

EXECUTIVE SUMMARY

Strategic Agenda for R+D+i in the Water Sector in Spain

Period 2024- 2026

The **Spanish Water Technology Platform (PTEA)**, as a public-private cooperation network for the promotion of R+D+i in the water sector:

- Connect scientific and technological agents
- It focuses its activity on achieving the objectives set out in the Spanish Strategy for Science and Technology and Innovation (2021-2027), the European Research Area and the European partnership Water4All
- It supports the Administrations to respond to the major challenges affecting the water sector in our country

MISSION

Innovation and constant improvement of technologies and processes applicable to the sustainable management of the integral water cycle, as well as the improvement of employment, competitiveness and internationalization of the sector.

OBJECTIVES OF THE 2024-2026 AGENDA

- 1 **Strengthening public-private collaboration**
- 2 **Promoting knowledge transfer**
- 3 **Enhancing Spain's capacity to internationalise the sector**
- 4 **Attracting, recovering and retaining talent**
- 5 **Guarantee the application of the principle of real equality between women and men in R+D+i**



This contextualisation section includes the analysis of the main **Strategies, Programmes and/or Initiatives** of the major strategic objectives that will mark the evolution of the sector in the coming years. The roadmap has been defined by dissociating the main reference strategies and plans, the tools from the strategies and programmes, and the reference initiatives and partnerships for the PTEA.

Policy Scope

International scale	European scale	National scale

Regulatory Scope

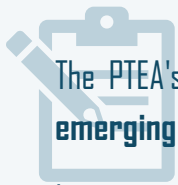
European regulation	National regulation

Benchmark Initiatives and Partnerships

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The new agenda pursues a greater "strategic alignment of technological development and innovation objectives" with the programmes and initiatives that at international, European and national level are defining the science, technology and innovation ecosystem, with special emphasis on **Water4All**, as a European initiative focused on innovation in water.





The PTEA's EISA 2024-2026 aims to be a comprehensive **guide that addresses crucial challenges and emerging opportunities** in the field of water.

In an interconnected and ever-evolving world, water stands as a resource whose management and preservation are essential for human well-being, sustainable development and the health of ecosystems.

4 Objectives

- 1 Strengthening a holistic vision of the future of the sector
- 2 Driving innovation
- 3 Foster collaboration and cooperation
- 4 Promote the adoption of advanced technological solutions that allow us to face water challenges with determination and vision

The **7 themes** represent the pillars on which the future of water is built:



Circular Economy

- I.I Water supply for socio-economic development in activities such as agriculture, aquaculture, urban, industrial, recreational and energy uses
- I.II Circular economy
- I.III Empowering the public, water users and stakeholders in water valuation



Water for the future

- III.I Integrated water resources management
- III.II Watershed Management
- III.III Groundwater management
- III.IV Resilience, adaptation and mitigation to extreme hydroclimatic events
- III.V Tools for Water Management



Water Infrastructures

- V.I Adaptation of existing hydraulic infrastructures to new challenges
- V.II Resilience of water infrastructures.
- V.III Security of water infrastructures and terrorism.

Ecosystems and Biodiversity



- II.I Functioning and biodiversity
- II.II Resilience, mitigation and adaptation of aquatic ecosystems and ecosystem services to global changes
- II.III Development and application of ecological and ecohydrological engineering for ecosystem restoration
- II.IV Integration of ecosystem services into the management of water resources and aquatic ecosystems

Water and Health



- IV.I Behaviour and effects of pollutants of emerging interest
- IV.II Water dimension of antimicrobial resistance
- IV.III Innovative tools for water quality control and treatment
- IV.IV Risk assessment for the protection of human health and ecosystems

Water-Energy – Food – Ecosystems Nexus



- IV.I Sustainable management and efficient use of resources
- IV.II Promotion of renewable energies as a GHG reduction measure
- VI.III Empowerment of the public, users and stakeholders

Governance



- VII.I Development of methods for more effective participation of citizens and stakeholders
- VII.II Strengthen policy integration, alignment and coherence, as well as the coordination of water policy to effect change in society.



Research, Development and Innovation (R+D+i) play a crucial role in the evolution and progress of the water sector. The promotion of R+D+i not only drives the creation of innovative and technologically advanced solutions to address current and future water challenges, but also fosters competitiveness, sustainability and economic growth in this sector.

Identifying and understanding existing initiatives at the national and international levels allows us to:

- 1 Leverage synergies, avoid duplication, and focus our efforts on areas where collaboration and innovation can have an impact
- 2 To recognize the importance and richness of the R+D+i ecosystem in the water sector
- 3 To establish a solid foundation to drive technological advancement, applied research and cross-sectoral collaboration for the benefit of sustainable and efficient water management.

Promotion of the R+D+i

Tools & Programs



The PTEA has received the Aid for Technological and Innovation Platforms of the State Program to Promote Scientific-Technical Research and its Transfer through the Ministry of Science and Innovation.