

## CALL FOR EVIDENCE FOR AN INITIATIVE (without an impact assessment)

This document aims to inform the public and stakeholders about the Commission’s work, so they can provide feedback and participate effectively in consultation activities.

We ask these groups to share their views on the Commission’s understanding of the problem and the possible solutions, and to give us any relevant information they may have.

<b>TITLE OF THE INITIATIVE</b>	<b>Water resilience research and innovation strategy</b>
<b>LEAD DG – RESPONSIBLE UNIT</b>	DG Research and Innovation, Unit B.4 (Oceans, Seas and Waters) Co-lead: DG Environment, Units A.3 (Green Knowledge & Research Hub, LIFE) and C.1 (Sustainable Freshwater Management)
<b>LIKELY TYPE OF INITIATIVE</b>	Commission communication
<b>INDICATIVE TIMING</b>	Q4 2026
<b>ADDITIONAL INFORMATION</b>	<a href="#">Water resilience strategy – Environment – European Commission</a>

### A. Political context, problem definition and subsidiarity check

#### Political context

Investing in a water-smart economy is essential for Europe’s future. It can increase the EU’s competitiveness and resilience, thereby protecting communities and businesses from growing water risks, and it can enable the EU to develop the knowledge, technologies and skills needed to manage water more sustainably. In doing so, it strengthens the EU’s role as a global provider of practical solutions. The [European water resilience strategy](#) sets out a long-term plan to make Europe resilient to water-related challenges by 2050. Research and innovation (R&I) play a key role in this effort. To deliver on this ambition, a dedicated water resilience R&I strategy is planned for adoption in 2026. The strategy will focus on closing key knowledge gaps, setting clear R&I priorities for the next programming period and achieving the right mix of R&I instruments to deliver results. It will strengthen coordination with Member States, non-EU countries and with businesses, researchers and innovators across sectors that depend on large volumes of high-quality water, such as agriculture, industry, energy, digital industries and health. The strategy will also address the fragmentation of EU R&I initiatives and infrastructures. It will be closely coordinated with the ocean R&I strategy to ensure that R&I priorities and actions on water and the ocean reinforce each other and deliver a greater impact. As part of this coordination effort, a parallel consultation on ocean R&I matters is published ([https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/16392-European-ocean-research-and-innovation-strategy\\_en](https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/16392-European-ocean-research-and-innovation-strategy_en)). In line with the source-to-sea approach, the input from both consultations will feed into a combined EU Ocean and Water Research and Innovation Strategy.

#### Problem the initiative aims to tackle

Water resilience R&I is complex because it has a cross-system dimension and needs to balance scientific findings from the environmental, health, social and economic fields, while considering both the sustainable development goals and the planetary boundaries framework. Water abstraction supports [60% of global GDP, valued at USD 58 trillion](#) (EUR 55 trillion), with the EU contributing USD 11.95 trillion (EUR 11.3 trillion). Yet, fees are only USD 7.5 trillion (EUR 7.1 trillion), making it difficult to invest in appropriate solutions. [Climate change intensifies the challenges](#), prompting the EU to take measures to achieve water resilience by 2050. Those measures are aimed at protecting people, assets and infrastructure from floods, particularly in urban areas, where 74% of the EU population lives. They also target drought, as [water scarcity](#) affected 32% of the EU population in 2023. To address these societal challenges, the water resilience R&I strategy aims to guide research and innovation for solutions and skills development to enhance Europe’s water resilience. The water resilience R&I strategy will address the challenges set out below.

- Insufficient knowledge and capacity to develop solutions to restore and protect the water cycle.**  
Despite increased knowledge and solutions, pressures on water are becoming more numerous and more

complex, because of the triple planetary crisis of climate change, pollution and biodiversity loss, coupled with over-exploitation. New technologies can aid the green transition but also increase pressure on water resources.

2. **Global competition in water R&I, technologies and EU competitiveness.** Despite strong R&I capacities, global competition is increasing. The EU therefore needs to invest to maintain leadership and attract talent to R&I in water resilience-related domains.
3. **Lack of coordination in the EU water resilience R&I landscape and inefficiencies in the uptake of innovative solutions.** Although Europe is a [global leader in water technology](#), deploying innovative solutions requires capacity building and improved coordination between programme goals, beneficiaries, project types, technological readiness levels, forms of funding and levels of investment.
4. **Suboptimal support along the investment journey.** In line with the start-up and scale-up strategy, the water resilience R&I strategy will seek to bridge the gap between research and the real-life application of solutions by identifying barriers to financing the development and deployment of new knowledge and solutions.

## **Basis for EU action (legal basis and subsidiarity check)**

### **Legal basis**

Given the broad scope of the initiative, the water resilience R&I strategy falls under the shared competences of the EU and its Member States, namely research (Article 182 TFEU), environment (Article 192(1) TFEU) and possibly others.

### **Practical need for EU action**

The scale and transboundary nature of water challenges in Europe require R&I cooperation at European level. The EU added value stems from the EU's unique capacity to advance a coordinated water resilience R&I strategy, promoting a cross-sectoral approach to water R&I and fostering transnational coordination.

Cooperation in R&I activities needs to be supported at EU level to ensure that the capacities and resources available in all Member States are used in the most cost-efficient way. This means promoting collaboration between universities, research institutes, competent authorities, companies and civil society throughout the EU. A harmonised framework for wider development and deployment of competitive innovative solutions can be best achieved at EU level, in view of increasing competition from outside the EU.

Because water systems – rivers, lakes, groundwater, coasts and seas – are interconnected, a source-to-sea approach is needed to address pollution threats, biodiversity loss and the impact of climate change, while ensuring coherence, efficiency and long-term resilience. A source-to-sea approach will also provide the necessary elements to better understand and predict the functioning of the water cycle in a coordinated manner. Consequently, input submitted in response to this Call for Evidence will be processed together with the input submitted in response to the Call for Evidence on an Ocean Research & Innovation Strategy, and result in a single integrated Ocean and Water R&I Strategy. Coordinated R&I enables the development of common methodologies, interoperable data systems, reliable data collection, systems for storing and sharing water information and advanced modelling tools across territories and for all countries.

A common EU approach will also help turn research results into practical solutions, develop the necessary skills and jobs to better prepare the EU for climate and environmental risks, and strengthen the EU's role in water management. Harmonisation is needed to avoid the negative impact of divergent standards on the functioning of the internal market and the implementation of environmental policies. Reducing fragmentation and scaling innovative solutions will strengthen the EU's competitiveness.

## **B. What does the initiative aim to achieve and how?**

The water resilience R&I strategy aims to address water challenges through integrated, science-based solutions. It will identify R&I priorities related to water for the next programming period, coordinate with Member States and industry and establish a framework for working with different stakeholders and sectors. The strategy supports the EU water resilience goals, aligns with the Letta and Draghi reports and addresses the impact of climate change on water availability. It builds on Horizon Europe's Cluster 6, EU Missions and European Partnerships and links in with the European Institute of Innovation and Technology's 'EIT Water' knowledge and innovation community and the 2021-2027 cohesion policy (smart specialisation strategy (S3)). It aims to bridge the innovation gap by identifying barriers to commercialisation and how to better finance solution deployment, as outlined in the Competitiveness Compass, the [European start-up and scale-up strategy](#) and the forthcoming [European Research Area Act](#).

## Overarching aim

- Support water resilience, integrated water management, freshwater ecosystem restoration and the implementation of EU water legislation and sectoral policies with an impact on water availability.

## Restoring and protecting the water cycle

- Understand and predict changing water cycles in the context of climate change (green water, atmospheric water, glacier streams) and geopolitical risks.
- Demonstrate the usefulness of nature-based solutions for recharging groundwater and mitigating floods and droughts and increase their uptake across the EU.
- Develop and implement R&I-based tools for water-smart spatial planning.

## Building a water-smart economy

- Boost economic competitiveness through the development and uptake of innovative practices to increase water efficiency and water reuse and reduce leaks, thereby realising the economic value of well-functioning water ecosystem services.
- Reap the benefits of digital tools, artificial intelligence and other innovative techniques for water monitoring and reporting and for protecting critical water infrastructure, while minimising the water footprint of data centres and microchip production.

## Access to safe drinking water and sanitation for all

- Contribute to societal well-being through the availability of water and associated goods and services.
- Increase the resilience of water infrastructure through innovations such as waterless sanitation, new housing approaches, more circular water infrastructure and nature-based solutions.
- Enhance prevention of water pollution, also considering chemicals and materials that are safer and more sustainable by design, waterborne diseases and antimicrobial resistance issues.

## Operational Objectives

To achieve its objectives and overcome the insufficient knowledge on the water resilience of our societies and their capacity to develop solutions, the water resilience R&I strategy will:

- promote a more coordinated approach to water resilience R&I, notably by
  - helping to bring about more coherent and structured programming of water resilience-related R&I across EU programmes; and
  - improving transnational and international cooperation;
- identify possible key elements to optimise financial support throughout the innovation cycle and investment chain to foster competitiveness;
- promote cross-European research infrastructure networks and water-efficiency testing sites, which requires support for prototyping and testing of technologies at EU level;
- promote the sharing and pooling of data and scientific and technological efforts in the EU and Member States;
- support the development and effective implementation of EU water legislation and the European Green Deal.

## Likely impact

The likely impact of the R&I strategy is increased coherence and complementarity between water-related R&I initiatives at EU and Member State level. This will boost Europe's long-term scientific excellence, competitiveness, sustainability, resilience and strategic autonomy. It will also reinforce the concept of science diplomacy and promote international cooperation.

The European water resilience R&I strategy will have a broad and significant economic, social, environmental and strategic impact.

**Economically**, the strategy will help boost an EU sustainable water-resilient economy by supporting the development of cutting-edge innovation, technologies, new products and skills.

**Environmentally**, the strategy will help to better understand how to protect and restore water resources and the fundamental ecosystem goods and services they provide. It will help to address the interdependent crises of climate change, biodiversity and pollution, notably by gaining a deeper understanding of aquatic environments, by developing innovative sustainable solutions and through near real-time electronic monitoring and reporting. This will make it possible to improve early warning systems and decision-making support by using modelling, forecasting, simulations and predictions to inform policy decisions and strategies.

**Socially**, the R&I strategy will improve knowledge to help curb water shortages and flooding and other extreme events, thereby enhancing civil protection, mitigating pollution pressures and improving sanitation and health services and public safety. It will also promote knowledge-based jobs and support education and scientific cooperation. The strategy might indirectly contribute to lowering the potential for emerging water-related conflicts.

The impact on **fundamental rights and equality** is expected to be positive, as greater understanding and knowledge of water-resource management and sharing will enhance transparency and equal access to information for the general public, scientists and policymakers in the EU and beyond. It is also expected to lead to fair and equitable access to water and to goods and services that depend on water.

Key advances on the United Nations **sustainable development goals** (SDGs) include advances on SDG 6 (Clean Water and Sanitation), SDG 14 (Life Below Water), SDG 13 (Climate Action), SDG 9 (Industry, Innovation and Infrastructure) and SDG 17 (Partnerships for the Goals).

#### **Future monitoring**

The Commission will regularly monitor progress in implementing the strategy. As part of that process, the Commission will also draw on the regular monitoring and evaluation of the Horizon Europe framework programme, notably the EU Missions 'Restore our Ocean and Waters' and 'Adaptation to Climate Change'.

### **C. Better regulation**

#### **Impact assessment**

The initiative is a communication that will not involve committing to actions or funding but will establish a framework and propose a way forward for R&I on water resilience. Therefore, no impact assessment is planned for this initiative. Any future initiatives resulting from the communication will be subject to impact assessment as applicable. No consultant(s) / external contractors will be involved.

#### **Consultation strategy**

The Ocean and Water R&I strategy will follow a targeted consultation process aimed at gathering views from stakeholders and the public and will allow them to contribute to the development of the strategy in a transparent, collaborative and inclusive manner. The Commission is seeking stakeholders' views on the need for and added value of EU action on water resilience R&I. Stakeholders are invited to submit proposals on:

- i. knowledge gaps and how R&I can serve as a critical enabler to achieve technical breakthroughs on topics related to water resilience;
- ii. overcoming barriers to the deployment of innovation to ensure that the objectives of the water resilience strategy will be achieved;
- iii. promoting a more coordinated approach to water resilience R&I in the EU;
- iv. optimising support throughout the innovation cycle and investment journey, from research to scale-up, deployment and replication;
- v. supporting the development of an enabling framework that ensures that people have the right skills for jobs and promoting public participation;
- vi. supporting the development of water management, nature-based solutions, water-efficient technologies, sanitation and a European network of technology-testing sites;
- vii. supporting the development and effective implementation and evaluation of environmental policies;
- viii. promoting the sharing and pooling of water resilience knowledge, data, and scientific and technological efforts and capitalising on the use of artificial intelligence;
- ix. how R&I on water can contribute to societal well-being and what social sciences and humanities can contribute.

In parallel, the input in response to this Call for Evidence is supplemented by targeted feedback from the following formal and informal ad hoc stakeholder dialogues:

- 21 November 2025: workshop on possible future public-private initiatives on perfluoroalkyl and polyfluoroalkyl substances (PFAS) and waterless/dry cooling;
- 4 March 2026: first Water Resilience R&I Stakeholder consultation as part of the European Ocean Days;
- 5 June 2026: second consultative workshop: 'Water resilience as competitive edge: Bridging R&I gaps for Nature-based Solutions (NbS)' (Official EU Green Week side event).

In line with the European Commission's better regulation policy to develop initiatives informed by the best available knowledge, we also invite scientific researchers, academic organisations, learned societies and scientific associations with expertise in water-related science to submit relevant published and pre-print scientific research, analyses and data. We are particularly interested in submissions that synthesise the current state of knowledge in

relevant fields. To build on the extensive body of existing scientific knowledge and innovations, three separate policy feedback documents will be attached to this call for evidence (one document for each of the three key elements of the water resilience strategy: (1) [restoring and protecting the water cycle](#); (2) [building a water-smart economy](#); and (3) [guaranteeing clean and affordable water](#)).