



Information on current water related calls Horizon Europe

Cluster 6: Food, Bioeconomy, Natural Resources, Agriculture and Environment

Financing possibilities for EUSDR water projects
Workshop-webinar on 9 December 2021



Structure of the Horizon Europe framework programme

€ 95,5 billion
(HE budget in current prices)



Call Opening: 28 Oct 2021

Call Deadline(s): 15 Feb 2022



HORIZON-CL6-2022-ZEROPOLLUTION-01-01: Preventing groundwater contamination and protecting its quality against harmful impacts of global and climate change

Budget/project: 2-4 million EUR

Budget for the topic: 12 million EUR

Project results are expected to contribute to some of the following **expected outcomes**:

1. Wider use of an enhanced knowledge base and better understanding of pollution sources, pathways and impacts, including surface hydrology, aquifers and receiving water bodies, as well as the synergistic effects of multiple stressors on groundwater quality.
2. Implement advanced prevention and mitigation strategies to protect groundwater against pollution induced by global and climate change, including anticipative approaches preparing for future or emerging challenges.
3. Apply effective risk assessment and risk management strategies enabling early warning systems and delivering ready-made outcomes for decision-making and governance.
4. Deploy innovative monitoring strategies, including advanced sensors, tracers and analytical methods, and integration of IT tools/platforms and advanced modelling.
5. Broad uptake of advanced knowledge, breakthrough solutions and innovative technologies to enhance the competitiveness of the EU water sector and foster the EU's position and role in the global water scene.
6. Increasing the EU scientific and technological base on measures to manage groundwater quality and providing evidence and guidance for policy-making and implementation.

Science and evidence-based implementation of the European Green Deal and the Sustainable Development Goals, notably the SDG 6 “Ensure availability and sustainable management of water and sanitation for all”.



Scope:

Additional knowledge is needed to understand the synergistic effects and risks of multiple stressors and pollutants on groundwater quality to better evaluate the impacts of global and climate change, particularly in highly vulnerable areas affected by diffuse pollution, anthropogenic activities and/or water table fluctuations. Actions in this field should aim to identify and assess sources and pathways of groundwater pollution to inform risk management plans at basin/regional scales, with particular consideration of aquifer recharge with reclaimed water and persistent pollutants.

Further developments are expected in terms of cost-efficient monitoring strategies, which could include new tracers and sensors, increased sampling and analytical capacity, as well as integrating IT advances and geophysical modelling.

In general, the participation of academia, research organisations, utilities, industry and regulators is strongly advised, as well as civil society engagement whenever necessary, also aiming to broaden the dissemination and exploitation routes and to better assess the innovation potential of developed solutions and strategies.





HORIZON-CL6-2022-ZEROPOLLUTION-01-04: Securing drinking water quality by protecting water sources against pollution, providing innovative monitoring and treatment solutions and ensuring safe distribution

Budget/project: 2-4 million EUR

Budget for the topic: 15 million EUR

Project results are expected to contribute to some of the following **expected outcomes**:

1. A wider use of a better understanding and an enhanced knowledge base required to assess pollution sources, pathways and combined effects on drinking water systems, including forward looking approaches aimed to anticipate and prepare for future or emerging challenges.
2. Implement advanced preventive and mitigating strategies and measures to protect drinking water sources, treatment and supply against harmful effects of global and climate change.
3. Apply effective risk assessment and risk management strategies enabling early warning systems and delivering ready-made outputs for decision-making and governance.
4. Exploit advanced, integrated and cost-effective water quality sensors and analytical methods.
5. Deploy innovative and robust monitoring systems and real-time information on drinking water quality, from sources to supply.
6. Disseminate and use a robust knowledge on the occurrence, persistence and degradability of disinfection by-products (DBPs) in drinking water with due consideration to operational parameters, chemicals, materials and biofilms interactions, including the pathways related to human exposure.
7. Spread the use of advanced and cost-effective drinking water treatment and disinfection processes and technologies, including transformative approaches.
8. Broad uptake of advanced knowledge, breakthrough solutions and innovative technologies to enhance competitiveness of the EU water sector and fostering the EU's position and role in the global water scene.
9. Increasing the EU scientific and technological base and guidance on measures to manage drinking water quality and evidence for policy-making, safety planning and implementation.
10. Science and evidence-based implementation of the European Green Deal and the Sustainable Development Goals, notably the SDG 6 "Ensure availability and sustainable



Scope:

Actions in this field should aim to expand the knowledge base required to identify, assess and prevent pollution threats (micro-pollutants, pathogens, toxins, algal blooms, etc.) and the combined effects of multiple stressors on water sources, including risk assessment and management, to protect drinking water preparation and distribution. Particular attention to extreme weather events and possible synergistic effects affecting hydraulic flows, temperatures and pollutants' loads should be considered, whenever appropriate.

Advanced water quality assessment needs further development of sensors sensitivity, automated routine monitoring and fast analytical responses that fully integrate IT advances. Proposals in this topic should aim to extend the current analytical capacity to enable among other issues the detection of suspect and non-targeted pollutants, resulting in robust and reliable monitoring systems for consideration in future legislation. They should also consider the requirements of the revised Drinking Water Directive as regards catchment management.

In order to better address some or all of the expected outcomes, international cooperation is encouraged.



HORIZON-CL6-2022-CLIMATE-01-01: Climate sensitive water allocation systems and economic instruments.

Budget/project: 4-5 million EUR

Budget for the topic: 10 million EUR

Projects results are expected to contribute to several of the following **expected outcomes**

1. Achieve transparent water sharing and adjust water allocation across environmental and human uses towards long-term water replenishment capacity and availability,
2. Adopt inclusive, forward-looking and climate risk-informed water allocation planning and management processes, foster adoption of digital technologies in water management
3. Guide decision makers in transboundary rivers to share transboundary waters equitably, reaping the benefits of appropriate water allocation regimes.
4. Identify water efficiency deficiencies and achieve improvement by at least 50% by 2030, in regions under water stress, now or in the future, and for water bodies at risk of failing to achieve good ecological or quantitative status.
5. Reduce the water footprint of water-using sectors, especially agriculture, energy and industry.
6. Promote financing mechanisms to smoothen the transition to more appropriate water pricing policies in water supply and sanitation and in the different economic sectors, such as agriculture, energy and industry, taking into consideration the opportunities available in various EU (e.g. CAP, Cohesion Policy funds, etc.) and national funding mechanisms and policies.
7. Help structure an appropriate policy dialogue to support water allocation reforms and increase stakeholders engagement.

Support the implementation of the European Green Deal and the Sustainable Development Goals, notably the SDG 6 “Ensure availability and sustainable management of water and sanitation for all”.



Scope:

Actions under this topic should address ways to value water appropriately, taking into account the multiple and diverse values of water to different groups and sectors, and ways to develop appropriate tariffs and prices to ensure access to water which should be available and affordable to all, while also securing adequate pricing policies allowing for systematic renewal of water service infrastructure. Actions should develop and demonstrate in relevant river basins and sectors, innovative tools / instruments on intelligent water allocation schemes relevant for decision-making recommendations (e.g. on permits). The opportunities for developing water allocation schemes based on digital technologies should be explored.

Water allocation scheme in transboundary river basins should also be addressed with a view to developing an internationally accepted and standardised mechanism for allocation of water in cross-border river basins, by taking into account the various socio-economic and environmental disparities among these countries and making transboundary waters an area of cooperation rather than conflict.

International cooperation with non-associated third countries with transboundary rivers is encouraged.





Call opening: 28 Oct 2021

Call Deadline(s): 10 March 2022

HORIZON-CL6-2022-GOVERNANCE-01-06: Water governance, economic and financial sustainability of water systems

Budget/project: 3 million EUR

Budget for the topic: 10 million EUR

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

1. Improve policy implementation for securing sustainable water use across sectors, while insuring transparency and inclusiveness
2. Promote a better integrated planning approach across water-using sectors
3. Help to link water management to the economic and social development sectors.
4. Support coordination between water policies and other relevant policies and coordination of planning measures across relevant EU and national instruments for sustainable water use
5. Empower citizens by increasing their motivation and capacity to influence effective water governance decisions.
6. Help society to implement through governance, the technological, economic, political, and social measures that will set a course toward the achievement of a desirable, more sustainable and secure water future.

Support the implementation of the European Green Deal and the Sustainable Development Goals, notably SDG 6 “Ensure availability and sustainable management of water and sanitation for all”



Scope:

This topic aims to validate innovative multi-level water governance practices among various stakeholders to strengthen policy integration, coherence and coordination and assess their impacts on economy, social well-being and environment.

Actions should assess current governance approaches and organisational models in different river basins to optimise water governance and integrate it with other sectors, such as energy, agriculture, land use and urbanisation, and to overcome fragmentation in public policy formulation and decision-making. They should also aim to understand how different operational governance contexts at various levels, influence the effective realisation of sustainable water management in practice and explore the interaction among governance approaches at different spatial and temporal scales with a view to understanding potential conflicts and strengthening synergies.

Research should also address ways to value water and develop appropriate tariffs and pricing policies to ensure both access to water and sufficient funds for systematic renewal of water service infrastructure, as well as ecosystems restoration.

Innovative mechanisms should be developed to promote stakeholder engagement and involvement of public participation in defining and developing methods for collaborative approaches, as well as to promote social innovation, effective communication platforms, encourage exchange of know-how, expertise, eliminate frustration, minimize risks of distortion, and increase citizens' responsibility.

The role of appropriate economic policy instruments, financing and business models (investments, risk management, water pricing, cost-benefits...) in governance towards ensuring long term financial sustainability and increasing investments in the water sector, should be also assessed.

This topic should involve the effective contribution of SSH disciplines.



HORIZON-CL6-2022-GOVERNANCE-01-15: Developing EU advisory networks on water use

Budget/project: 4 million EUR

Budget for the topic: 8 million EUR

Project results are expected to contribute to the following **outcomes:**

1. The most urgent policy objectives linked to Cluster 6, as well as the European Green Deal, and in particular the Farm to Fork Strategy and the CAP, with a view to increase farmer viability, help raise awareness and tackle societal challenges in helping the reduction of water pollution and use;
2. The CAP cross-cutting objective of modernising the sector by fostering and sharing of knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake . This topic will help to fill gaps on emerging advisory topics beyond the classical sectorial advice, which is useful in particular in relation with the new obligation for Member States to integrate advisors within their AKIS which must cover a much broader scope than in the former period. It will provide overall support related to knowledge creation, organisation and sharing.
3. Development of interaction with regional policy makers and of a potential EU network to discuss institutional barriers to practical water-related issues, such as bottlenecks, lock-ins, political inertia, ambiguous regulations, inequality between Member States and power imbalances;
4. Production of supporting services and materials to facilitate the upscaling of prevention of water shortage and pollution, such as water audit schemes, novel water retention practices, water knowledge networks and peer-to-peer counselling, master classes, advice modules, communication and education materials, effective business models for farm management on dry soils, etc
5. The outcomes should speed up introduction, spreading and bringing into practice of innovative solutions related to avoiding water shortage and pollution overall, in particular by:
 1. creating added value by better linking research, education, advisors and farming practice and encouraging the wider use of available knowledge across the EU,
 2. learning from innovation actors and projects, resulting in faster sharing and implementation of ready-to-use innovative solutions, spreading them into practice and communicating to the scientific community the bottom-up research needs of practice.



Scope:

1. Connect advisors having a broad and extensive network of farmers across all EU Member States in an EU advisory network dedicated to water use, including avoiding water shortage and pollution, with a view to sharing experiences on how to best tackle the issues, building on the outcomes of the EIP-AGRI “Focus Group on Water and Agriculture”, the EIP-AGRI Workshop: “Connecting innovative projects: Water & Agriculture”, and the H2020 “Thematic network to improve water management”
2. Share effective and novel approaches among the EU advisory network on water use, which are sustainable in terms of economic, environmental and social aspects.
3. 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 water companies.
4. Integrate the advisors of the EU water use network into their Member State AKIS as much as possible. They should encourage as innovation brokers innovative projects on water use solutions in European innovation partnership "Agricultural productivity and sustainability" (EIP-AGRI) 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 water use more efficient, reduce farmers' water use and pollution, 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 YouTube demo films, and provide specific back-office support for generalist advisors within the national / regional AKIS.
5. Explore if the activities of the EU advisory network on water use 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. Seek if common tools can be created to incentivise the implementation of the learnings from this proInclude 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.

Provide all outcomes and materials to the 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.



tender portal link:
<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/home>

Thank you for your attention!