



The RETOUCH NEXUS project promotes a cross-sectoral Water–Energy–Food–Ecosystems (WEFE) Nexus approach to support a resilient EU water economy. It ensures that water governance considers ecological, social, and economic dimensions, fostering coherence and effectiveness across sectors and governance levels.

KEY STAKEHOLDERS

- Policy Makers, ministries
- Agencies

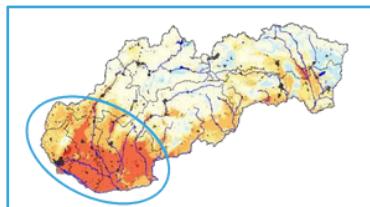
PRIORITY ACTIONS

- Implement measures that improve soil water retention, invest in modernization of irrigation and water retention infrastructure, and impose water pricing reflecting environmental and economic value of water.
- Establish clear coordination mechanisms across different water using sectors and actors, applying nexus thinking, and integrate water and landscape planning taking river basins into account.
- Institutionalize participatory water councils and adaptive management cycles to strengthen stakeholder engagement and policy responsiveness.
- Develop and implement a unified, interoperable water data platform supporting real-time monitoring and decision-making.

INTEGRATED PARTNERSHIPS FOR INCLUSIVE GOVERNANCE

- The Water Policy Concept promotes participation and multi-level partnerships through both mandatory and voluntary processes. However, fragmented institutional responsibilities and a lack of a unified framework limit stakeholder engagement. Centralized, top-down governance often overlooks bottom-up input, hindering inclusive policy development, cross-sector coordination, and adoption of a WEFE nexus approach.
- Cross-sectoral initiatives such as Dialogue on Water and Soil or adaptation and optimization of water infrastructure show promise but require greater intensity, continuity, and structured knowledge sharing to be effective.

Robust monitoring and transparent reporting are essential to support evidence-based decision-making and build public trust.



CONTEXT

- Climate change exposes Slovakia to drying, floods, and droughts, reducing agricultural productivity and degrading ecosystems, calling for an integrated policy response.
- Water governance is highly fragmented across ministries and management stages, undermining water quality and efficiency.
- Effective participation of technical and non-technical stakeholders is key for legitimacy, ownership, and coordinated water governance.

NEXUS GOVERNANCE CHALLENGES & BARRIERS

- Water governance is highly fragmented, with responsibilities split between the Ministries of Environment and Agriculture, and limited coordination. State enterprises and municipalities often have overlapping or conflicting roles. While the Water Policy Concept offers a strategic framework, planning, implementation, and stakeholder cooperation remain misaligned.
- Frequent leadership changes disrupt continuity. Decision-making suffers from inconsistent, outdated data scattered across sources. The legal framework is complex and hard to enforce. Fragmented land ownership hinders modernization and maintenance of water infrastructure.
- The Action Plan Water is the Value outlines measures but lacks timelines, funding, and implementation details. The Carbon and Water Bank concept is stalled. Fees for water use don't reflect true environmental or economic costs. Climate adaptation strategies are still underdeveloped.

FRAGMENTATION VS INTEGRATION

| Aspect | Current State (Fragmented) | WEFE Nexus Approach (Integrated) |
|-------------------------|---|--|
| Policy Focus | Separate focus either on water or agriculture. | Joint WEFE Nexus approach. |
| Stakeholder Engagement | Limited and formal, some relevant stakeholders have limited access to information and no say. | Multi-sectoral co-decision with inclusion of all technical and non-technical stakeholders. |
| Coordination Mechanisms | Inconsistent policies and regulations. | Learning and communicating institutions, joint comprehensive databases, sharing information. |
| Outcomes/Risks | Inconsistent policies and regulations. | Efficient, inclusive policy-making. |
| Examples | Stand-alone sectoral strategies. | Implementation of design, policies and strategies using WEFE Nexus approach. |



PATHWAYS TO SUSTAINABLE NEXUS WATER GOVERNANCE

- Effective participatory planning requires engagement of stakeholders across all sectors and administrative levels to foster legitimacy, ownership, and coordinated implementation.
 - National Level:** Develop a comprehensive, multi-sector water strategy integrating water, food, and ecosystem priorities. Use integrated spatial planning to align water governance with land use and environmental goals. Streamline water management authorities, increase funding and capacity building, and unify fragmented water data into an interoperable digital platform.
 - Regional Level:** Strengthen communication and information sharing among stakeholders across the WEFE nexus. Adopt watershed and river basin units as the primary frameworks for integrated water and land use planning, facilitating ecosystem-based management and cross-sector coordination.
 - Local (Subregional) Level:** Enhance stakeholder engagement and participatory decision-making by fostering regular dialogue and collaboration among WEFE nexus actors.
- To enhance cross-sector integration and adaptive management, governance and legal frameworks should be revised to clarify roles, improve coordination, and increase flexibility. This includes an inter-ministerial platform for dialogue and joint decision-making across water, agriculture, environment, and land-use sectors, embedding adaptive management through regular policy reviews based on monitoring and stakeholder input, and strengthening regional water authorities along river basins. Aligning water governance with spatial planning and reinforcing public participation and enforcement will boost coherence and accountability.
- Addressing technical, economic, legal, and institutional barriers requires innovative policy instruments and organizational models. Slovakia can use economic tools like subsidies for water retention and regenerative agriculture, tiered tariffs reflecting scarcity, and tradable permits for efficiency. Financing mechanisms such as carbon-water banks and public-private partnerships can fund infrastructure and ecosystem restoration. Organizational innovations, including watershed-based bodies and multi-stakeholder platforms, can foster collaboration and adaptive governance, aligning incentives, reducing fragmentation, and supporting sustainable water management.

PROGRESSION TIMELINE ROADMAP (2025-2035)



| Phase | Short-Term: Cross-Sectoral Governance Alignment | Medium-Term: Strengthening institutions | Long-Term: Stakeholder Engagement and Performance Evaluation |
|--------------------------|--|--|--|
| Key Actions | <ul style="list-style-type: none"> Establishing an inter-ministerial coordinating body to enhance cross-sectoral collaboration in water governance. Aligning water management plans with spatial and land-use planning to ensure cohesive policy implementation. | <ul style="list-style-type: none"> Strengthening regional water authorities to improve localized decision-making and management. Developing the Carbon and Water Bank concept to support water retention in the landscape. Developing a unified water data platform to consolidate information from multiple sources. | <ul style="list-style-type: none"> Enhancing stakeholder involvement through participatory water councils or community-based monitoring. Institutionalizing regular evaluation mechanisms to assess progress against water management objectives and climate adaptation goals. |
| Responsibilities | <ul style="list-style-type: none"> National government, regional and local self-governance. | <ul style="list-style-type: none"> National government, regional and local self-governance, land owners, IT partners, research institutes. | <ul style="list-style-type: none"> National government, regional and local self-governance, landowners and users, environmental NGOs, public. |
| Enablers/Tools | <ul style="list-style-type: none"> National plans, GIS mapping, policies supporting nexus. | <ul style="list-style-type: none"> National plans; funding, digital collaboration platform, research. | <ul style="list-style-type: none"> Legal framework for participation. |
| Challenges & Mitigations | <ul style="list-style-type: none"> Institutional Resistance, political instability. | <ul style="list-style-type: none"> Budget constraints, political instability, limited technical capacity. | <ul style="list-style-type: none"> Low engagement, coordination complexity. |
| Milestones / Outcomes | <ul style="list-style-type: none"> Integrated policy decisions and cohesive policy implementation. | <ul style="list-style-type: none"> Strong ecosystem-based management, consolidated water data. | <ul style="list-style-type: none"> Inclusive decision-making with representation from communities. |

