sharing of knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake⁴⁹²;
- Enhanced interactions among advisors and other relevant actors in the EU and Associated Countries conducive to a strengthened research and innovation ecosystem for organic farming;
- Increased provision of supporting services and materials that facilitate the conversion to and upscaling of organic farming;

⁴⁹⁰ This [decision](#) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁴⁹¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0141R%2801%29>

⁴⁹² Art 5 CAP post 2020 proposal.

- Accelerated introduction, spread and implementation in practice of innovative solutions related to organic farming leading to improved production methods of organic farms.

Scope: Agricultural Knowledge and Innovation Systems (AKIS)⁴⁹³, in which advisors play a central role, are key drivers to speed up innovation and the uptake of research results by farmers. Transformative changes such as the ones called for by the farm to fork strategy, are dynamic and knowledge-intensive processes that require appropriate governance of AKIS actors. Advisors play a key role in steering and influencing farmers' decisions. A novelty in the post-2020 CAP plans⁴⁹⁴ is that advisors must be integrated within the Member States' AKIS, and that the scope of their actions has become much broader. Advisors must be able to cover the economic, environmental and social domains, as well as being up-to-date on scientific and innovation developments. They should be able to translate this knowledge into concrete opportunities for the end users, and adapt those to specific local circumstances.

This topic focuses on the important role that advisors can play in relation to boosting organic farming towards reaching the target of at least 25% of the EU's agricultural land under organic farming by 2030. In particular, advisors can play a key role in encouraging conversion to organic farming and in facilitating this process to farmers, and overall in tackling the challenges of organic farming. In this context, advisors are in a good position to provide hands-on training to organic farmers, to inspire new and incoming farmers or farms at the cross-roads of intergenerational renewal, to connect with education and ensure broad communication, to support peer-to-peer consulting, and to develop on-farm demonstrations.

Proposals should set up an EU advisory network dedicated to organic farming, covering both organic plant production systems and organic animal husbandry. The network should involve participants from at least 20 EU Member States, including countries in which the organic sector is more developed and less developed. In this context, proposals should:

- Connect farm advisors across the EU , with a view to sharing experiences on how to best tackle the main issues of the sector.
- Undertake knowledge, best practice and innovation exchange activities that support Member States in making the best use of the possibilities offered by the new CAP to support their national organic sector.
- Fill gaps on emerging advisory topics beyond the classical sectorial advice, in particular in view of the new obligation for Member States to integrate advisors within their AKIS.
- Serve as a platform to bring stakeholders together to discuss challenges and solutions to practical organic farming problems, such as bottlenecks, lock-ins, power imbalances, normative aspects, lack of consumer buy-in or trust, inequalities between Member States, etc.;

⁴⁹³ AKIS means the organisation and knowledge flows between persons, organisations and institutions who use and produce knowledge for agriculture and interrelated fields (Agricultural Knowledge and Innovation).

⁴⁹⁴ Art 13(2) of the post 2020 CAP regulation.

- Provide overall support related to knowledge creation, organisation and sharing. This could include peer-to-peer counselling, master classes, (digital) advice modules, communication and education materials, etc.
- Promote the sharing of effective and novel approaches that are sustainable in terms of economic, environmental and social aspects.
- Create added value by ensuring stronger links between research, education, advisors and farming practice and encouraging the wider use of available knowledge across the EU.
- Spread ready-to-use innovative solutions to practitioners and ensuring communication to the scientific community of research needs from practice.
- Taking strong account of cost-benefit elements, collect and document good examples of connecting farmers, intermediates and consumers in Member States to be able to take into account financial aspects and local conditions. Select the best practices, and extract lessons about the key success factors, possible quick wins and make them available for (local) exploitation.
- Promote the integration of the advisors of the EU advisory network on organic farming into their Member State's AKIS.
- Explore if the activities of the EU advisory network on organic farming can be up scaled at the level of a number of Member States under a cooperative format. Seek if common tools can be created to incentivise the implementation of the learnings from this project.
- Organise training activities for new advisors to be integrated in the network during the course of the project.
- In the EU advisory network, use local AKIS connections which can more accurately interpret the national/regional contexts to help develop the best solutions for that Member State or region. Use the support of the Member States' knowledge and innovation experts of the SCAR-AKIS Strategic Working Group and of the SCAR Agroecology Strategic Working Group⁴⁹⁵ to discuss project strategy and progress in the various stages of the project.

Outcomes should be spread beyond the organic farming communities and reach also farmers involved in conventional, carbon, low-input, circular agriculture or agroecology. Proposals must implement the multi-actor approach, with a majority of partners being organic farming advisors with solid field experience. Proposals should capitalise and build on the outputs of relevant EIP-AGRI Operational Groups and EIP-AGRI networking activities, as well as those of the Horizon 2020 Thematic Networks related to organic farming. Proposals should dedicate a task, appropriate resources and a plan on how they will ensure synergy with and take into consideration the results of other initiatives under Horizon Europe, including the projects selected under the topics HORIZON-CL6-2021-FARM2FORK-01-01: 'Reaching the farm to

⁴⁹⁵ <https://scar-europe.org/agroecology-mission-and-aims>

fork target: R&I scenarios for boosting organic farming and organic aquaculture in Europe’, and HORIZON-CL6-2021-BIODIV-01-14: ‘Fostering organic crop breeding’ in the Horizon Europe Work Programme 2021-2022. Proposals should also dedicate appropriate resources to ensure synergies with the activities carried out by projects selected under the following topics in this work programme: HORIZON-CL6-2024-FARM2FORK-02-1-two-stage: ‘Increasing the availability and use of non-contentious inputs in organic farming’, and HORIZON-CL6-2023-FARM2FORK: ‘Improving yields in organic cropping systems’, HORIZON-CL6-2023-CLIMATE-01-5: ‘Pilot network of climate-positive organic farms’, as well as coherence and synergies with the activities of the future partnership ‘Accelerating farming systems transition: agroecology living labs and research infrastructures’. Proposals should provide all outcomes and materials to the European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI), including in the common 'practice abstract' format for EU wide dissemination, as well as to national/regional/local AKIS channels and to the EU-wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24) in the requested formats.

HORIZON-CL6-2023-GOVERNANCE-01-21: Developing EU advisory networks to reduce the use of pesticides

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 4.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the

	Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁴⁹⁶ .
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Expected Outcome: In support of the European Green Deal, common agricultural policy (CAP), farm to fork and biodiversity strategies', the zero pollution action plan objectives and targets, and the sustainable carbon cycles communication, the successful proposal will focus on advisor exchanges across the EU in order to increase the speed of knowledge creation and sharing, capacity building, demonstration of innovative solutions, as well as helping to bring them into practice, which accelerates the needed transitions. Agricultural Knowledge and Innovation Systems (AKIS), in which advisors play a central role, are key drivers to speed up innovation and the uptake of research results by farmers.

Transformative changes such as the changes required within the European Green Deal are dynamic processes that require appropriate governance of AKIS actors. Advisors are key actors with a strong role in guiding and with a big influence on producers' decisions. A novelty in the post-2020 CAP plans⁴⁹⁷ is that advisors must now be integrated within the Member States' AKIS, and that the scope of their actions has become much broader. They must be able to cover economic, environmental and social domains, as well as be up-to-date on science and innovation. They should be able to translate this knowledge into opportunities, and use and adapt this knowledge to specific local circumstances. This specific topic focuses on the important role advisors can play in relation to reducing pesticide use and risks to reach the associated target of the farm to fork and biodiversity strategies by promoting, for example, more sustainable farming techniques (e.g., integrated pest management and agroecology), carbon farming practices, and the use of non-chemical or biological methods for pest control.

Project results are expected to contribute to the following outcomes:

- Progress towards the most urgent policy objectives linked to Cluster 6, as well as the European Green Deal, and in particular the farm to fork strategy, the new CAP, and the sustainable carbon cycles communication, with a view to increasing the sustainability of farming, helping to raise awareness and tackling societal challenges, including climate change, and helping to reduce pesticide risks and use;
- Support to the CAP cross-cutting objective of modernising the sector by fostering and sharing knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake⁴⁹⁸;
- Development of interaction with regional policymakers and of a potential EU network to discuss institutional challenges to the reduction of pesticide use and the associated risks

⁴⁹⁶ This [decision](#) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁴⁹⁷

Art 13(2) of the post 2020 CAP regulation.

⁴⁹⁸

Art 5 CAP post 2020 proposal.

in practice, such as bottlenecks, lock-ins, political inertia, ambiguous regulations, inequality between Member States and power imbalances;

- Production of supporting services and materials to facilitate the reduction of pesticide use and risk, including knowledge networks and peer-to-peer counselling, master classes, advice modules, communication and education materials, effective business models for farm management with less pesticides, and other risk mitigation tools and measures, etc.;
- Speed up of the introduction, spread and implementation in practice of innovative solutions related to pesticide use and measures to reduce risks and pollution overall, in particular by:
 - a. creating added value by better linking research, education, advisors and farming practice and encouraging the wider use of available knowledge across the EU;
 - b. learning from innovation actors and projects, resulting in faster sharing and implementation of ready-to-use innovative solutions, spreading them to practitioners and communicating to the scientific community the bottom-up research needs of practice.

Scope: Proposals should address the following activities:

- Connect advisors possessing a broad and extensive network of farmers across all EU Member States in an EU advisory network dedicated to pesticide use and risk reduction, including farming techniques which support pesticide use and risk reduction, with a view to sharing experiences on how to best tackle the issues, building on the outcomes of the EIP-AGRI Focus Groups and Workshops as well as the Horizon 2020 Thematic networks related to pesticide use and risks reduction;
- Share effective and novel approaches among the EU advisory network on pesticide use and risk reduction, which are sustainable in terms of economic, environmental and social aspects;
- Fill gaps on emerging advisory topics beyond the classical sectoral advice, which is useful in particular in relation with the new obligation for Member States to integrate advisors within their AKIS and their obligation to cover a much broader scope than in the past;
- Provide overall support related to knowledge creation, organisation and sharing;
- Take strong account of cost-benefit elements. Collect and document good examples in this regard, connecting with farmers, intermediates and consumers in Member States to be able to take into account financial aspects and local conditions. Select the best practices, learn about the key success factors, possible quick wins and make them available for (local) exploitation, to ensure financial win-wins for producers, citizens and intermediate actors;

- Integrate the advisors within the EU pesticide use and risk reduction network into their MS AKIS as much as possible. As innovation brokers they should encourage innovative projects on organic and other low-input sustainable farming systems in EIP Operational Groups. They should give hands-on training to farmers and local advisors, lead national thematic and learning networks on the subject, deliver and implement action plans to make farming systems with a reduced use of chemical pesticides, more efficient, reduce farmers' yield losses, inspire new and incoming farmers or farms at the cross-roads of intergenerational renewal, connect with education and ensure broad communication, support peer-to-peer consulting, develop on-farm demonstrations and demo films distributed widely via social media, and provide specific back-office support for generalist advisors within the national/regional AKIS;
- Explore if the activities of the EU advisory network on pesticide use and risk reduction can be scaled up at the level of a number of Member States under a cooperative format. Wherever possible, develop digital advisory tools for common use across the EU. Determine whether common tools can be created to incentivise the implementation of the learnings from this project;
- Include all 27 EU Member States in the EU advisory network, using local AKIS connections which can more accurately interpret the national/regional contexts to help develop the best solutions for that Member State or region. Use the support of the Member States' knowledge and innovation experts of the SCAR-AKIS Strategic Working Group to discuss project strategy and progress in the various stages of the 2 projects;
- Projects should run at least 5 years. They must implement the multi-actor approach, with a majority of partners being farming advisors with solid field experience;

Proposals must implement the multi-actor approach, with a majority of partners being farming advisors active in pesticide use and with substantial field expertise. Proposals should capitalise and build on the outputs of relevant EIP-AGRI Operational Groups, EIP-AGRI Focus Groups and EIP-AGRI networking activities, as well as those of the Horizon 2020 Thematic Networks related to plant health and pesticide use. Proposals should also build on the results of past/ongoing research projects and thematic networks.

Proposals should also ensure synergies with the activities carried out by projects selected under the following topics in this work programme: 'HORIZON-CL6-2023-BIODIV-01-14: Biodiversity friendly practices in agriculture – breeding for Integrated Pest Management (IPM)', 'HORIZON-CL6-2023-FARM2FORK-01-7: Innovations in plant protection: alternatives to reduce the use of pesticides focusing on candidates for substitution', and 'HORIZON-CL6-2023-GOVERNANCE-01-20: Developing an EU advisory network on organic agriculture' as well as coherence and synergies with the activities of the future partnership 'Accelerating farming systems transition: agroecology living labs and research infrastructures'. Proposals should provide all outcomes and materials to the European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI), including in

the common 'practice abstract' format for EU wide dissemination, as well as to national/regional/local AKIS channels and to the EU-wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24) in the requested formats.

HORIZON-CL6-2023-GOVERNANCE-01-22: Developing EU advisory networks on the optimal fertiliser use

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 4.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁴⁹⁹ .

Expected Outcome: In support of the European Green Deal, common agricultural policy (CAP), and biodiversity strategies', the zero pollution action plan objectives and targets, and the sustainable carbon cycles communication, the successful proposal will focus on advisor exchanges across the EU in order to increase the speed of knowledge creation and sharing, capacity building, demonstration of innovative solutions, as well as helping to bring them into practice, which accelerates the needed transitions. Agricultural Knowledge and Innovation Systems (AKIS), in which advisors play a central role, are key drivers to speed up innovation and the uptake of research results by farmers.

⁴⁹⁹ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

Transformative changes such as the changes required within the European Green Deal are dynamic processes that require appropriate governance of AKIS actors. Advisors are key actors with a strong role in guiding and with a big influence on producers' decisions. A novelty in the post-2020 CAP plans⁵⁰⁰ is that advisors must now be integrated within the Member States' AKIS, and that the scope of their actions has become much broader. They must be able to cover economic, environmental and social domains, as well as be up-to-date on science and innovation. They should be able to translate this knowledge into opportunities, and use and adapt this knowledge to specific local circumstances. This specific topic focuses on the important role advisors can play in relation to the soaring fertilizer prices and the ambition of the farm to fork and biodiversity strategies for 2030 to reduce nutrient losses to the environment from both organic and mineral fertilizers by at least 50%; and hence reduce the use of fertilisers by at least 20%, while ensuring no deterioration in soil fertility.

Project results are expected to contribute to the following outcomes:

- Progress towards the most urgent policy objectives linked to Cluster 6, as well as the European Green Deal, and in particular the farm to fork strategy, the new CAP, the sustainable carbon cycles communication, with a view to increasing the sustainability of farming, helping to raise awareness and tackling societal challenges, including climate change, and helping to reduce nutrient losses and thereby the use of fertilisers;
- Substitution of mineral fertilisers with sustainable, affordable high-quality bio-based alternatives from different residue and waste streams;
- Support to the CAP cross-cutting objective of modernising the sector by fostering and sharing knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake⁵⁰¹;
- Development of interaction with regional policymakers and of a potential EU network to discuss institutional challenges to the reduction of nutrient losses and the use of fertilisers in practice, such as bottlenecks, lock-ins, political inertia, ambiguous regulations, inequality between Member States and power imbalances;
- Production of supporting services and materials to facilitate the reduction of nutrient losses and the use of fertilisers, including knowledge networks and peer-to-peer counselling, master classes, advice modules, communication and education materials, effective business models for farm management with less fertilisers, and other risk mitigation tools and measures, etc.;
- Speed up of the introduction, spread and implementation in practice of innovative solutions related to fertiliser use and measures to reduce nutrient losses overall, in particular by:

⁵⁰⁰ Art 13(2) of the post 2020 CAP regulation.

⁵⁰¹ Art 5 CAP post 2020 proposal.

- a. creating added value by better linking research, education, advisors and farming practice and encouraging the wider use of available knowledge across the EU;
- b. learning from innovation actors and projects, resulting in faster sharing and implementation of ready-to-use innovative solutions, spreading them to practitioners and communicating to the scientific community the bottom-up research needs of practice.

Scope: Proposals should address the following activities:

- Connect advisors possessing a broad and extensive network of farmers across all EU Member States in an EU advisory network dedicated to the reduction of nutrient losses and optimal use of fertilisers, including bio-based fertilisers and farming techniques which support a sustainable nutrient management, including carbon farming, with a view to sharing experiences on how to best tackle the issues, building on the outcomes of the related EIP-AGRI focus groups and workshops as well as the Horizon 2020 projects and thematic networks.
- Share among the EU advisory network effective and novel approaches to the reduction of nutrient losses and the use of fertilisers, which are sustainable in terms of economic, environmental and social aspects.
- Fill gaps on emerging advisory topics beyond the classical sectoral advice, which is useful in particular in relation with the new obligation for Member States to integrate advisors within their AKIS and their obligation to cover a much broader scope than in the past.
- Provide overall support related to knowledge creation, organisation and sharing.
- Take strong account of cost-benefit elements. Collect and document good examples in this regard, connecting with farmers, intermediates and consumers in Member States to be able to take into account financial aspects and local conditions. Select the best practices, learn about the key success factors, possible quick wins and make them available for (local) exploitation, to ensure financial win-wins for producers, citizens and intermediate actors.
- Integrate the advisors within the EU network on the reduction of nutrient losses and the use of fertilisers into their MS AKIS as much as possible. As innovation brokers they should encourage innovative projects on low-input sustainable farming systems in EIP Operational Groups. They should give hands-on training to farmers and local advisors, lead national thematic and learning networks on the subject, deliver and implement action plans to make farming activities more efficient, reduce farmers' yield losses, inspire new and incoming farmers or farms at the cross-roads of intergenerational renewal, connect with education and ensure broad communication, support peer-to-peer consulting, develop on-farm demonstrations and demo films distributed widely via social media, and provide specific back-office support for generalist advisors within the national/regional AKIS.

- Explore if the activities of the EU advisory network on the reduction of nutrient losses and use of fertilisers can be scaled up at the level of a number of Member States under a cooperative format. Wherever possible, develop digital advisory tools for common use across the EU. Determine whether common tools can be created to incentivise the implementation of the learnings from this project.
- Include all 27 EU Member States in the EU advisory network, using local AKIS connections which can more accurately interpret the national/regional contexts to help develop the best solutions for that Member State or region. Use the support of the Member States’ knowledge and innovation experts of the SCAR-AKIS Strategic Working Group to discuss project strategy and progress in the various stages of the 2 projects.
- Projects should run at least 5 years. They must implement the multi-actor approach, with a majority of partners being farming advisors with solid field experience.
- Provide all outcomes and materials to the European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI), including in the common 'practice abstract' format for EU wide dissemination, as well as to national/regional/local AKIS channels and to the EU-wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24) in the requested formats.

Proposals must implement the multi-actor approach, with a majority of partners being farming advisors active in fertiliser use and with frequent field expertise. Proposals should capitalise and build on the outputs of relevant EIP-AGRI Operational Groups, EIP-AGRI Focus Groups and EIP-AGRI networking activities, as well as those of the Horizon 2020 Thematic Networks related to the reduction of nutrient losses and the use of fertilisers. Proposals should also build on the results of past/ongoing research projects and thematic networks.

Call - Innovative governance, environmental observations and digital solutions in support of the Green Deal

HORIZON-CL6-2023-GOVERNANCE-02

Conditions for the Call

Indicative budget(s)⁵⁰²

Topics	Type of Action	Budgets (EUR million)	Expected EU contribution per project	Indicative number of

⁵⁰² The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.
The Director-General responsible may delay the deadline(s) by up to two months.
All deadlines are at 17.00.00 Brussels local time.
The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023 and 2024.

Horizon Europe - Work Programme 2023-2024
Food, Bioeconomy, Natural Resources, Agriculture and Environment

		2023	(EUR million) ⁵⁰³	projects expected to be funded
Opening: 25 May 2023 Deadline(s): 21 Sep 2023				
HORIZON-CL6-2023-GOVERNANCE-02-1	CSA	4.00	Around 4.00	1
Overall indicative budget		4.00		

General conditions relating to this call	
<i>Admissibility conditions</i>	The conditions are described in General Annex A.
<i>Eligibility conditions</i>	The conditions are described in General Annex B.
<i>Financial and operational capacity and exclusion</i>	The criteria are described in General Annex C.
<i>Award criteria</i>	The criteria are described in General Annex D.
<i>Documents</i>	The documents are described in General Annex E.
<i>Procedure</i>	The procedure is described in General Annex F.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G.

Innovating with governance models and supporting policies

Proposals are invited against the following topic(s):

HORIZON-CL6-2023-GOVERNANCE-02-1: Supporting the All-Atlantic Ocean Research and Innovation Alliance and Declaration

Specific conditions

⁵⁰³ Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 4.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>If eligible for funding, legal entities established in non-associated third countries may exceptionally participate in this Coordination and support action as beneficiary or affiliated entity.</p> <p>Due to the scope of this topic, legal entities established in Brazil are exceptionally eligible for Union funding.</p> <p>The following additional eligibility criteria apply: In order to achieve the expected outcomes of the action, namely the European contribution to the implementation of the All-Atlantic Ocean Research & Innovation Alliance, participation, as a beneficiary or associated partner, of at least three legal entities established in at least three of the following countries is required: Argentina, Brazil, Canada, Cape Verde, Morocco, United States of America, South Africa.</p>
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025).⁵⁰⁴.</p>

Expected Outcome: Proposals are expected to contribute to all of the following expected outcomes:

- Support the coordination of marine and maritime research and innovation activities with Atlantic Ocean stakeholders, integrating the North and South Atlantic dimension, aligned with the priorities identified in the 2022 All-Atlantic Ocean Research and Innovation Alliance (AAORIA) Declaration, with the aim of facilitating knowledge

⁵⁰⁴ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

exchange, structure its integration as well as stimulating all forms of innovation, in view of providing benefit to local communities;

- Consolidated integration of partners and newcomers to the All-Atlantic Ocean Research and Innovation Alliance and enhanced visibility to the activities through targeted communication actions and coordination of visual identity;
- Support to the governance, implementation and reporting of the All-Atlantic Ocean Research and Innovation Alliance;
- Forged links and coordination with other important EU and international activities such as the European Mission Restore Our Ocean and Waters by 2030, and in particular its Atlantic-Arctic Lighthouse, the Horizon Europe Partnership for a Sustainable Blue Economy, and organisations in charge of protection of the marine and coastal environment in the Atlantic, such as the OSPAR and Abidjan Conventions, in delivering coordinated activities in the Atlantic Sea Basin, while ensuring its interlinks with the adjacent polar areas;
- Foster active contribution from the All-Atlantic Ocean Research and Innovation Alliance to achieving the goals of the UN Decade of Ocean Science for Sustainable Development 2021-2030, the UN Decade on Ecosystem Restoration, the Convention on Biological Diversity, to Marine Biodiversity of Areas Beyond National Jurisdiction (BBNJ), as well as G7 and G20 related activities;
- Facilitated synergies in youth and gender programmes and capacity development for early career professionals; educational and inter-generational activities in favour of youth and communities living on the shores of the Atlantic Ocean.

Scope: The actions should aim at supporting a wider understanding of the opportunities and promoting a sustainable management of the Atlantic Ocean as a whole, through a large-scale basin effort involving both the northern and the southern parts of this ocean, and its interlinks with the adjacent polar areas. To achieve this, it will be necessary to bring together and systematically connect scientists, a wide range of public and private stakeholders, including civil society and youth, with data, knowledge, expertise, capacities, infrastructures and resources.

Building on the pre-existing cooperative efforts under the Galway and Belém Statements and the existing and future bilateral administrative arrangements between the EU and Atlantic partner countries, this cooperation can continue to converge towards the implementation of a systemic approach by linking and jointly tackling the climate-food-ocean challenges, including extreme events and sea level rise. Overall, activities should contribute to upscaling cooperation along and across the Atlantic Ocean, including the specific on-going and future activities and initiatives related to the Arctic and Antarctica. They should include upscaling of long-term partnerships building also on on-going initiatives such as the All-Atlantic Ocean Youth Ambassadors, joint actions, working groups, pledging platform, etc, for the benefit of the All-Atlantic local communities. This action is expected to bring research and innovation

results for their benefit and to also empower for and link early career professional to all these activities.

The action should:

- Contribute with professional support to the organization, monitoring, communication, and outreach activities of the All-Atlantic Ocean Research and Innovation Alliance and Innovation work, in particular to the annual All-Atlantic Ocean Research and Innovation Alliance Forum, and any other major relevant events;
- Consolidate existing initiatives (All-Atlantic Ocean Youth Ambassadors, joint actions, working groups, etc.) building on the outcomes of the 2022 AAORIA Fora. Continue providing basic support for joint activities (in particular in their initial phase) in the priority areas identified in the 2022 All-Atlantic Ocean Research and Innovation Alliance Declaration, ensuring their long-term self-sustainability;
- Facilitate a structured dialogue and coordination between the All-Atlantic Ocean Research and Innovation Alliance and relevant national and regional stakeholders, such as the Benguela Current Commission, the Abidjan Convention, indigenous communities, as well as networks and initiatives operating in the polar seas;
- Link with relevant international bodies, supporting the All-Atlantic contributions to the UN Decade of Ocean Science, and facilitating dialogue and synergies with other EU instruments (e.g., Mission Restore our Ocean and Waters, Mission Adaptation to Climate Change, and the Sustainable Blue Economy Partnership) relevant for the All-Atlantic work, is part of the activities to be undertaken under this action.

Proposals should include a strong involvement of citizens/civil society, together with academia/research, industry/SMEs and government/public authorities.

In order to achieve the expected outcomes, international cooperation is mandatory. Consortia submitting proposals to this topic are encouraged to include in particular participants from countries endorsing the All-Atlantic Ocean Research and Innovation Alliance Declaration.

Call - Innovative governance, environmental observations and digital solutions in support of the Green Deal

HORIZON-CL6-2024-GOVERNANCE-01

Conditions for the Call

Indicative budget(s)⁵⁰⁵

⁵⁰⁵ The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.
The Director-General responsible may delay the deadline(s) by up to two months.
All deadlines are at 17.00.00 Brussels local time.

Horizon Europe - Work Programme 2023-2024
Food, Bioeconomy, Natural Resources, Agriculture and Environment

Topics	Type of Action	Budgets (EUR million)	Expected EU contribution per project (EUR million) ⁵⁰⁶	Indicative number of projects expected to be funded
		2024		
Opening: 17 Oct 2023 Deadline(s): 28 Feb 2024				
HORIZON-CL6-2024-GOVERNANCE-01-1	COFUND	60.00	Around 60.00	1
HORIZON-CL6-2024-GOVERNANCE-01-10	CSA	4.00	Around 4.00	1
HORIZON-CL6-2024-GOVERNANCE-01-11	CSA	3.00	Around 3.00	1
HORIZON-CL6-2024-GOVERNANCE-01-12	CSA	4.00	Around 4.00	1
HORIZON-CL6-2024-GOVERNANCE-01-13	CSA	4.00	Around 4.00	1
HORIZON-CL6-2024-GOVERNANCE-01-2	CSA	3.50	Around 3.50	1
HORIZON-CL6-2024-GOVERNANCE-01-3	CSA	3.00	Around 3.00	1
HORIZON-CL6-2024-GOVERNANCE-01-5	PCP	19.00	Around 19.00	1
HORIZON-CL6-2024-GOVERNANCE-01-6	RIA	8.00	Around 4.00	2
HORIZON-CL6-2024-GOVERNANCE-01-7	RIA	15.00	Around 5.00	3
HORIZON-CL6-2024-GOVERNANCE-01-8	CSA	4.00	Around 2.00	2

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for years 2023 and 2024.

⁵⁰⁶ Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

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HORIZON-CL6-2024-GOVERNANCE-01-9	CSA	6.00	Around 3.00	2
Overall indicative budget		133.50		

General conditions relating to this call	
<i>Admissibility conditions</i>	The conditions are described in General Annex A.
<i>Eligibility conditions</i>	The conditions are described in General Annex B.
<i>Financial and operational capacity and exclusion</i>	The criteria are described in General Annex C.
<i>Award criteria</i>	The criteria are described in General Annex D.
<i>Documents</i>	The documents are described in General Annex E.
<i>Procedure</i>	The procedure is described in General Annex F.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G.

Innovating with governance models and supporting policies

Proposals are invited against the following topic(s):

HORIZON-CL6-2024-GOVERNANCE-01-1: Additional activities for the European Partnership for a climate neutral, sustainable and productive Blue Economy

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 60.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 60.00 million.
<i>Type of Action</i>	Programme Co-fund Action
<i>Eligibility</i>	The conditions are described in General Annex B. The following

<p><i>conditions</i></p>	<p>exceptions apply:</p> <p>The proposal must be submitted by the coordinator of the consortium funded under HORIZON-CL6-2022-GOVERNANCE-01-02: European Partnership for a climate neutral, sustainable and productive Blue Economy. This eligibility condition is without prejudice to the possibility to include additional partners.</p> <p>If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other data and services may additionally be used).</p> <p>The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.</p> <p>The following additional eligibility criteria apply: Proposals focusing on one type of activity or sector are out of scope.</p>
<p><i>Procedure</i></p>	<p>The procedure is described in General Annex F. The following exceptions apply:</p> <p>The evaluation committee will be composed partially by representatives of EU institutions.</p> <p>If the proposal is successful, the next stage of the procedure will be grant agreement amendment preparations.</p> <p>If the outcome of amendment preparations is an award decision, the coordinator of the consortium funded under HORIZON-CL6-2022-GOVERNANCE-01-02: European Partnership for a climate neutral, sustainable and productive Blue Economy will be invited to submit an amendment to the grant agreement, on behalf of the beneficiaries.</p>
<p><i>Legal and financial set-up of the Grant Agreements</i></p>	<p>This action is intended to be implemented in the form of an amendment of the grant agreement concluded pursuant to topic HORIZON-CL6-2022-GOVERNANCE-01-02.</p> <p>For additional activities covered by this action:</p> <ul style="list-style-type: none"> • The funding rate is 30% of eligible costs. • Beneficiaries may provide financial support to third parties (FSTP). The support to third parties can only be provided in the form of grants. • Financial support provided by the participants to third parties is one of the primary activities of this action in order to be able to achieve its objectives. The 60 000 EUR threshold provided for in Article 204 (a) of the Financial Regulation No 2018/1046 does not

	<p>apply.</p> <ul style="list-style-type: none"> • The maximum amount of FSTP to be granted to each third party is EUR 10 000 000. This amount is justified since the provision of FSTP is one of the primary activities of this action and it is based on extensive experience under predecessors of this partnership. • The starting date of grants awarded under this topic may be as of the submission date of the application. Applicants must justify the need for a retroactive starting date in their application. Costs incurred from the starting date of the action may be considered eligible (and will be reflected in the entry into force date of the amendment to the grant agreement).
<i>Total indicative budget</i>	The total indicative budget for the duration of the partnership is EUR 150 million.

Expected Outcome: This topic is for the continuation of the Sustainable Blue Economy Partnership (SBEP), i.e. EU contribution in WP 2023-2024.

The second instalment of the partnership is expected to contribute to all expected outcomes specified in topic HORIZON-CL6-2022-GOVERNANCE-01-02: European Partnership for a climate-neutral, sustainable and productive Blue Economy, for continuation and new development of activities.

Scope: The objective of this action is to continue to provide support to the European Partnership for a climate-neutral, sustainable and productive Blue Economy (SBEP) identified in the Horizon Europe Strategic Plan 2021-2024 and first implemented under the topic HORIZON-CL6-2022-GOVERNANCE-01-02: European Partnership for a climate neutral, sustainable and productive Blue Economy, and in particular to fund additional activities (which may also be undertaken by additional partners) in view of its intended scope and duration, and in accordance with Article 24(2) of the Horizon Europe Regulation.

The consortium which applied to and received funding under HORIZON-CL6-2022-GOVERNANCE-01-02 is uniquely placed to submit a proposal to continue the envisioned partnership. Not only did this consortium submit the proposal leading to the identification of the partnership in the Horizon Europe strategic planning 2021-2024, it has also implemented the partnership through co-funded calls in year 2022 based on this planning and further to topic HORIZON-CL6-2022-GOVERNANCE-01-02. In this context, the current consortium has particular expertise in relation to the objectives of the Partnership, the activities to be implemented, in particular FSTP calls or other calls/scope of calls clearly required/envisioned pursuant to initial proposal/partnership, and other relevant aspects of the action. In practice, another consortium could not continue the activities of the Partnership underway without significant disruption to the ongoing activities, if at all.

The scope of the application for this call on the European partnership for a climate neutral, sustainable and productive Blue Economy should focus on duly justified continuation or additional priority areas, additional activities and additional partners, including from additional countries, delivering knowledge and solutions to make the blue economy sustainable and ensure that its benefits are distributed fairly, by aligning national, regional and EU R&I priorities and bringing together science, industry, governance and society.

Responding to national and EU policy goals (e.g., European Green Deal, Marine Strategy and Water Framework Directive, Natura and Maritime Spatial Planning Directives), the partnership's continued and/or additional priority areas should aim to achieve a healthy ocean, a sustainable and productive blue economy and the well-being of citizens, for which the long-term vision for the EU's rural areas and its objectives (in particular contributing to stronger and resilient rural (coastal) areas) should also be considered, with its flagship initiative "Research and innovation for rural (coastal) communities".

The partnership is expected to continue to organise joint calls as part of the additional activities and therefore it should factor ample time to run the co-funded projects. The partnership should further promote technological, nature-based, social, economic and cultural innovation and experiment with new planning, governance, business and finance models.

The partnership's additional activities are expected to be designed and described in such a way that it is clear how they will increase scientific contributions, applicable in a legal/regulatory context, and how they will facilitate the use of scientific knowledge by regulators and policymakers, contributing to the EU biodiversity strategy for 2030, the farm to fork strategy, the mission "Restore our Ocean and Waters by 2030", the circular economy action plan, the zero pollution ambition and the transformation of Europe's blue economy towards climate-neutral status by 2050, as also reflected in the communication on a new approach for a sustainable blue economy in the EU "Transforming the EU's Blue Economy for a Sustainable Future".

The partnership is also expected to have a structuring function with regard to European integrated ocean observing systems and data analyses. The partnership is expected to put specific emphasis on how to contribute to the future EU initiative on ocean observation, to have a key role in the implementation of the European Ocean Observing System (EOOS), including research infrastructures, in the development of a common European ocean data space connected to the European Open Science Cloud (EOSC) and European Green Deal data spaces, and contribute to the development of Digital Twin Ocean. All quality-controlled data collected through actions funded from this co-fund call should follow FAIR principles and be made available through open access data systems supported by the European Commission (such as Copernicus, GEOSS, EMODnet).

The partnership's additional activities should put the emphasis on the development of basin- or Europe-wide holistic, integrated, systemic and cross-sectoral approaches and foster co-creation processes involving all relevant stakeholders and actors, while remaining operationally manageable and taking into account the recommendations from additional support offered by the European Commission in 2022. The additional activities are expected

to be implemented through the 'multi-actor approach' and ensure adequate involvement of researchers from different disciplines, advisors, local, regional and national authorities, government representatives, industry and businesses, including SMEs, knowledge institutions and citizens, civil society organisations including NGOs, and other relevant actors of the value chain, supported through Open Science and an inclusive governance, policy and decision-making. It should harness the full potential of social sciences and humanities (SSH), social innovation and citizen engagement to deliver portfolios of solutions, measures and tools and facilitate their replication, and upscaling. In particular, the effective contribution of SSH disciplines and expertise is expected to produce meaningful and significant effects enhancing the societal impact of the related research and innovation activities.

Additional activities should contribute to improve the health and quality of life and long-term socio-economic prospects of coastal communities, including women, youth and the most vulnerable groups like indigenous people, in the context of major transitions and rising threats to climate, resources and health, including by increasing their resilience to crises like the COVID-19 pandemic. In line with the European Commission's political vision of leaving no one behind, the wide diversity and heterogeneity in levels of socio-economic, technological, institutional, innovation and skills potential should be taken into account.

The partnership is expected to include partners from additional countries, including Associated Countries, in its consortium, as it should cover the Atlantic, the Baltic Sea, the North Sea, the Mediterranean and the Black Sea to the maximum extent possible. It is expected to include and be open to all relevant public marine/maritime funding organisations and ministries from EU Member States and Associated Countries as core members, in close cooperation with the private sector, including SMEs and foundations. Appropriate links to other relevant ministries and organisations, including civil society, should be established.

Given the global dimension of ocean policy, membership and other modalities of participation from organisations and institutions in Non-Associated Third Countries is expected, in particular key partners bordering the different EU sea basins. In line with the Europe's global approach to cooperation in research and innovation, international cooperation should contribute to align strategies and research agendas, strengthen data collection, monitoring and sharing, as well as access to research infrastructures, promote good practice for maritime policies, promote the exchange and export of key technologies and gradually open up cooperation with new countries outside of Europe.

Through the additional activities and new partners, the partnership should support the EU's strong commitment to the UN Decade of Ocean Science for Sustainable Development, the UN Decade of Ecosystem Restoration, the G7 Future of the Seas and Oceans Initiative, the All-Atlantic Ocean Research and Innovation Alliance, the BLUEMED Initiative, the Black Sea Synergy and other international initiatives.

Partners are expected to continue to provide contributions for the governance structure, the joint calls and other dedicated implementation actions and efforts for national coordination. The partnership is expected to mobilise EU, national and regional capacities to leverage

investments, including from the private sector, increase up-scalability and market accessibility for the developed solutions and thus increase the return to investments.

To ensure the coherence and complementarity of activities, and to leverage knowledge investment possibilities, the partnership is expected to foster close cooperation and ensure synergies with other relevant European Partnerships, in place and proposed, notably “Rescuing biodiversity to safeguard life on Earth”, “Sustainable food systems for people, planet and climate”, “Water security for the planet (Water4All)”, and related actions for coordinating and supporting the combined activities of Member States and Associated Countries towards the objectives of the “Zero-emission waterborne transport” (ZEWT) Partnership, “Clean Energy Transition”, “Artificial intelligence, Data and Robotics”, the European Open Science Cloud (EOSC) and others where relevant, as well as the EIT Climate KIC, the EIT FOOD and the “European Open Science Cloud (EOSC)”. The partnership will also be linked to the relevant objectives of the mission “Restore our Ocean and Waters by 2030”. Proposers are expected to describe in details the way to plan and implement such collaborations through dedicated tasks and appropriate resources.

Engaging with managing authorities of European Structural and Investment Funds, as well as others like LIFE, the Recovery and Resilience Facility, the Instrument for Pre-Accession Assistance (IPA III) and Neighbourhood, Development and International Cooperation Instrument (NDICI), during partnership implementation would help increase the implementation of the project outcomes and support and facilitate further uptake.

While the award of a grant to continue the Partnership in accordance with this call should be based on a proposal submitted by the coordinator of the consortium funded under HORIZON-CL6-2022-GOVERNANCE-01-02: European Partnership for a climate neutral, sustainable and productive Blue Economy and the additional activities (which may include additional partners) to be funded by the grant should be subject to an evaluation, this evaluation should take into account the existing context and the scope of the initial evaluation as relevant, and related obligations enshrined in the grant agreement.

Taking into account that the present action is a continuation of topic HORIZON-CL6-2022-GOVERNANCE-01-02 and foresees an amendment to an existing grant agreement, the proposal should also present in a separate document the additional activities and additional partners, if any, to be covered by the award in terms of how they would be reflected in the grant agreement. The proposal should also describe the specific activities foreseen in order to strengthen the synergies with other related Missions and Partnerships.

The Commission envisages to include new actions in future work programme(s) to continue providing support to the partnership for the duration of Horizon Europe.

HORIZON-CL6-2024-GOVERNANCE-01-2: Regional ecosystems of innovation to foster food system transformation

Specific conditions

<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 3.50 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 3.50 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁵⁰⁷ .

Expected Outcome: In line with the objectives of the European Green Deal, the farm to fork strategy for a fair, healthy and environment-friendly food system, the food 2030 priorities and the EU’s climate ambition for 2030 and 2050, the successful proposal will contribute to the sustainability and resilience of EU food systems by supporting the establishment of innovative governance models notably to achieve better-informed decision-making processes, social engagement and innovation. Successful proposals will boost knowledge sharing, interactions and priority setting in the form of an acceleration agenda between all relevant food systems actors, in particular small and medium-sized enterprises (SMEs) and industrial clusters, start-ups, universities/research centres, public authorities and civil society organisations.

Project results are expected to contribute to all of the following expected outcomes:

- Coherent business-focused analysis of R&I bottlenecks and opportunities for the transition of European food systems in line with the farm to fork strategy objectives, in particular to contribute to the 25% organic food target.

⁵⁰⁷ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

- Improved coordination of existing European and national platforms with regional innovation ecosystems actors at EU level.
- Strengthened European regions (NUTS 2 level) and their regional actors.
- Contribution to the farm to fork objectives and food 2030 priorities: nutrition for sustainable healthy diets, climate, biodiversity and environment, circularity and resource efficiency, innovation and empowering communities (e.g., meeting the needs, values and expectations of society in a responsible and ethical way).

Scope: Collaboration between innovation actors across Europe is necessary to accelerate and master the innovative solutions needed for the food system transformation and the implementation of sustainable solutions. Innovation ecosystems can be found in many locations in Europe, but too few places can be seen as regional ecosystems of innovation. Moreover, the strength and depth of interconnections, information flows and knowledge transfers inside innovation ecosystems and between actors vary widely.

Strong and well-connected food systems actors, in particular small and medium-sized enterprises (SMEs) and industrial clusters, start-ups, universities/research centres, public authorities and civil society organisations, have the potential to become ecosystems of innovation facilitating coordination and multi-stakeholder engagement, to create an effective framework for action to support the food system transition in the EU and Associated Countries. The framework is expected to allow pooling of resources, coordinating efforts, and facilitating and promoting the multi-actor approach. Relevant capacities to foster the necessary R&I in the short, medium, and long term will be developed, giving a specific focus to the objective to boost the organic food sector.

Proposed activities should cover all of the following aspects:

- Strengthen existing ecosystems of innovation to broaden their scope and take on a “food systems approach” that delivers on the Food 2030 co-benefits (nutrition, public health, climate, circularity and communities) by: (a) deploying a quadruple helix model (that fully engages the four major actors in the innovation system: small and medium-sized enterprises and industrial clusters, universities/research centres, public authorities, and civil society organisations); and (b) delivering solutions that empower regional actors and their regional innovation ecosystems through an acceleration agenda.
- Devise an acceleration agenda connected with existing research and innovation agendas that align to target mutual objectives and cross regional collaborations, in particular by identifying and creating links to regions with priorities relevant for sustainable food systems identified in their local smart specialisation strategies, as well as relevant smart specialisation partnerships and platforms (such as the Thematic Smart Specialisation Platform on Agri-food).
- Provide technical assistance, encourage “mutual learning” and stimulate “new” ecosystems of innovation in parts of Europe that are less well integrated, for example

with the objectives of the BIOEAST Food Systems Thematic Working Group (e.g., to catalyse future reflections and discussions at regional level regarding the need to work together to tackle food system transformations).

- Explore how the existing Responsible Research and Innovation (RRI) approach can help regional actors to implement farm to fork relevant objectives, in particular for societally relevant market solutions that contribute to public health objectives and environmental businesses such that they contribute to the “EU Code of Conduct on Responsible Food Business and Marketing Practice”.
- Take a systemic view to help industries built up around the European food systems related businesses, to innovate and cooperate, thereby proposing solutions of regional relevance.
- Identify and facilitate synergies with other financing and capacity building instruments to enable progress along the whole innovation pipeline, including the Interregional Innovation Investments (I3), a new funding instrument under the European Regional Development Fund (ERDF).

Proposals must implement the 'multi-actor approach' and ensure adequate involvement of small and medium-sized enterprises (SMEs) and industrial clusters, start-ups, universities/research centres, public authorities and civil society organisations and other relevant actors of the value chain.

Proposals should include a dedicated task, appropriate resources and a plan on how they will collaborate with other projects funded under in the work programme from 2018-2020 and 2021-2022, namely CE-FNR-07-2020: “FOOD 2030 - Empowering cities as agents of food system transformation” and HORIZON-CL6-2021-GOVERNANCE-01-07 “Regional governance models in the bioeconomy”.

Collaboration and complementary with the European Partnership on “Sustainable Food Systems for People, Plant and Climate” is encouraged. This topic should involve the effective contribution of SSH disciplines, as it involves the quadruple helix to deliver innovative locally-based and bottom-up solutions, engaging citizens and leading to behavioural changes. In order to achieve the expected outcomes, international cooperation is encouraged.

HORIZON-CL6-2024-GOVERNANCE-01-3: The role of mainstream media, social media and marketing in fostering healthy and sustainable consumption patterns and how to encourage good practices

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 3.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

<i>Indicative budget</i>	The total indicative budget for the topic is EUR 3.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁵⁰⁸ .

Expected Outcome: In line with the objectives of the European Green Deal, Europe’s beating cancer plan, the farm to fork strategy for a fair, healthy and environment-friendly food system, the food 2030 priorities and the EU’s climate ambition for 2030 and 2050, the successful proposal will facilitate the transition towards healthy and sustainable dietary behaviour by supporting the establishment of innovative governance models notably to achieve better-informed decision-making processes, social engagement and innovation. The main objective of this topic is to better understand factors influencing dietary behaviour and to advance the understanding of the role of mainstream media, social media and digital marketing in fostering (un-)healthy and (un-)sustainable consumption patterns and to encourage good practices.

Projects results are expected to contribute to all of the following expected outcomes:

- Improved knowledge and understanding of how mainstream media, social media and marketing is affecting the dietary behaviour of different target groups (in particular vulnerable groups) across Europe, including barriers and constraints, as well as how to detect incorrect or misleading information.
- Better understanding of the different media and marketing (both linear and non-linear) approaches and channels used by different food system operators and actors.
- Enabling consumers to make informed food choices.

⁵⁰⁸ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

- Informed policies and business strategies aimed at fostering healthy and sustainable food environments, consumption patterns and at encouraging or incentivizing good practices.
- Contribution to the farm to fork objectives and food 2030 priorities: nutrition for sustainable healthy diets, climate, biodiversity and environment, circularity and resource efficiency, innovation and empowering communities (e.g., meeting the needs, values and expectations of society in a responsible and ethical way).

Scope: Food consumption cannot be considered the sole responsibility of citizens or a problem of demand only since it is a result of a choice that is influenced by culture, social and economic factors and where the food environment plays an important role. In today's interconnected world, the impacts of mainstream media, social media and digital marketing are amplified, with food influencers, NGOs and social platforms making citizens think differently about food. As studies show, since eating habits are also influenced by what consumers see, being virtually surrounded by healthy eaters may encourage consumers to eat healthier. However, the reverse is also true.

In addition, differences in media and marketing (both linear and non-linear) approaches of national/regional/local governments, civil society, and the private sector, can lead to differences in consumption patterns and food choices across different socio-economic and cultural groups. Moreover, television viewing and internet use has led to a more inactive, sedentary lifestyle, as well as more exposure to the marketing of products high in fat, sugar and/or salt among adults and children. Greater levels of TV viewing and internet use is associated with harmful effects on the eating habits of children. This includes higher consumption levels of products high in fat, sugar and/or salt. An improved understanding of these differences and drivers of food choices can support all food systems operators and actors to develop innovative and effective communication strategies (and related policy and regulatory frameworks) that would benefit all parts of the society and support a shift towards healthy and sustainable diets for all.

Proposed activities should cover all of the following aspects:

- Identify the various techniques and vehicles for spreading information and influence behaviour using different mainstream and social media channels (such as apps, websites, virtual consumer clubs and platforms), in particular mapping of new communication tools, algorithms and machine learning principles where citizens make food choices or are consciously or unconsciously influenced to change the consumption behaviour.
- Compare the different media and marketing (both linear and non-linear) approaches of national/regional/local governments, civil society, and the private sector, and assess how these different types of approaches and channels affect consumption patterns and food choices across different socio-economic and cultural groups, with a particular emphasis on vulnerable groups such as persons with low socio/economic status, infants and children or their parents responsible for their diets, respectively.

- Explore the impact of negative news (e.g., information on food safety risks, information on impacts on biodiversity and ecosystems) as compared with messages promoting positive outcomes of food choices (e.g., information on nutritional and health benefits) by, for example, conducting surveys or employing sentiment analyses. Assess whether parental control can be considered an effective strategy given the real-world context and levels of independent exposure of children to linear and non-linear media. Also explore the effects of misinformation (intentional or not), and how this propagates through different media.
- Identify innovative and effective tools to improve communication on sustainable healthy nutrition and diets, and more generally on sustainable food systems, thereby ensuring that all parts of the society are benefitting from access to information that foster uptake of healthy and sustainable diets and lead to the transformation of food systems, while respecting the EU and national legal framework and policies, national educational policies and advice on nutrition and food.
- Compile strategies and best practices – in compliance with the Best Practice Portal Protocols – for all food systems operators and actors for communication and outreach efforts to foster healthy, sustainable, and alternative consumption patterns and to encourage good practices, while respecting the EU and national legal framework and policies, national educational policies and advice on nutrition and food.
- Clearly explain how results will deliver co-benefits on Europe’s Beating Cancer Plan, the farm to fork strategy and on each of the food 2030 priorities: nutrition for sustainable healthy diets, climate and environment, circularity and resource efficiency, innovation and empowering communities (e.g., meeting the needs, values and expectations of society in a responsible and ethical way).

Proposals must implement the 'multi-actor approach' and ensure adequate involvement of public authorities and civil society organisations, consumers, the private sector and other relevant actors of the value chain.

Where relevant, activities should build and expand on the recent studies carried out in this area (such as the study on the exposure of children to online marketing of foods high in fat, salt or sugar),⁵⁰⁹ on the results of past and ongoing EU joint actions (such as Best-ReMaP on diet and nutrition with a special focus on children) and EU research projects (such as the topics HORIZON-CL6-2021-FARM2FORK-01-15 and HORIZON-CL6-2023-COMMUNITIES), e.g. by participating in joint activities, workshops, as well as common communication and dissemination activities.

Proposals should bring together multiple types of scientific expertise in health and natural sciences, and social sciences and humanities (SSH). This topic should involve the effective

⁵⁰⁹ European Commission, Directorate-General for Health and Food Safety (2021) Study on the exposure of children to linear, non-linear and online marketing of foods high in fat, salt or sugar: Final report, Publications Office, <https://data.europa.eu/doi/10.2875/928620>.

contribution of SSH disciplines (e.g., economics, sociology, human geography, management science, political science, citizen engagement studies, cultural studies, gender studies, etc.).

Efforts should be made to ensure that the data and the output produced in the context of this topic is FAIR (Findable, Accessible, Interoperable and Re-usable).

Deploying and adding value to Environmental Observations

Proposals are invited against the following topic(s):

HORIZON-CL6-2024-GOVERNANCE-01-5: Customisation/pre-operationalisation of prototypes end-user services in the area Climate Change Adaptation and Mitigation

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 19.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 19.00 million.
<i>Type of Action</i>	Pre-commercial Procurement
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other data and services may additionally be used).</p> <p>The following additional eligibility criteria apply: Project(s) should have a maximum duration of 3 years.</p>
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>The specific conditions are described in General Annex H.</p> <p>PCP/PPI procurement costs are eligible.</p>

Expected Outcome: The successful proposal will be contributing to the European Green Deal related domains benefiting from further deployment, uptake and exploitation of Environmental Observation data and products. It will furthermore be contributing to fit-for-purpose Environmental Observation Systems and a strengthened Global Earth Observation System of Systems (GEOSS)⁵¹⁰.

Proposals are expected to contribute to all of the following outcomes:

⁵¹⁰ <https://www.earthobservations.org/geoss.php>.

- Customisation/pre-operationalisation of prototypes end-user services in the area Climate Change Adaptation and Mitigation, building on the Copernicus⁵¹¹ Services that respond to the common needs and beyond state-of-the-art performance targets of the buyers group;
- Reduction of fragmentation of demand for innovative solutions by enabling public procurers to collectively implement a Pre-Commercial Procurement (PCP) in the area of climate adaptation and mitigation, which, due to their nature, are better addressed jointly, or which they would not have been able to tackle independently;
- New opportunities for wide market uptake and economies of scale for the supply side through the use of joint specifications, wide publication of results and – where relevant – contribution to standardization, regulation or certification to remove barriers for introduction of innovations into the market and creation of new products, processes and/or services ready for market uptake, leading to viable new businesses, jobs and sustainable economic growth.

Scope: This PCP – i.e. a joint procurement of research and development services - is launched to reinforce public demand driven innovation in end-user services in the area of climate adaptation and mitigation. PCP has the potential to be an effective demand side innovation action and a useful tool to close the gap between supply and demand for innovative solutions.

The PCP should deliver successful innovative and fully tested product(s) and/or service(s) that meet the common needs of a buyers' group (consortium of procurers) to procure research, develop innovative marketable solutions, speed up the time-to-market and provide best value for money.

Activities shall include:

- Preparation of the relevant documentation needed to launch and implement the procurement procedure;
- Joint research activities relating to the customisation/pre-operationalisation of prototypes end-user services in the area of climate change adaptation and mitigation validating the PCP strategy;
- Activities for the follow-up of the joint procurement, such as activities for awareness raising, networking, training, evaluation, validation and dissemination of results.

The proposal is expected to build on the outcomes coming from:

- HORIZON-CL6-2021-GOVERNANCE-01-15: Preparing for pre-commercial procurement (PCP) for end-user services based on environmental observation in the area of climate change adaptation and mitigation. The work done previously under Horizon

⁵¹¹ <https://www.copernicus.eu/en>.

2020 and Horizon Europe (e.g., from e-shape, climate service projects and downstream services projects);

- GEOSS initiatives.

The core of the consortium should be a qualified 'buyers group' (public procurement consortium), able to implement the action. Additional partners such as business/SME support organisations, innovation agencies or sectoral organisations may be included to assist procurers in knowing what is available on the market through market consultations.

The proposal should describe the jointly identified challenge, indicating how it fits into the mid-to-long-term innovation plans of the consortium, why solutions currently available on the market or under development are not meeting their needs, and put forward concrete targets for the desired functionality/performance improvement in the quality and efficiency of their public services.

The proposal should explain clearly how the creation of jobs, sustainable economic growth and new businesses will be assessed as an integral part of the successful application.

HORIZON-CL6-2024-GOVERNANCE-01-6: Develop innovative applications to support the European Green Deal, building on meteorological satellite data

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 8.00 million.
<i>Type of Action</i>	Research and Innovation Actions

Expected Outcome: A successful proposal will be delivering new environmental information through the exploitation of Earth observations and promote application development and pre-operational European services through cloud infrastructures, supporting the GEO engagement priorities and the objectives of the European Green Deal.

They should be in line with the European strategy for data and Europe’s Digital Decade, thus developing new advanced products, adding value to safety and healthy critical applications of environmental observations and contributing to a strengthened Global Earth Observation System of Systems (GEOSS)⁵¹² and complementing or enhancing the Copernicus⁵¹³ services.

Proposals are expected to contribute to all of the following outcomes:

⁵¹² <https://www.earthobservations.org/geoss.php>.
⁵¹³ <https://www.copernicus.eu/en>.

- Uptake of the newly available environmental information and data at global and regional scale delivered through the Copernicus Sentinels and the EUMETSAT⁵¹⁴ “Meteosat Third Generation (MTG)” and “EUMETSAT Polar System Second Generation (EPS SG)”;
- Preparation and implementation of high-quality (novel) satellite data products and applications using the next generation EUMETSAT and Copernicus instruments for the exploitation by advanced physical/chemical/biochemical models, and integrating in-situ data, to improve the implementation and operationalisation of new and advanced services and applications;
- Demonstrated use of these applications for Earth Systems predictions, long-term climate monitoring (i.e., re-analysis within the Copernicus climate services context) and disaster risk prediction and reduction (e.g., within the framework of the Copernicus Emergency Management service);
- Exploitation of the European cloud systems (e.g. Copernicus DIAS⁵¹⁵, European Open Science Cloud⁵¹⁶, European Weather Cloud) and a contribution to the Destination Earth initiative⁵¹⁷;
- Demonstrated use of satellite derived environmental information to advance and improve seamless climate-weather and environmental services in Europe, and potentially beyond.

Scope: The successful applications should take up and enhance the development of new environmental information based on the Meteosat Third Generation (MTG) and EUMETSAT Polar System Second Generation (EPS SG)⁵¹⁸. They should explore pre-operational European services through the exploitation of new Earth Observation (EO), digital infrastructures and modelling capabilities.

In the coming years, the MTG and EPS SG satellites will provide an unprecedented view of the Earth System offering opportunities for developing weather, climate, air-quality and marine applications. Copernicus Sentinels 4 and 5 will be collocated within the MTG and EPS-SG payloads, offering an important opportunity to develop synergetic products.

Ongoing Copernicus and EUMETSAT missions will complement this observational framework. EUMETSAT will facilitate the access to these data to the successful applications under this topic.

Proposals should build on these and other missions (e.g., Sentinel), designing new methods and data products to exploit the synergies across instruments and platforms and showcase pilot services for public and private users. They should turn existing and future EO

⁵¹⁴ <https://www.eumetsat.int/>.

⁵¹⁵ <https://www.copernicus.eu/en/access-data/dias>.

⁵¹⁶ https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/our-digital-future/open-science/european-open-science-cloud-eosc_en

⁵¹⁷ <https://digital-strategy.ec.europa.eu/en/policies/destination-earth>.

⁵¹⁸ These satellites have a specific focus on greenhouse gases, air quality, ocean and land biodiversity, high-impact weather events and climate extremes.

measurements into new environmental information. Co-registration of measurements should allow for optimising the information extraction, as for example the life cycle of extreme weather events through lightning, hyperspectral and other instruments hosted by geostationary payloads.

Synergies should be considered for across-payloads (geostationary and polar orbiting systems) measurements, and through the use of advanced algorithms, machine learning/artificial intelligence, data assimilation techniques and atmospheric models and artificial intelligence/machine learning techniques. This should contribute to the design of new products exploiting the full spectrum of possibilities (as for example integrating chemistry and water cycle observations into new products/ knowledge). The tools and services developed under the successful applications should be made available for future integration in the Copernicus programme and in the common topical European open infrastructure, Destination Earth. Open-source data/information requires open access to data that is associated with important benefits for the society and economy when reused. They should furthermore ensure the collaboration with EuroGEO⁵¹⁹ and the relevant EuroGEO projects as well as ESA initiatives (such as EO4SD⁵²⁰).

Successful applications should also develop applications using the new environmental data/information within key domains (e.g., urban and coastal management, air quality and health, disaster risk reduction, sustainable blue economy and climate adaptation/mitigation), as enhancements of already available services.

Attention should be given the sustained uptake of data/services or these satellites by the European commercial sector.

Digital and data technologies as key enablers

Proposals are invited against the following topic(s):

HORIZON-CL6-2024-GOVERNANCE-01-7: Enhancing working conditions and strengthening the work force through digital and data technologies – the potential of robotics and augmented reality in agriculture

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 5.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 15.00 million.

⁵¹⁹ https://ec.europa.eu/info/research-and-innovation/knowledge-publications-tools-and-data/knowledge-centres-and-data-portals/eurogeo_en.

⁵²⁰ <https://eo4sd.esa.int/?msclkid=27bf6922c7a311ec9cd2c915ab1af722>.

<i>Type of Action</i>	Research and Innovation Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Technology Readiness Level</i>	Activities are expected to achieve TRL 7-8 (according to the activity) by the end of the project – see General Annex B.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Beneficiaries may provide financial support to third parties. The support to third parties can only be provided in the form of grants. The maximum amount to be granted to each third party is EUR 60 000.

Expected Outcome: In line with the farm to fork strategy, the common agricultural policy post 2022, and the headline ambition of a Digital Age, a successful proposal will contribute to transition to a fair, healthy and resilient agriculture. It will therefore also directly and/ or indirectly contribute to the enhancement of the sustainability performance of the sector, including social sustainability, and competitiveness in agriculture through research and innovation which will support the further deployment of digital and data technologies as key enablers.

Project results are expected to contribute to all of the following expected outcomes:

- Enhanced working conditions in agriculture (including increased safety of workers and reduced drudgery) through innovative digital solutions exploiting the potential of augmented reality.
- Lowered environmental impacts and productions costs and increased product quality in and through the use of digital technologies, through robotics and augmented reality in particular⁵²¹.
- Reduced share of risky or unattractive actions/tasks to be performed by workers through automation-based solutions.
- Mitigated shortage of work force in agriculture in some sub-sectors through automation-based solutions.

⁵²¹ Innovative solutions developed to address this point may foster both, robotics and augmented reality, or only on robotics or augmented reality.

Scope: Digital and data technologies can facilitate the work in agriculture, enhance working conditions⁵²² and mitigate the challenge of a lack of work force, by which some branches and regions are affected. They have the potential of making farm-related jobs more attractive, including for younger generations, and to make them safer. Digital and data technologies can increase the effectiveness and efficiency of applications, including for instance through a higher level of precision, and thus increase the sustainability and competitiveness of the sector. Automation is increasingly used in agriculture; frequently, the cost-effectiveness of innovative digital and data technologies still presents a bottleneck to their use in the sector, particularly in fields where their application is not primarily relevant for increasing process efficiency and effectiveness. Technical solutions based on augmented reality approaches offer many opportunities to facilitate and enhance the use of digital technologies in agriculture, to enhance the performance of digital tools, and to provide remote assistance, which is important for remote businesses, particularly in rural areas.

Proposals should address the following:

- Development of augmented-reality based solutions to improve working conditions, safety and failure avoidance, and to further increase robotic performance.
- Development of robotic solutions to improve unhealthy working conditions, where applicable. Robotics tasks to be fostered might be directly related to agricultural production, such as harvesting, weeding, crop monitoring, animal husbandry or indirectly related, such as logistics/ farm management (TRL 7-8).
- Development of robotic solutions for tasks, for which there is a high interest/ need to support and/ or replace the human work force, not only because of an interest to improve productivity, but to ensure production in an environmentally and socially sustainable way (TRL 7-8).
- Strengthening AI capabilities for agro-robotics in the fields of applications fostered by the proposals including through the use of (scalable) platforms to further increase robotics performance (TRL 7-8).
- Development of business models for the use of the developed innovative technologies under consideration of various farm structures and inter-farm linkages as well as of various biogeographic and socio-economic framing conditions.
- Development of a tool for system analyses of the consequences for farmers and rural communities of enhancing working conditions through automation and augmented reality and of replacing human work force with robotic systems.

The development of such technologies should take into account relevant (forthcoming) EU legislation, in particular linked to the horizontal Act on AI, as well as the legislation related to

⁵²² The enhancement of working conditions is of cross-sectoral relevance. In agriculture, under the CAP post 2022 more attention will be dedicated to working conditions and social conditionality: CAP payments will be linked to the respect of certain EU labour standards and beneficiaries will be incentivised to improve working conditions on farms.

liability and machinery. Projects are encouraged - when reflecting on the effects of automation and augmented reality - to dedicate particular attention to youth/ younger generation, women and persons with disabilities as well as to the affordability of digital solutions. Projects are expected to develop training material allowing the targeted end users and multipliers to easily deploy and promote the new technologies.

Proposals must implement the ‘multi-actor approach’ including a range of actors to ensure that knowledge and needs from various stakeholder groups, including farmers, farm workers, farm advisors and scientists are taken into consideration. This topic should involve the effective contribution of social sciences and humanities (SSH) disciplines.

Projects are expected to take into consideration the results of other related Horizon 2020/ Europe projects as well as of other relevant EU-funded projects and initiatives.

Proposals may involve financial support to third parties, e.g. to academic researchers, hi-tech start-ups, SMEs, and other multidisciplinary actors, to for instance, develop, test or validate developed approaches, tools and applications or to provide other contributions to achieve the project objectives. Consortia need to define the selection process of organisations, for which financial support may be granted. A maximum of 20% of the EU funding can be allocated to this purpose.

A project duration of 60 months might be envisaged.

Strengthening agricultural knowledge and innovation systems (AKIS)

Proposals are invited against the following topic(s):

HORIZON-CL6-2024-GOVERNANCE-01-8: Broaden EIP Operational Group outcomes across borders by means of thematic networks to compile and share knowledge ready for practice

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 2.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 4.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.

<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁵²³ .
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Expected Outcome: In support of the European Green Deal, the EU climate policy, the common agricultural policy (CAP) and the farm to fork strategy objectives and targets, the successful proposals will focus on knowledge sharing in a language that is easy to understand and targeted to farmers and foresters. They will address the necessity of primary producers for impartial and tailored knowledge on the management choices related to the needs, challenges or opportunities they experience. They will also speed up innovation and the uptake of results, and will be key to improving sustainability.

They will contribute to effective Agriculture Knowledge and Innovation Systems (AKIS⁵²⁴), thereby adding value to the knowledge and cost-effectiveness of innovative practices and techniques in and across primary production sectors, food and bioeconomy systems, and lead to more informed and engaged stakeholders and users of project results.

Despite the continued funding of scientific projects, new knowledge, innovative ideas and methods from practice are not sufficiently captured and spread. The research findings are often not integrated into agricultural and forestry practice. The proposals, acting at EU level to remedy this, are essential because national and sectoral agricultural knowledge and innovation systems (AKISs) are insufficiently connected and organised to fully meet the challenge of intensifying thematic cooperation between researchers, advisors and farmers/foresters. This exchange of knowledge will foster economically viable and sustainable agriculture and forestry and build trust between the main AKIS actors. It will scale local solutions up to the EU level and may even influence policy design wherever useful.

Project results are expected to contribute to all of the following outcomes:

- Contribution to the cross-cutting objective of the CAP on modernising the sector by fostering and sharing of knowledge, innovation and digitalisation in agriculture and rural

⁵²³ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁵²⁴ AKIS means the organisation and knowledge flows between persons, organisations and institutions who use and produce knowledge for agriculture and interrelated fields (Agricultural Knowledge and Innovation).

areas, and encouraging their uptake⁵²⁵, as well as to the European Green Deal and farm to fork strategy objectives and targets, including climate change and carbon farming.

- Collection and distribution of easily accessible practice-oriented knowledge on the thematic area chosen, in particular the existing innovative solutions, best practices and research findings that are ready to be put into practice, but not sufficiently known or used by practitioners.
- Maintenance of practical knowledge in the long-term – beyond the project period – in particular by using the main trusted dissemination channels which farmers/foresters most often consult.
- Increased flow of practical information between farmers/foresters in the EU in a geographically balanced way, creating spill-overs and taking account of the differences between territories.
- Greater user acceptance of collected solutions and a more intensive dissemination of existing knowledge, by connecting actors, policies, projects and instruments to speed up innovation and promote the faster and wider co-creation and transposition of innovative solutions into practice.

Scope: Proposals should address the following activities:

- Build on the experiences and outcomes of at least 5 EIP-AGRI Operational Groups of at least 3 Member States and choose a common theme related to the themes of the 5 Operational Group projects.
- Tackle the most urgent needs of farmers and foresters. Collect, summarise, share and translate the existing knowledge from science and practice, resulting from the EIP operational Groups and beyond, in an easy-to-understand language for practitioners.
- Compile a comprehensive description of the state of current farming practices on the chosen theme to explain the added value of the proposal and the relevance of the theme. Proposals should focus on the cost/benefit aspects of the practices collected and summarised, and clarify how the project avoids duplication with ongoing or completed projects and networks.
- Deliver an extensive range of useful, applicable and appealing end-user material for farmers and foresters. This info should be easy to access and understand, and feed into the existing dissemination channels most consulted by farmers and foresters in the countries.
- Deliver as much audio-visual material and as many “practice abstracts” in the common EIP-AGRI format as possible, also including education and training materials.

⁵²⁵ Art 5 CAP post 2020 proposal.

- All materials should also be provided to the European Innovation Partnership (EIP-AGRI) 'Agricultural Productivity and Sustainability' in the common 'practice abstract' format, as well as to national/regional/local AKIS channels and to the EU wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24) in the requested formats.
- In addition to giving the details on the EIP Operational Groups whose involvement is strongly recommended⁵²⁶, wherever possible and relevant to the chosen theme, provide also details on how further synergies will be built with future EIP Operational Groups and interactive innovation groups operating in the context of the EIP-AGRI.
- Proposals must implement the 'multi-actor approach', with a consortium based on a balanced mix of actors with complementary knowledge clearly activating farmers/foresters, farmers' groups and advisors and run for a minimum of 3 years.
- In order to better reach and capture knowledge from the targeted farmers/foresters, the networks may organise 'cross-fertilisation' through sub-networks covering, for example, a region, a language or a production system.

HORIZON-CL6-2024-GOVERNANCE-01-9: Thematic networks to compile and share knowledge ready for practice

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 3.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 6.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for

⁵²⁶ According to the requirements of the multi-actor approach.

	Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁵²⁷ .
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Expected Outcome: In support of the European Green Deal, the EU climate policy, the common agricultural policy (CAP) and the farm to fork strategy objectives and targets, the successful proposals will focus on knowledge sharing in a language that is easy to understand and targeted to farmers and foresters. They will address the necessity of primary producers for impartial and tailored knowledge on the management choices related to the needs, challenges or opportunities they experience.

They will also speed up innovation and the uptake of results, and will be key to improving sustainability. They will contribute to effective Agriculture Knowledge and Innovation Systems (AKIS⁵²⁸), thereby adding value to the knowledge and cost-effectiveness of innovative practices and techniques in and across primary production sectors, food and bioeconomy systems, and lead to more informed and engaged stakeholders and users of project results.

Despite the continued funding of scientific projects, new knowledge, innovative ideas and methods from practice are not sufficiently captured and spread. The research findings are often not integrated into agricultural and forestry practice. Proposals, acting at EU level to remedy this situation, are essential because national and sectoral AKISs are insufficiently connected and organised to fully meet the challenge of intensifying thematic cooperation between researchers, advisors and farmers/foresters. This exchange of knowledge will foster economically viable and sustainable agriculture and forestry and build trust between the main AKIS actors.

Project results are expected to contribute to all of the following outcomes:

- Contribution to the cross-cutting objective of modernising the sector by fostering and sharing knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake⁵²⁹, as well as to the European Green Deal, including climate change, and farm to fork strategy objectives and targets.
- Collection and distribution of easily accessible practice-oriented knowledge on the thematic area chosen, in particular the existing innovative solutions, best practices and research findings that are ready to be put into practice, but not sufficiently known or used by practitioners.

⁵²⁷ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁵²⁸ AKIS means the organisation and knowledge flows between persons, organisations and institutions who use and produce knowledge for agriculture and interrelated fields (Agricultural Knowledge and Innovation).

⁵²⁹ Art 5 of the post 2020 CAP regulation.

- Maintenance of practical knowledge in the long-term – beyond the project period – in particular by using the main trusted dissemination channels that farmers/foresters most often consult.
- Increased flow of practical information between farmers/foresters in the EU in a geographically balanced way, creating spill-overs and taking account of the differences between territories.
- Greater user acceptance of collected solutions and a more intensive dissemination of existing knowledge, by connecting actors, policies, projects and instruments to speed up innovation and promote the faster and wider co-creation and transposition of innovative solutions into practice.

Scope: Proposals should address the following activities:

- Tackle the most urgent farmers' or foresters' needs by summarising, sharing and presenting – in a language that is easy to understand and is targeted to farmers and foresters – the existing best practices and research findings that are ready to be put into practice, but not sufficiently known or used by practitioners. The specific themes of the networks can be chosen in a 'bottom-up' way on the condition that they contribute to the relevant EU policy objectives, including climate change mitigation or adaptation;
- Compile a comprehensive description of the state of current farming/forestry practices on the chosen theme to explain the added-value of the proposal and the relevance of the theme. Proposals should focus on the cost/benefit aspects of the practices collected and summarised, and clarify how the project avoids duplication with ongoing or completed projects and networks;
- Deliver an extensive range of useful, applicable and appealing end-user material for farmers and foresters. This info should be easy to access and understand, making use of audio-visual material wherever possible, including also materials serving education and training and automatic translation services that allow dissemination beyond language barriers;
- This range of material should feed into the existing dissemination channels most consulted by farmers and foresters in the countries;
- As many “practice abstracts” in the common EIP-AGRI format as possible, as well as other types of materials should be provided to the European Innovation Partnership (EIP-AGRI) 'Agricultural Productivity and Sustainability', as well as to national/regional/local AKIS channels and to the EU-wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24);
- Besides giving the details on the EIP Operational Groups whose involvement is strongly recommended⁵³⁰, wherever possible and relevant to the chosen theme, provide also

⁵³⁰ According to the requirements of the multi-actor approach.

details on how further synergies will be built with future EIP Operational Groups and interactive innovation groups operating in the context of the EIP-AGRI;

- Proposals must implement the 'multi-actor approach', with a consortium based on a balanced mix of actors with complementary knowledge clearly activating farmers/foresters, farmers' groups and advisors; and run for a minimum of 3 years;
- In order to better reach and capture knowledge from the targeted farmers/foresters, the networks may organise 'cross-fertilisation' through sub-networks covering, for example, a region, a language or a production system.

HORIZON-CL6-2024-GOVERNANCE-01-10: Organic farming thematic networks to compile and share knowledge ready for practice

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 4.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁵³¹ .

Expected Outcome: Successful proposals will support the objectives of the European Green Deal, including on climate change, of the common agricultural policy (CAP) and of the farm

⁵³¹ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

to fork strategy, notably its target to reach at least 25% of the EU's agricultural land under organic farming by 2030. This topic addresses the necessity of organic farming producers for impartial and tailored knowledge on the management choices related to the needs, challenges or opportunities they experience. Successful proposals will speed up innovation and the uptake of results, and will contribute to effective Agriculture Knowledge and Innovation Systems (AKIS⁵³²).

Project results are expected to contribute to all of the following outcomes:

- Support for the implementation of the CAP's cross-cutting objective of modernising the sector by fostering and sharing of knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake⁵³³, as well as the objectives of the Action Plan for the Development of Organic Production⁵³⁴ related to the promotion of best practices and synergies with EIP-AGRI projects, enhancing knowledge exchange and strengthening AKIS;
- Collection, distribution and dissemination to farmers of easily accessible practice-oriented knowledge focusing on organic farming, in particular the existing best practices and research findings that are ready to be put into practice;
- Increased flow of practical information between farmers in the EU and Associated Countries in a geographically balanced way;
- Greater user acceptance of collected solutions and a more intensive dissemination of existing knowledge.

Scope: Transformative changes, such as the ones called for by the farm to fork strategy and the European Green Deal, are dynamic and complex processes. This is particularly the case of organic farming, a more knowledge-intensive approach compared to more conventional ones. This topic aims at supporting the achievement of the farm to fork strategy target of at least 25% of the EU's agricultural land under organic farming by 2030, for which knowledge and best practice exchange among farmers and across the EU and Associated Countries are fundamental, as it is recognised in the action plan for the development of organic production⁵³⁵. In this respect, it also aims to support climate change mitigation and adaptation, including carbon farming uptake. Despite the continued funding of scientific projects devoted specifically to address the challenges of organic farming, research findings are not sufficiently integrated into agricultural practice. Therefore, new knowledge and innovative ideas are not sufficiently shared with and adopted by organic farmers. Moreover, national and sectoral AKISs are insufficiently connected and organised to fully meet the challenge of intensifying thematic cooperation between researchers, advisors and farmers/foresters. The exchange of knowledge can foster economically viable and sustainable agriculture.

⁵³² AKIS means the organisation and knowledge flows between persons, organisations and institutions who use and produce knowledge for agriculture and interrelated fields (Agricultural Knowledge and Innovation).

⁵³³ Art 5 of the post 2020 CAP regulation.

⁵³⁴ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0141R%2801%29>.

⁵³⁵ <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52021DC0141R%2801%29>.

Proposals should focus on knowledge sharing that addresses the most urgent needs of organic farmers, involved in plant production and/or animal husbandry, for impartial and tailored knowledge on the management choices related to the needs, challenges or opportunities they experience in their specific contexts. The specific subthemes of the network should be chosen in a 'bottom-up' way. Proposals should focus on the cost/benefit aspects of the practices identified. End-user material for farmers should include conversion and business plans. The differences between countries/regions/territories should be duly taken into consideration.

In this context, proposals should:

- Describe comprehensively the state of available knowledge of organic farming practices on the chosen theme and justify the added-value and the relevance of the theme, and explaining how duplication with ongoing or completed projects and networks is avoided.
- Summarise, share and present – in a language that is easy to understand and is targeted to farmers – the existing best practices and research findings that are ready to be put into practice.
- Deliver an extensive range of useful, applicable and appealing material for organic farmers. This material should be easy to access and understand, making use of audio-visual material wherever possible, including also materials serving education and training. The material should feed into existing dissemination channels most consulted by farmers in the different countries.
- Provide “practice abstracts” in the common EIP-AGRI format, as well as other type of materials, to the European Innovation Partnership (EIP-AGRI) 'Agricultural Productivity and Sustainability', as well as to national/regional/local AKIS channels and to the EU-wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24).
- In addition to giving the details on the EIP Operational Groups which are strongly recommended to be involved⁵³⁶, wherever possible and relevant to organic farming, provide also details on how further synergies will be built with future EIP Operational Groups and interactive innovation groups operating in the context of the EIP-AGRI.
- Ensure the long-term - beyond the project period - availability of the practical knowledge collected.

Proposals must implement the 'multi-actor approach', with a consortium based on a balanced mix of actors with complementary knowledge clearly building on organic farmers, farmers' groups and advisors, and should run for a minimum of 3 years. Proposals may organise 'cross-fertilisation' through sub-networks covering, for example, a region, a language or a production system, in order to better reach and capture knowledge from the targeted farmers and to address context-specific challenges. Outcomes should be widely spread beyond the organic farming community and reach also farmers involved in carbon farming, low-input farming, circular agriculture or agroecology.

⁵³⁶ According to the requirements of the multi-actor approach.

Proposals should include a dedicated task, appropriate resources and a plan on how they will ensure synergies with the activities carried out by projects selected under the topic HORIZON-CL6-2023-GOVERNANCE-01-20: ‘Developing an EU advisory network on organic agriculture’, HORIZON-CL6-2024-FARM2FORK-02-1-two-stage: ‘Increasing the availability and use of non-contentious inputs in organic farming’, and HORIZON-CL6-2023-FARM2FORK-01-3: ‘Improving yields in organic cropping systems’ in this Work Programme.

HORIZON-CL6-2024-GOVERNANCE-01-11: Biodiversity thematic networks to compile and share knowledge ready for practice

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 3.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 3.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁵³⁷ .

Expected Outcome: In support of the European Green Deal, the EU climate policy, the common agricultural policy (CAP) and the farm to fork strategy objectives and targets, the successful proposals will focus on knowledge sharing in a language that is easy to understand and targeted to farmers and foresters. They will address the necessity of primary producers for impartial and tailored knowledge on the management choices related to the needs, challenges

⁵³⁷ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under ‘Simplified costs decisions’ or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

or opportunities they experience. They will also speed up innovation and the uptake of results, and will be key to improving sustainability. They will contribute to effective Agriculture Knowledge and Innovation Systems (AKIS⁵³⁸), thereby adding value to the knowledge and cost-effectiveness of innovative practices and techniques in and across primary production sectors, food and bioeconomy systems, and lead to more informed and engaged stakeholders and users of project results.

Despite the continued funding of scientific projects, new knowledge, innovative ideas and methods from practice are not shared and adopted. Often the research findings are not integrated into agricultural and forestry practice. Proposals, acting at EU level to remedy this situation, are essential because national and sectoral AKISs are insufficiently connected and organised to fully meet the challenge of intensifying thematic cooperation between researchers, advisors and farmers/foresters. This exchange of knowledge will foster economically viable and sustainable agriculture and forestry and build trust between the main AKIS actors.

Project results are expected to contribute to the following outcomes:

- Support the implementation of the cross-cutting objective of modernising the sector by fostering and sharing of knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake⁵³⁹, as well as European Green Deal and farm to fork objectives.
- Collection and distribution of easily accessible practice-oriented knowledge on the thematic area chosen, in particular the existing best practices and research findings that are ready to be put into practice.
- Maintenance of the practical knowledge for the long-term – beyond the project period – in particular by using the main trusted dissemination channels that farmers/foresters most often consult.
- Increased flow of practical information between farmers/foresters in the EU in a geographically balanced way, creating spill-overs and taking account of the differences between territories.
- Greater user acceptance of collected solutions and a more intensive dissemination of existing knowledge, by connecting actors, policies, projects and instruments to speed up innovation and promote the faster and wider co-creation and transposition of innovative solutions into practice.

Scope: Proposals should address the following activities:

⁵³⁸ AKIS means the organisation and knowledge flows between persons, organisations and institutions who use and produce knowledge for agriculture and interrelated fields (Agricultural Knowledge and Innovation).

⁵³⁹ Art 5 of the post 2020 CAP regulation.

- Tackle the most urgent needs of farmers and/or foresters related to biodiversity, including those relevant for climate change mitigation and adaptation, by summarising, sharing and presenting - in a language that is easy to understand and is targeted to farmers and foresters – the existing best practices and research findings that are ready to be put into practice, but not sufficiently known or used by practitioners. The specific objectives of the networks can be chosen in a 'bottom-up' way on condition that they tackle biodiversity issues.
- The network should cover at least the following aspects:
 - Incentives from farmers and foresters to improve biodiversity on farms/forests or across farms/forests in a collaborative way
 - EU requirements for biodiversity protection in agricultural and forest areas (Birds and Habitats Directives).
- Compile a comprehensive description of the state of current farming practices on biodiversity, including those relevant for climate mitigation or adaptation, to explain the added value of the proposal and the relevance of the theme.
- Proposals should focus on the cost/benefit aspects of the practices collected and summarised, and clarify how the project avoids duplication with ongoing or completed projects and networks.
- Deliver an extensive range of useful, applicable and appealing end-user material for farmers and foresters. This info should be easy to access and understand, making use of audio-visual material wherever possible, including also materials serving education and training;
- This range of material should feed into the existing dissemination channels most consulted by farmers and foresters in their countries.
- As many “practice abstracts” in the common EIP-AGRI format as possible, as well as other type of materials should be provided to the European Innovation Partnership (EIP-AGRI) 'Agricultural Productivity and Sustainability', as well as to national/regional/local AKIS channels and to the EU-wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24);
- Besides giving the details on the EIP Operational Groups whose involvement is strongly recommended⁵⁴⁰, wherever possible and relevant to biodiversity, provide also details on how further synergies will be built with future EIP Operational Groups and interactive innovation groups operating in the context of the EIP-AGRI.

⁵⁴⁰ According to the requirements of the multi-actor approach.

- Proposals must implement the 'multi-actor approach', with a consortium based on a balanced mix of actors with complementary knowledge clearly building on farmers/foresters, farmers' groups and advisors; and run for a minimum of 3 years.
- In order to better reach and capture knowledge from the targeted farmers/foresters, the networks may organise 'cross-fertilisation' through sub-networks covering, for example, a region, a language or a production system.

HORIZON-CL6-2024-GOVERNANCE-01-12: Developing EU advisory networks on forestry

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 4.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	<p>The conditions are described in General Annex B. The following exceptions apply:</p> <p>Legal entities established in non-associated third countries, including low to middle income non-associated third countries, may participate as a beneficiary in this Coordination and support action if their participation is considered essential for implementing the action by the granting authority.</p> <p>The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.</p>
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the Research and Training Programme of the European Atomic Energy Community (2021-2025).⁵⁴¹.</p>

⁵⁴¹ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

Expected Outcome: In support of the European Green Deal, the EU climate policy, the common agricultural policy (CAP) and the EU forest strategy for 2030 objectives, the successful proposal will focus on advisor exchanges across the EU to increase the speed of knowledge creation and sharing, capacity building, of demonstration of innovative solutions, as well as helping to bring them into practice, accelerating the necessary transitions. Agricultural Knowledge and Innovation Systems (AKIS) in which advisors are fully integrated are key drivers to speed up innovation and the uptake of research results by farmers.

Transformative changes such as the changes required within the European Green Deal are dynamic processes that require appropriate governance of AKIS actors. Advisors are key actors with a role in providing strong guidance and with a big influence over producers' decisions. A novelty in the post-2020 CAP plans⁵⁴² is that advisors now must be integrated within the Member States' AKIS, and that the scope of their actions has become much broader. They must now be able to cover economic, environmental and social domains, as well as be up-to-date on science and technology. They should be able to translate this knowledge into opportunities, and use and adapt this knowledge to specific local circumstances. This specific topic focuses on the important role advisors can play related to more sustainable forestry in the future.

Project results are expected to contribute to the following outcomes:

- Progress towards the most urgent policy objectives linked to Cluster 6, as well as the European Green Deal, and in particular the EU Forest Strategy for 2030 and the new CAP, with a view to improve sustainability of forestry, help raise awareness and tackle societal challenges;
- Support to the CAP cross-cutting objective of modernising the sector by fostering and sharing of knowledge, innovation and digitalisation, and encouraging their uptake⁵⁴³;
- Development of interaction with regional policymakers and of a potential EU network to discuss institutional challenges to practical forestry issues, such as bottlenecks, lock-ins, political inertia, ambiguous regulations, inequality between Member States and power imbalances;
- Production of supporting services and materials, including knowledge networks and peer-to-peer counselling, master classes, advice modules, communication and education materials, effective business models, etc. to facilitate the upscaling of sustainable forest management;
- Acceleration of the introduction, spread and implementation in practice of innovative solutions related to forestry, in particular by:

⁵⁴² Art 13(2) of the post 2020 CAP regulation.

⁵⁴³ Art 5 CAP post 2020 proposal.

- creating added value by better linking research, education, advisors and foresters, and encouraging the wider use of available knowledge across the EU;
- learning from innovation actors and projects, resulting in faster sharing and implementation of ready-to-use innovative solutions, spreading them to practitioners and communicating to the scientific community the bottom-up research needs of practice.

Scope: Proposals should address the following activities:

- Connect advisors possessing a broad and extensive network of foresters across all EU Member States in an EU advisory network dedicated to forestry, including forestry techniques which support a higher level of sustainability, with a view to sharing experiences on how to best tackle the issues, building on the outcomes of the EIP-AGRI Focus Groups and Workshops as well as the Horizon 2020 Thematic Networks related to forestry.
- Share effective and novel approaches among the EU advisory network on forestry, which are sustainable in terms of economic, environmental and social aspects.
- Gather or develop short-, mid- and long-term strategic visions for forests and forestry in the EU, taking into account regional differences, regional policy frameworks, climate change, supply and demand, monitoring needs, etc.
- Fill gaps on emerging advisory topics beyond the classical sectoral advice, which is useful in particular in relation with the new obligation for Member States to integrate advisors within their AKIS and who must cover a much broader scope than in the past.
- Provide overall support related to knowledge creation, organisation and sharing.
- Take strong account of cost-benefit elements. Collect and document good examples in this regard, connecting with foresters and other actors across related value chains in Member States to be able to take into account financial aspects and local conditions. Select the best practices, learn about the key success factors, possible quick wins and make them available for (local) exploitation, to ensure financial win-wins for producers, citizens and intermediate actors.
- Integrate the advisors of the EU forestry network into their Member State AKIS as much as possible. They should encourage as innovation brokers innovative projects on forestry in EIP Operational Groups. They should give hands-on training to foresters and local advisors, lead national thematic and learning networks on the subject, deliver and implement action plans to make forestry more sustainable, connect with education and ensure broad communication, support peer-to-peer consulting, develop on-farm demonstrations and demo films distributed widely via social media, and provide specific back-office support for generalist advisors within the national/regional AKIS.
- Explore if the activities of the EU advisory network on forestry can be scaled up at the level of a number of Member States under a cooperative format. Wherever possible,

develop digital advisory tools for common use across the EU. Determine whether common tools can be created to incentivise the implementation of the learnings from this project.

- Include all 27 EU Member States in the EU advisory network, using local AKIS connections which can more accurately interpret the national/regional contexts to help develop the best solutions for that Member State or region. Use the support of the Member States' knowledge and innovation experts of the SCAR-AKIS Strategic Working Group to discuss project strategy and progress in the various stages of the 2 projects.
- Projects should run at least 5 years. They must implement the multi-actor approach, with a majority of partners being forestry advisors with frequent field experience.
- Provide all outcomes and materials to the European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI), including in the common 'practice abstract' format for EU wide dissemination, as well as to national/regional/local AKIS channels and to the EU-wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24) in the requested formats.

HORIZON-CL6-2024-GOVERNANCE-01-13: Developing EU advisory networks on sustainable livestock systems

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 4.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 4.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Eligibility conditions</i>	The conditions are described in General Annex B. The following exceptions apply: The following additional eligibility criteria apply: The proposals must use the multi-actor approach. See definition of the multi-actor approach in the introduction to this Work Programme part.
<i>Legal and financial set-up of the Grant Agreements</i>	The rules are described in General Annex G. The following exceptions apply: Eligible costs will take the form of a lump sum as defined in the Decision of 7 July 2021 authorising the use of lump sum contributions under the Horizon Europe Programme – the Framework Programme for Research and Innovation (2021-2027) – and in actions under the

	Research and Training Programme of the European Atomic Energy Community (2021-2025). ⁵⁴⁴ .
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Expected Outcome: In support of the European Green Deal, organic action plan, the common agricultural policy (CAP), farm to fork and biodiversity strategies, and the sustainable carbon cycles communication's objectives and targets, the successful proposal will focus on advisor exchanges across the EU in order to increase the speed of knowledge creation and sharing, capacity building, demonstration of innovative solutions, as well as helping to bring them into practice, which accelerates the necessary transitions. Agricultural Knowledge and Innovation Systems (AKIS), in which advisors play a central role, are key drivers to speed up innovation and the uptake of research results by farmers.

Transformative changes such as the changes required within the European Green Deal are dynamic processes that require appropriate governance of AKIS actors. Advisors are key actors with a role in providing strong guidance and with a big influence on producers' decisions. A novelty in the post-2020 CAP plans⁵⁴⁵ is that advisors must now be integrated within the Member States' AKIS, and that the scope of their actions has become much broader. They must be able to cover economic, environmental and social domains, as well as be up-to-date on science and innovation. They should be able to translate this knowledge into opportunities, and use and adapt this knowledge to specific local circumstances. This specific topic focuses on the important role that advisors can play in relation to boosting sustainable livestock systems in the future.

Project results are expected to contribute to the following outcomes:

- Progress towards the most urgent policy objectives linked to Cluster 6, as well as the European Green Deal, and in particular the new CAP, with a view to improving the sustainability of livestock management, helping to raise awareness and tackle societal challenges related to sustainable livestock systems, including climate change mitigation and adaptation;
- Support to the CAP cross-cutting objective of modernising the sector by fostering and sharing knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake⁵⁴⁶;
- Development of interaction with regional policymakers and of a potential EU network to discuss institutional challenges to practical sustainable livestock production systems issues, such as bottlenecks, lock-ins, political inertia, ambiguous regulations, inequality between Member States and power imbalances;

⁵⁴⁴ This [decision](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf) is available on the Funding and Tenders Portal, in the reference documents section for Horizon Europe, under 'Simplified costs decisions' or through this link: https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/ls-decision_he_en.pdf

⁵⁴⁵ Art 13(2) of the post 2020 CAP regulation.

⁵⁴⁶ Art 5 CAP post 2020 proposal.

- Production of supporting services and materials, including knowledge networks and peer-to-peer counselling, master classes, advice modules, communication and education materials, effective business models, etc. to facilitate the upscaling of sustainable livestock systems;
- Acceleration of the introduction, spread and implementation in practice of innovative solutions related to sustainable livestock systems, in particular by:
- creating added value by better linking research, education, advisors and farming practice, and encouraging the wider use of available knowledge across the EU;
- learning from innovation actors and projects, resulting in faster sharing and implementation of ready-to-use innovative solutions, spreading them to practitioners and communicating to the scientific community the bottom-up research needs of practice.

Scope: Proposals should address the following activities:

- Connect advisors possessing a broad and extensive network of farmers across all EU Member States in an EU advisory network dedicated to sustainable livestock systems, including farming techniques which support sustainable animal production, with a view to sharing experiences on how to best tackle the issues, building on the outcomes of the EIP-AGRI Focus Groups and Workshops as well as the Horizon 2020 Thematic Networks related to sustainable livestock systems.
- Share effective and novel approaches among the EU advisory network on livestock systems, which are climate-friendly and sustainable in terms of economic, environmental and social aspects.
- Fill gaps on emerging advisory topics beyond the classical sectoral advice, which is useful in particular in relation with the new obligation for Member States to integrate advisors within their AKIS and who must cover a much broader scope than in the past.
- Provide overall support related to knowledge creation, organisation and sharing.
- Take strong account of cost-benefit elements. Collect and document good examples in this regard, connecting with farmers, intermediates and consumers in Member States to be able to take into account financial aspects and local conditions. Select the best practices, learn about the key success factors, possible quick wins and make them available for (local) exploitation, to ensure financial win-wins for producers, citizens and intermediate actors.
- Integrate the advisors of the EU sustainable livestock systems network into their MS AKIS as much as possible. As innovation brokers they should encourage innovative projects on organic farming in EIP Operational Groups. They should give hands-on training to farmers and local advisors, lead national thematic and learning networks on the subject, deliver and implement action plans to make livestock systems more sustainable, climate-friendly, and inspire new and incoming farmers or farms at the

cross-roads of intergenerational renewal, connect with education and ensure broad communication, support peer-to-peer consulting, develop on-farm demonstrations and demo films distributed widely via social media, and provide specific back-office support for generalist advisors within the national/regional AKIS.

- Explore if the activities of the EU advisory network on sustainable livestock systems can be up scaled at the level of a number of Member States under a cooperative format. Wherever possible, develop digital advisory tools for common use across the EU. Determine whether common tools can be created to incentivise the implementation of the learnings from this project.
- Include all 27 EU Member States in the EU advisory network, using local AKIS connections which can more accurately interpret the national/regional contexts to help develop the best solutions for that Member State or region. Use the support of the Member States' knowledge and innovation experts of the SCAR-AKIS Strategic Working Group to discuss project strategy and progress in the various stages of the 2 projects.
- Projects should run at least 5 years. They must implement the multi-actor approach, with a majority of partners being advisors with frequent field experience.
- Provide all outcomes and materials to the European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI), including in the common 'practice abstract' format for EU wide dissemination, as well as to national/regional/local AKIS channels and to the EU-wide interactive knowledge reservoir (HORIZON-CL6-2021-GOVERNANCE-01-24) in the requested formats.