



WWT - Financial challenges and funding instruments in the Danube Region

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How EUSDR contributes to the prosperity of the Danube Region?

- Cooperation in the preparation, implementation and capitalisation process of international projects as well as in dissemination of the results,
- Focus on project funding, post 2020, embedding of EUSDR objectives into EU funding schemes,
- Strengthening capacity building, preparing studies, organizing workshops and conferences...

...and much more!

Revised EUSDR PA4 Action Plan



Actions:

- HAZARDOUS & EMERGING SUBSTANCES: Promote monitoring, prevention and reduction of water pollution deriving from hazardous and emerging substances (EU priority substances and watch list candidates as well as Danube basin specific pollutants candidates and others e.g. microplastics-plastics, pharmaceuticals, PFOS)
- 2. <u>WASTE WATER:</u> Continue boosting major investments in building, upgrading, maintaining and rehabilitating urban wastewater treatment facilities and promote alternative collection and treatment of wastewater in small rural settlements, including measures to build capacity at the regional and local level across the Danube basin
- 3. <u>WATER & AGRICULTURE:</u> Promote prevention and reduction of diffuse pollution, promote nutrient retention, smart irrigation and water reuse, foster and develop an active process of dialogue and cooperation between authorities responsible for agriculture and environment to ensure that measures are taken to address diffuse pollution and ensure smart water use
- 4. <u>DRINKING WATER:</u> Promote measures aimed at reducing knowledge deficits related to protecting water resources and safeguarding drinking water supply
- 5. <u>MIGRATORY FISH:</u> Promote measures to enable fish migration in the Danube river basin
- 6. <u>CLIMATE CHANGE:</u> Promote measures to adapt to climate change impacts in relation to water quality and quantity
- 7. <u>TOOLS:</u> Enhance cooperation, increase and exchange knowledge and secure financing to water quality measures in the Danube Region





The European Green Deal (EGD)

COM(2019) 640 final

The European Green Deal

Mobilising research and fostering innovation Transforming the EU's economy for a A zero pollution ambition Increasing the EU's Climate sustainable future for a toxic-free environment ambition for 2030 and 2050 Preserving and restoring Supplying clean, affordable The ecosystems and biodiversity and secure energy European Green From 'Farm to Fork': a fair, Mobilising industry healthy and environmentally Deal for a clean and circular economy friendly food system Building and renovating in an Accelerating the shift to And leave energy and resource efficient way sustainable and smart mobility No one behind Leave no one behind Financing the transition (Just Transition) The EU as a

global leader

A European Climate Pact

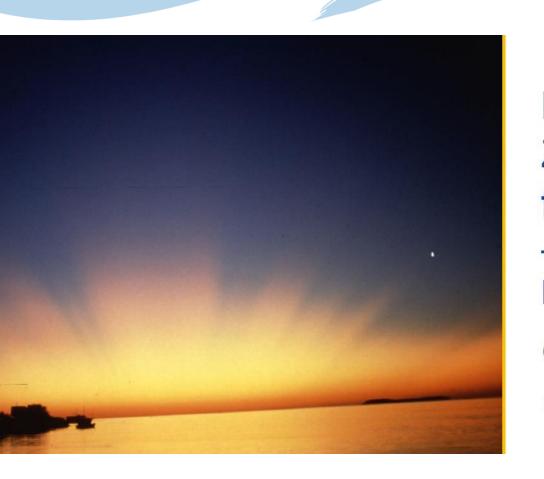


Action Plan



(Just Transition)





EU Action Plan 'Towards
Zero Pollution Action Plan
for Air, Water and Soil'

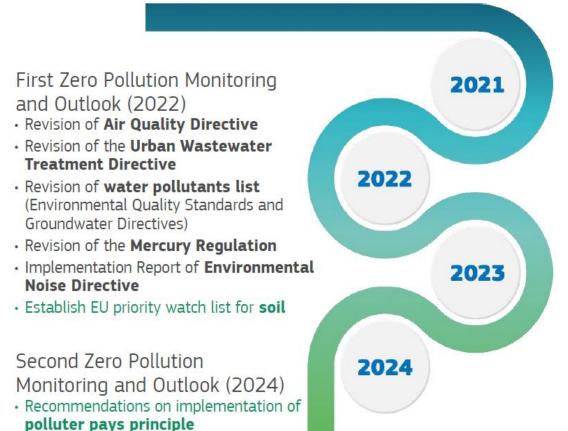
– A Pathway to a Healthy
Planet for Healthy People

COM (2021) 140 final

12 March 2021



Timetable (key actions)



Launch of the Zero Pollution Stakeholder Platform (2021)

- New emission limit values for motor vehicles (EUR07)
- Revision of the Industrial Emissions Directive and EU Pollutant Release and Transfer Register (or early 2022)
- Revision of the Environmental Crime Directive
- Launch global initiatives, e.g. on lead batteries recycling

EEA's European Environment & Health Atlas (2023)

- · Review of Marine Strategy Framework Directive
- Review of Bathing Water Directive
- Fitness Check of Environment Liability Directive
- Assess pathways and policy options for indoor air quality
- Dedicated nutrient (ammonia) actions contributing to the Integrated Nutrient Management Action Plan
- Zero pollution contribution to European Green Deal Dataspace

Circular Economy Action Plan



CEAP - Key targets related to water



- Food, water & nutrients one of the key product value chains addressed.
- Water reuse and water efficiency:
 - Facilitate water reuse and water efficiency, including in industrial processes
 - Application of the new Water Reuse Regulation (2020/741/EU)
 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2020:177:FULL&from=EN
- Sustainable product policy framework aim to set principles for product policy and requirements on products placed on the EU market.
- Review of the Industrial Emissions Directive, and integration of circular economy practices in upcoming Best Available Techniques (BAT) reference documents
- Adress and prevent microplastics → Environment, drinking water and food
- Key sectors: Building and textile



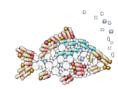
Strategy on Energy System Integration



- Planning and operation of the energy system 'as a whole' → Multiple energy carriers, infrastructures, and consumption sectors
- 3 pillars: 1) More circular energy system 2) Greater direct-electrification 3) Clean fuels where electrification is difficult
- Reduce the energy-water footprint:
 - Under Pillar 1: Potential of energy produced from bio-waste or in waste water treatment plants
 - 2) Circular Economy Action Plan → Increased sustainable production of bioenergy from waste-water, waste and residue, exploiting synergies and avoiding trade-offs
 - 3) Renewable and low-carbon fuel → Minimum shares or quotas in specific end-use sectors (including **maritime**) | Revision of the Renewable Energy Directive | Additional measures assessed under the REFUEL Aviation and **FUEL Maritime initiatives** (2020)
- A hydrogen strategy for a climate-neutral Europe → H2 can become an alternative low emission fuel for waterways and short-sea shipping



EU Strategic Approach to Pharmaceuticals in the Environment (PiE)

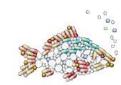


Main elements – Reminder

- <u>COM(2019) 128 final</u> adopted on 11 March 2019, feeds in the Pharmaceutical Strategy
- Objective → To address the environmental implications of all phases of the lifecycle of pharmaceuticals (human and veterinary), from design and production through use to disposal
- Action areas:
 - Increase awareness and promote prudent use
 - Support the development of pharmaceuticals intrinsically less harmful for the environment and promote greener manufacturing
 - 3. Improve environmental risk assessment and its review
 - 4. Reduce waste and improve the management of waste
 - 5. Expand environmental monitoring
 - 6. Fill other knowledge gaps



EU Strategic Approach to Pharmaceuticals in the Environment – progress and implementation





Most advanced actions:

- Additional pharmaceuticals included in the WFD Surface Water Watch List (rev. August 2020)
- Provisions in the Regulation on veterinary medicinal products for more prudent use of antimicrobials in animals and to fight antimicrobial resistance
- New guidelines on hazardous domestic waste.
 Pharmaceuticals included in the UWWTD impact assessment
- Pharmaceutical concentration and antimicrobial genes sampled in JRC-LUCAS soil survey (results expected in 2022)
- Work with MS e.g. to ensure health professionals consider environmental impacts of medication





EU Climate Change Adaptation Strategy



- Towards a climate-resilient water management
 - Improve coordination of thematic plans and other mechanisms (incl. water resource allocation and water-permits) across sectors and borders
 - Reduce water use:
 - Raising the water-saving requirements for products
 - Encouraging water efficiency and savings
 - Promoting the wider use of drought management plans
 - Stable and secure supply of drinking water → climate change-risks in risk analyses of water management
 - Sustainable soil management and land-use
 - Nature-based solutions to achieve the goals of the Water Framework
 Directive and the Floods Directive





To mobilise the necessary investments, the Commission is putting forward a two-fold response:

Next Generation EU

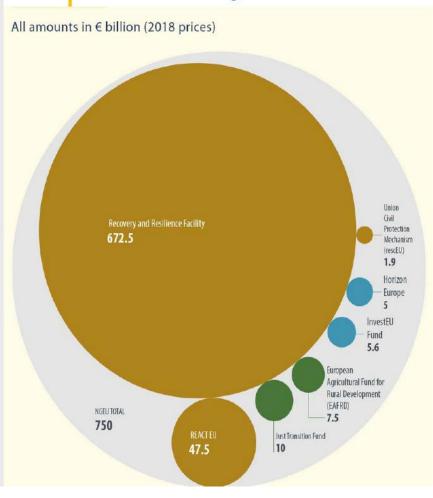
a new recovery instrument of €750 billion which will boost the EU budget with new financing raised on the financial markets for 2021-2024



A reinforced long-term budget of the EU for 2021-2027



Recovery and Resilience Plans



- The EU's long-term budget and the "Next Generation EU" instrument: A total of €1.8 trillion to help rebuild a post-COVID-19 greener, more digital and more resilient Europe
- Next Generation EU (2021-24) = EUR 750 billion
- 30% of the EU funds to fight climate change, the highest share ever of the European budget (NGEU, MFF).
- MS Recovery and Resilience Plans due on 30
 April: reform and investment agenda (green and digital transitions, fairness, macroeconomic stability)



Investment opportunities for water



Tools / Instruments

- InvestEU
- Just Transition Mechanism.
- REACT-EU
- Recovery Facility
- EAFRD
- EMFF
- Taxonomy
 Regulation and
 its delegated
 acts

Identify Needs

- Water Supply/Treatment: cf OECD/ENV study
- Improve knowledge on remaining WFD/MSFD investments needs
- Link to compliance gaps

Critical success factors

- Bankable projects
- Job creation
- Application polluter-pays principle
- Extended Producer Responsibility (EPR)
- Payments for ecosystems services

Process

- Integration in National Recovery Plans, Energy & Climate Plans
- Emphasis on financing/funding in forthcoming RBMPs / PoMs
- Country / sectoral priorities
- Technical assistance

Still a lot to be done at Commission and Member State levels to ensure good projects emerge and benefit from funding!



Examples of green investments in water sector

Ensuring supply of safe and clean drinking water, in line with the revised DWD

Improving water distribution networks /eliminating leakages Promoting water saving and reuse, waterefficient technologies Constructing wastewater collection and treatment infrastructure, complying with UWWTD

Upgrading existing wastewater installations, including on treatment of chemical substances (such as pharmaceuticals)

Promoting industrial symbiosis technologies and projects for reuse of wastewater in industry

Constructing eco-friendly water storage infrastructure

Removing outdated infrastructures or upgrading existing water infrastructure to render them environmental or climate friendly

Supporting preparation for implementation of the new Regulation on Water Reuse Implementing coherent and tailored-made River Basin Management Plans and Flood Risk Management Plans

Improving implementation of the WFD and other water-related Directives

Investing in natural water retention measures

Investing into measures at source to counteract pollution

Promoting nature-based solutions

Optimising performance in green infrastructure and water infrastructure services

Promoting further synergies among water-related Directives

More published by the EC:

https://ec.europa.eu/environment/integration/green_semester/index_en.htm https://ec.europa.eu/environment/integration/green_semester/pdf/Water_examples_projects_Oct2020.pdf



Cohesion Fund: 42,5 B EUR

Environment, transport

European Regional Development Fund (ERDF): 200 B
 EUR

Five policy objectives:

- 1. A more competitive and smarter Europe
- 2. A greener, low-carbon transitioning towards a net zero carbon economy and resilient Europe
- 3. More connected Europe
- 4. More social and inclusive Europe
- 5. A Europe closer to citizens
- Neighbourhood, Development and International Cooperation Instrument (NDICI): 71,8 B EUR
- JASPERS (Joint Assistance to Support Projects in European Regions)

Technical assistance partnership that helps cities and regions absorb European funds through top-quality projects



European Energy Efficiency Fund (<u>www.eeef.lu</u>)

An innovative public-private partnership that provides market-based financing for commercially viable public energy efficiency and renewable energy projects in the EU Member States

- Horizon Europe: 90,1 B EUR
- Interreg: 7,95 B EUR
- LIFE+: 5,432 B EUR

Environment (€3.488 billion):

- Nature and biodiversity (€2.143 billion)
- Circular economy and quality of life (€1.345 billion)

In the field of Climate (€1.944 billion):

- Climate change mitigation and adaptation (€0.947 billion)
- Clean energy transition (€0.997 billion)



Water in Horizon Europe



Horizon Europe: 95.5 Bo € for 2021-2027 (incl. 5.4 Bo € NextGenerationEU) - 30% increase

- EP and Council reached a <u>political agreement</u> on 11 December 2020 and will adopt the legal acts
- 1st Horizon Europe Strategic Plan (2021-2024) published on 19 March 2021
- First work programmes published as of April 2021

Elements to highlight:

- 6 Thematic clusters → Collaborative research relating to societal challenges
- 5 EU missions → Ambitious, time-bound and achievable goals
 EU mission on Healthy oceans, seas, coastal and inland waters
- European Partnerships → Research and innovation programmes jointly developed and implemented by the EU, private and public partners

Co-funded partnership → 'Water Security for the Planet' (Water4AII)

Co-programmed partnership → 'Zero-emission Waterborne Transport'



Horizon Europe programme structure

Specific programme implementing Horizon Europe and EIT

Exclusive focus on civil applications

Excellent Science
European Research Council
Marie Sklodowska-Curie Actions
Research Infrastructures

Global Challenges and European Industrial
Competitiveness
Clusters
Health
 <u>Culture, Creativity and Inclusive Society</u>
<u>Civil Security for Society</u>

· Digital, Industry and Space

Pillar II

 Climate, Energy and Mobility
 Food, Bioeconomy, Natural Resources, Agriculture and Environment

Non-nuclear direct actions of the Joint Research Centre

Pillar III

Innovative Europe

European Innovation Council

European Innovation Ecosystems

European Institute of Innovation and Technology

Part: Widening participation and strengthening the European Research Area

Widening participation and spreading excellence

Reforming and enhancing the European Research and Innovation system



Missions

Horizon Europe incorporates research and innovation missions to increase the effectiveness of funding by pursuing clearly defined targets.

The Commission engaged policy experts to develop studies, case studies and reports on how a mission-oriented policy approach will work.

Read more about the mission approach

5 mission have been identified.

Adaptation to Climate Change mission

Cancer mission

Restore our Oceans and Waters mission

Climate-neutral and smart cities mission

Soil Deal for Europe mission



European partnerships

Horizon Europe supports European partnerships in which the EU, national authorities and/or the private sector jointly commit to support the development and implementation of a programme of research and innovation activities.

The goal of European partnerships is to contribute to the achievement of EU priorities, address complex challenges outlined in Horizon Europe and strengthen the European Research Area (ERA).

Read more about the different kinds of partnerships

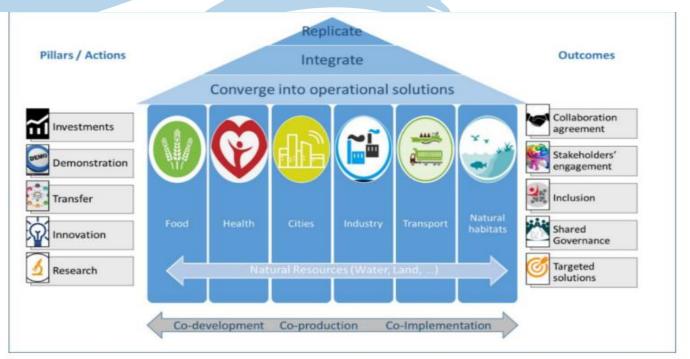
Partnership candidates and contact details are available to view grouped in the themes below.

<u>Partnerships across themes</u> <u>Climate, energy and mobility</u>

<u>Digital, industry and space</u> <u>Health</u>

Food, bioeconomy, natural resources, agriculture and environment

Horizon Europe Water 4 All – co-funded partnership



DANUBE REGION

The **planned activities** of the partnership are proposed considering available information on eligibility of actors relevant for a successful Partnership and can be adjusted to the final commitments:

- Pillar A Ensure coordination and alignment of EU/Nat./reg. programmes and continuum in actions from Research & Innovation to implementation
- Pillar B provide new knowledge and innovative solutions at the relevant scales of implementation from local to regional and global
- Pillar C foster the uptake of R&I results by engaging industry, users and policy makers while developing skills and capacity building at EU and intl. scale
- Pillar D Demonstrating the efficiency of innovation solutions and leveraging with "downstream" funding programmes (equipment investments, demonstration) by replication
- Pillar E Attracting new partners for creating the necessary critical mass required by global water security challenges and developing innovation cooperation tools





Provisional timeline



www.interregeurope.eu/about-us/2021-2027



Projects on water





Improving the European Rivers Water Quality through Smart Water Management Policies



Sustainable heritage management of WAterway REgions



Water reuse policies advancement for resource efficient European regions



European Network of Lindane waste affected regions working together towards a greener environment



Floating Cultures in River Deltas



Sustainability of the land-sea system for eco-tourism strategies

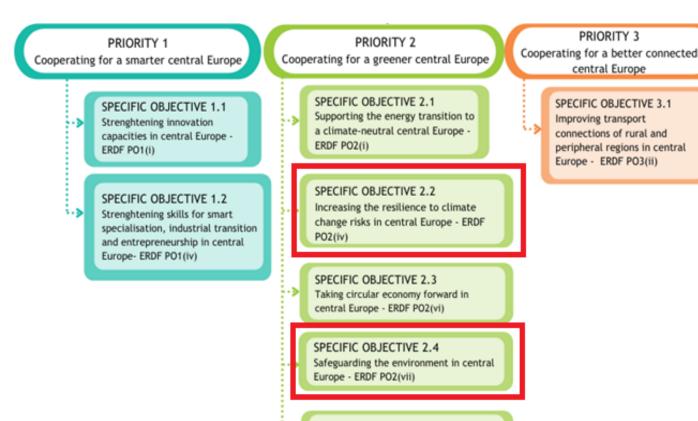


Water Technology Innovation Roadmaps





4 Priorities and 9 Specific Objectives



SPECIFIC OBJECTIVE 2.5

Greening urban mobility in central

Europe - ERDF PO2(viii)

PRIORITY 4

Improving governance for cooperation in central Europe

SPECIFIC OBJECTIVE 4.1

Strengthening governance for integrated territorial development in central Europe - Interreg ISO1



SO 2.1 Supporting the energy transition to a climate-neutral central Europe

- Smart integration of carbon-neutral solutions across sectors
- Renewable energy sources
- Energy efficiency of buildings and public infrastructures
- Reduction of greenhouse gas emissions from industry and other sectors
- Energy planning at local and regional levels
- Energy demand management and behavioural change
- Financing schemes for energy efficiency and renewable energy investments
- Energy poverty



SO 2.2. Increasing the resilience to climate change risks in central Europe

- Climate change resilience and adaptation measures
- Climate-proof landscape and urban planning
- Resilience to weather extremes and related hazards (rainfall events, floods, landslides, heat, draughts, water scarcity, wildfires etc.)
- Risk awareness, prevention and management
- Socio-economic and health-related impacts of climate change

SO 2.3. Taking circular economy forward in central Europe

- Waste prevention and management, recycling and recovery of resources and raw materials
- Repair and re-use
- Circular economy value chains
- Clean production processes and closed loop systems
- Sustainable product design (e.g. ecodesign) and product development processes
- Behavioural changes of producers, consumers, public buyers etc.

SO 2.4. Safeguarding the environment in central

- Biodiversity conservation and recovery, including urban green spaces
- Protection of natural heritage, ecosystems and valuable areas incl. Natura 2000 sites
- Reduction of environmental pollution (air, water, soil, noise, light etc.) and their human health impacts
- Integrated environmental management and sustainable use of natural resources
- Sustainable land management and landscape planning that optimize human activities with biodiversity protection and enhancement measures
- Ecosystem services (e.g. production of food and water, clean air, recreational benefits)
- Restoration of degraded ecosystems
- Sustainable tourism and the valorisation of natural heritage







Danube Region Programme 2021-27 thematic scope



PRIORITY 2: A greener, low-carbon Danube Region

Implementing the Paris Agreement and investing in energy transition, renewables and the fight against climate change.



SPECIFIC OBJECTIVES:

- 2. 1. Support greening the energy and transport sectors in the Danube Region by enhancing the integration of renewable energy sources.
- 2. 2. Promoting climate change adaptation capacities in the Danube Region and disaster management on transnational level in relation to environmental risks (taking into account ecosystem-based approaches).
- 2. 3. Sustainable, integrated, transnational water and sediment management in the Danube River Basin ensuring good quality and quantity of waters and sediment balance.
- 2. 4. Protecting and preserving the biodiversity in ecological corridors and eco-regions of transnational relevance in the Danube Region.



Danube Region Programme 2021-27 thematic scope

SO 2.3 Sustainable, integrated, transnational water and sediment management in the Danube River Basin ensuring good quality and quantity of waters and sediment balance

Focus 1: Capacities for prevention and mitigation of water pollution or for restoration of good quality of transnational water bodies

Focus 2: Harmonising management practises between water management and other key sectors to improve quality and quantity of water and sediment in transnational river systems, taking into consideration potential impacts of CC

Focus 3: Transnational coordination of water supply management, especially in relation to basin-wide importance of groundwater bodies





Danube Region Programme 2021-27 thematic scope

SO2.3 Sustainable water & sediment management – type of actions

- Harmonised <u>data availability</u>, <u>monitoring</u>, <u>modelling systems</u> for transnational water management
- Strengthening capacities to <u>prevent and mitigate water pollution</u> or restore good quality of water
- Improving <u>sediment balance</u> and related morphodynamics
- > Potentials of <u>floodplain reconnection to improve water quality</u>
- Monitoring, modelling of transboundary groundwater systems
- Measures ensuring <u>balanced use of water</u>, regarding CC impacts
- Measures in connection to CC induced low water periods on transnational rivers of DRB (sediment, navigation, HPP)





Danube Region Programme new call

ENI CALL FOR PROPOSALS IS LAUNCHED: €6 MILLION TO FINANCE PROJECTS IN MOLDOVA AND UKRAINE

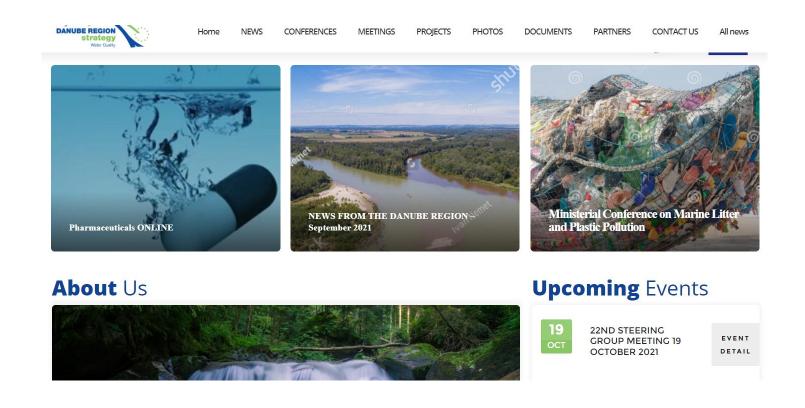
to increase the institutional capacity of the Ukrainian/ Moldovan stakeholders to develop and implement transnational projects in the thematic fields of the Danube Programme 2021-2027 through enhanced cooperation of relevant stakeholders at national, regional and local levels.

focus on Improve institutional capacities to tackle major societal challenges

The call is open from the 26th January until the 10th March, 15:00 hrs CET.



https://waterquality.danube-region.eu/



Thank you for your attention!