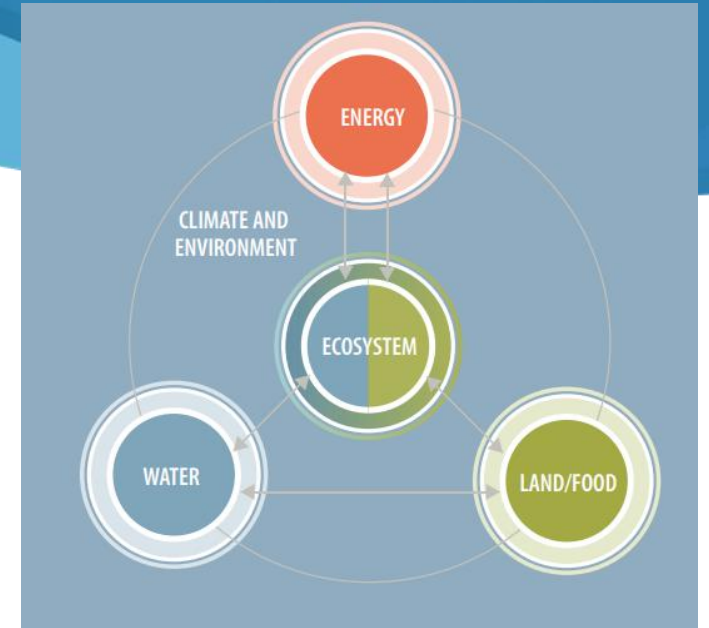


# Nexus solutions and investments

Dr. Annukka Lipponen

Environmental Affairs Officer

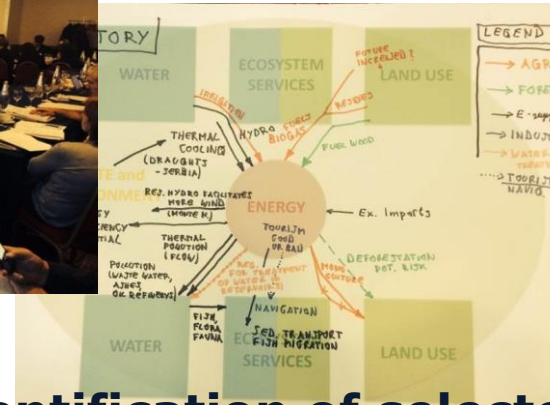
United Nations Economic Commission for Europe  
(UNECE)



# Participatory process for joint identification of issues and dialogue informed by analysis, applying the nexus assessment methodology



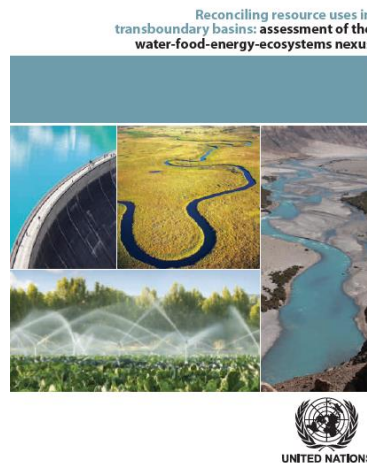
## Workshop



## General basin diagnostic

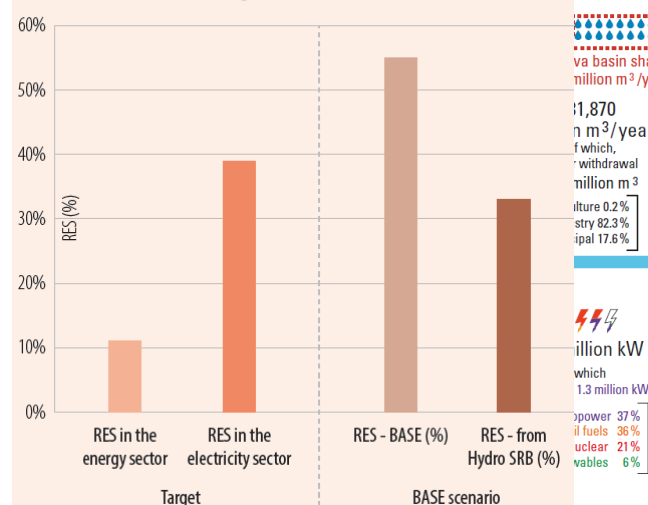


## Conclusions & dissemination

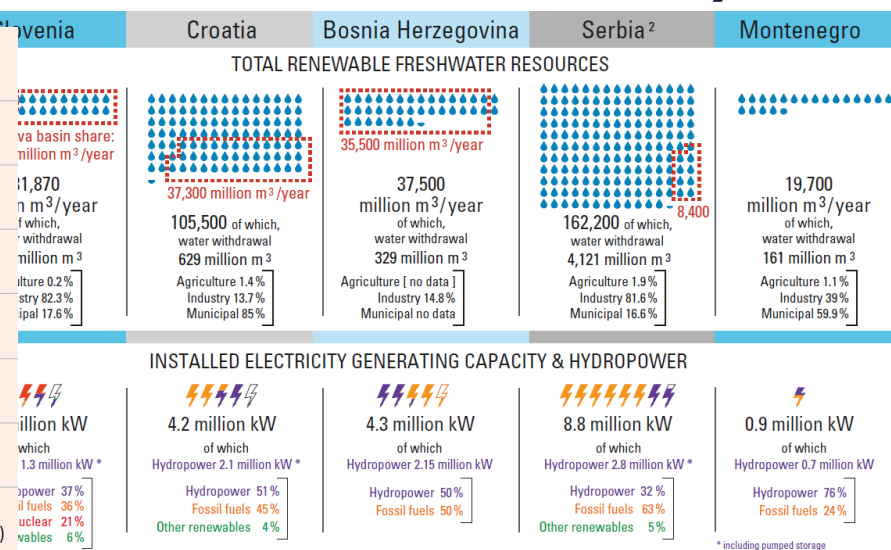


## Quantification of selected priority issues & solutions

Renewable Energy Sources (RES) contribution to the electricity generation in the Sava River Basin (SRB) region in the baseline scenario<sup>a</sup>



## Indicator-based analysis



# From nexus issues to intersectoral solutions



- Nexus issues
- Context decisive for possible orientation of solutions

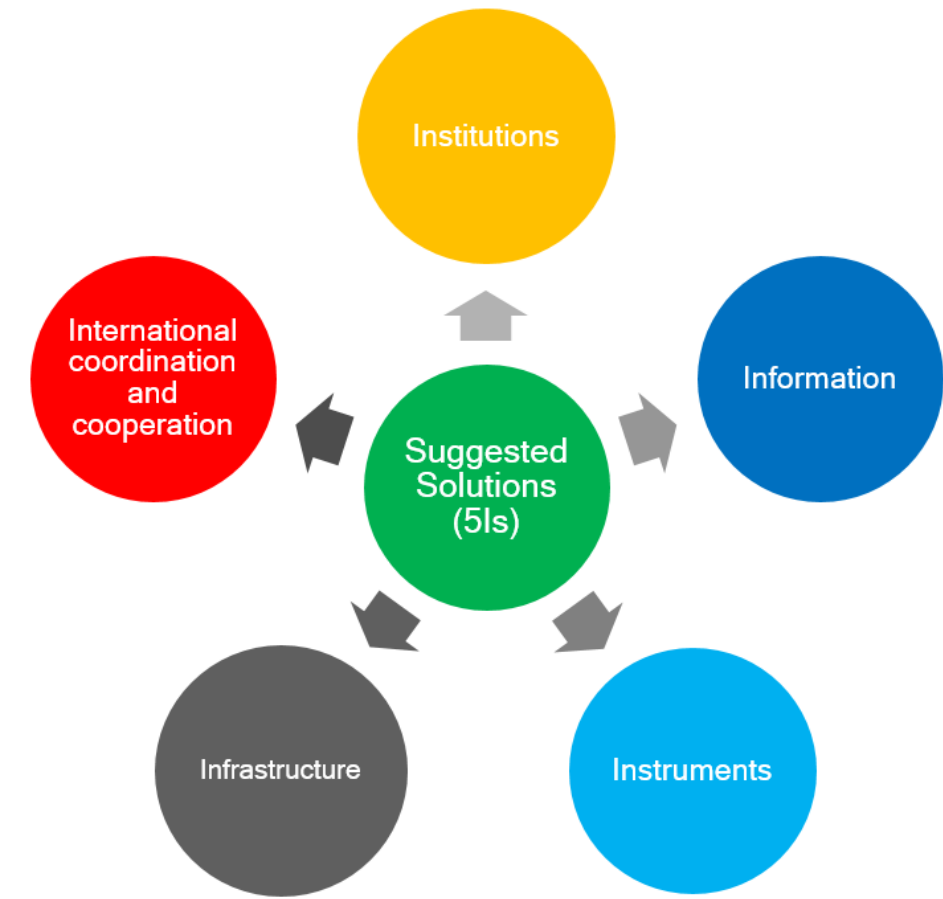
- Nexus solutions
- Fit-for-purpose
- Joint conceptualization

- Accompanying measures
- Packages/ programmes of solutions
- Enabling environment
- Partnerships

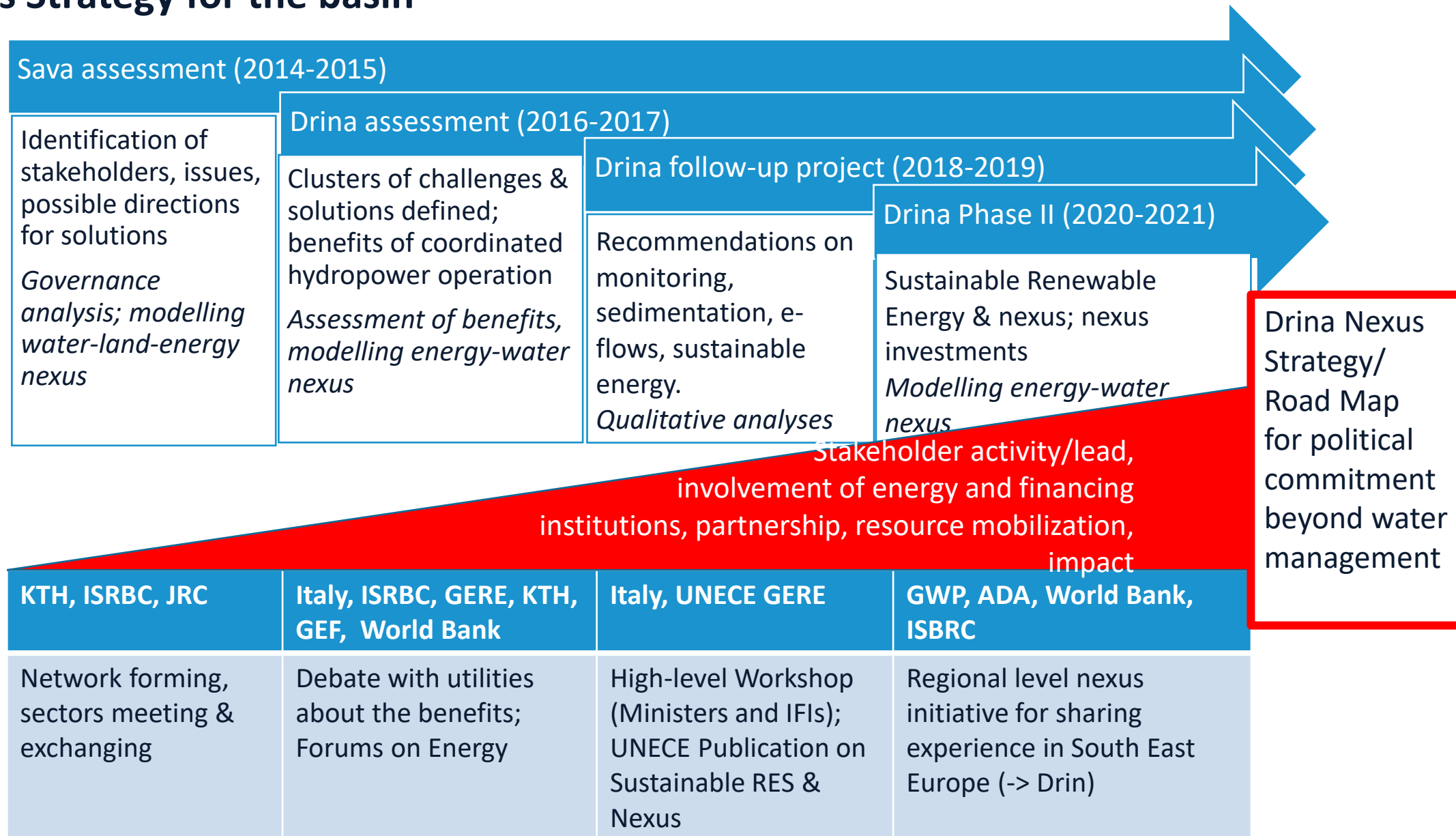
# Various types of cooperative intersectoral solutions

(typology developed under the Water Convention)

- **Institutions** (inter-sectoral, multiple level governance, engaging resource users, responsibilities etc.)
- **Information** (multi-sector information to support policy, assessing impacts across sectors, guidelines etc.)
- **Instruments** (mixes of regulatory, economic and information instruments)
- **Infrastructure** - built and natural (investments, operation, multiple use designs etc.)
- **International coordination and cooperation** (sharing information, plans, good practices etc.)



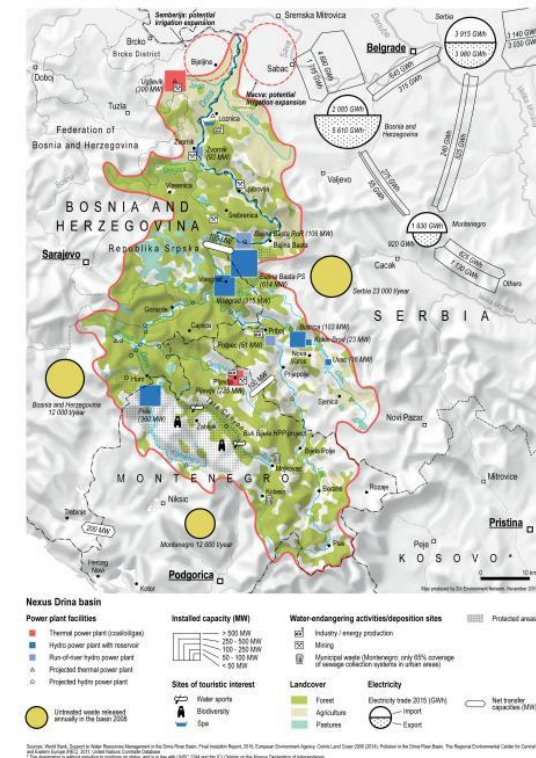
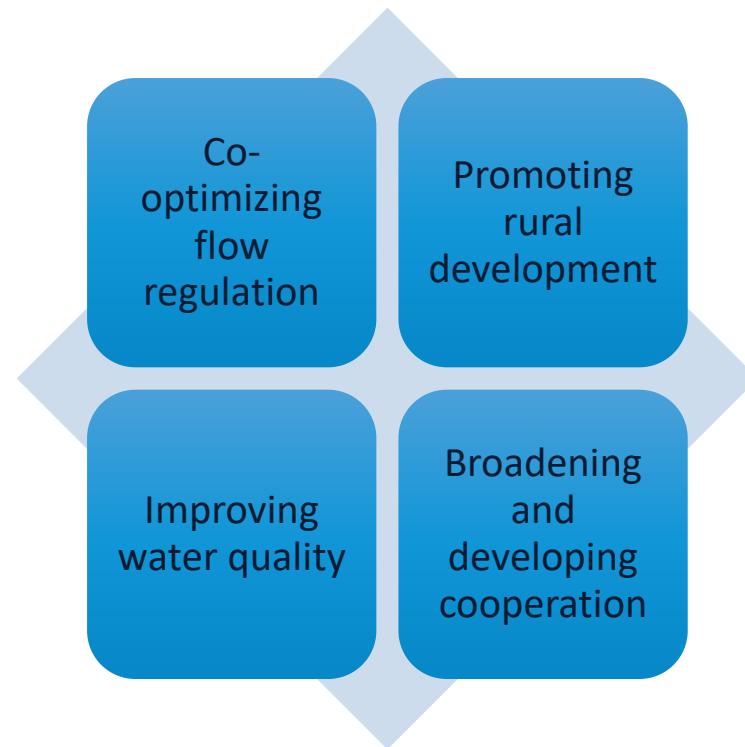
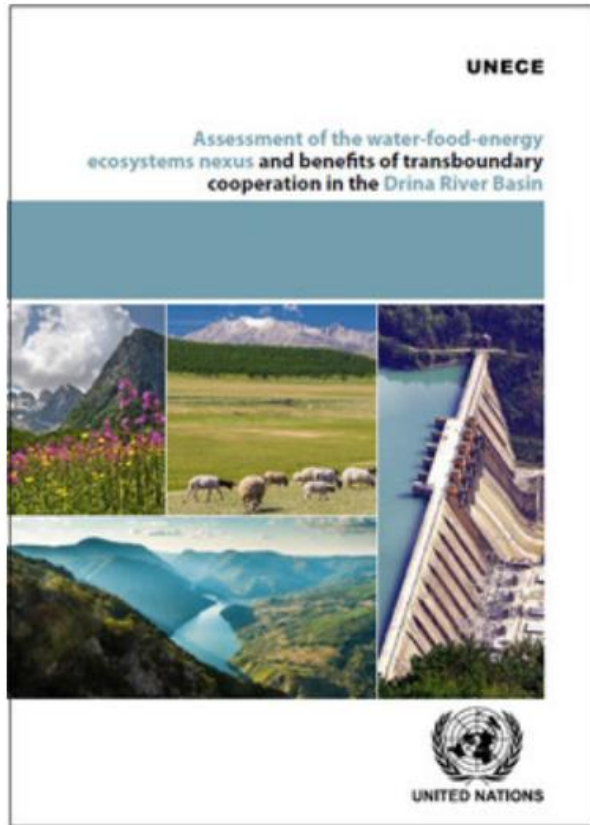
# Nexus dialogue in the Drina: from identification of issues to formulation of a Nexus Strategy for the basin





# Nexus Assessment of the Drina River Basin (2016-2017)

- Zoom in to specific nexus interlinkages (focus on Drina)
- Modelling of energy-water nexus in the Drina basin (KTH Royal Institute of Technology)
- Assessment of benefits of cooperation (cross-border, cross-sectors)
- Engagement of power companies in the dialogue



# Co-optimizing flow regulation



## Suggested direction for solutions:

1) Improve cooperation in the operation of dams and hydropower plants in the Drina river basin for optimized production and flood control

2) Improving the opportunities for electricity trade in the region (within and beyond the DRB countries) utilizing energy efficiency measures to release stress on hydro and thermal power

# Promoting rural development

## **Suggested direction for solutions:**

Promoting integrated rural development in the basin by exploiting the existing synergies between eco-tourism, sustainable agriculture, renewable energy production, at the advantage of local businesses and communities.





# High-Level Workshop “Action across sectors and borders for sustainable future of the Drina River Basin” – Belgrade, Oct 29, 2019

## UNECE workshop presents recommendations for sustainable future of Drina River Basin

Region/EU | October 31, 2019 | Comments: 0 | Author: [Balkan Green Energy News](#)



**Ivan Karić: We share not only the beauty of the Drina, but also responsibility**

“The Drina is one of our most beautiful rivers, and citizens of Montenegro, Bosnia and Herzegovina and Serbia are privileged to live by it. However, we also share the responsibility for managing the Drina, and we need to jointly ensure its sustainable future.” – State Secretary at the Ministry of Environmental Protection of the Republic of Serbia Ivan Karić.



Discussion evolved around two questions:

- How to better **balance development**, considering energy generation, land management and water use, **and sustainability**, including the environment, **in the basin**?
- What is necessary to achieve **investments that provide benefits** for multiple sectors and that, as such, can be considered “nexus investment”?

-> High level **Statement from the workshop**: an important first step towards the political commitment to cooperate at transboundary level on the sustainable development of the Drina River Basin

Participation from IFIs (EIB, World Bank, WBIF).  
Investments & cooperation linked

Important to continue the water-energy dialogue, aiming for a better flow regulation, accounting for different needs.  
Energy choices will have a major impact on the Drina water resources

# The present SEE Nexus Project for promoting the nexus approach in transboundary basins: the Drina and Drin River Basins

- Project (funded by ADA, implemented by GWP-Med and UNECE) in the Drin and Drina RB (on-going): quantitative analysis, stakeholder process, priority interventions' ("nexus solutions") identification to be followed by project fiches and exploring potential financing, Nexus Roadmap/Strategy by basin.
- **Drina River Basin** (Bosnia and Herzegovina, Montenegro, Serbia) nexus assessment (follow-up): National consultations held. On-going: Study of formalization options for agreeing about selected aspects of flow (including e-flows); Energy-water modelling on renewable energy potential & implications for hydro.
- **Drin River Basin** (Albania, Kosovo\*, North Macedonia, Montenegro) nexus assessment: Thematic Report on the WFEE Nexus (part of the Transboundary Diagnostic Analysis) published, to reinforce SAP & its implementation. On-going: Energy-water modelling on co-optimizing flood protection & hydro generation; Study on biomass and forestry links and benefits for water and environment.

Publications, information on all assessments at: <http://www.unece.org/env/water/nexus>

\*References to Kosovo shall be understood in the context of Security Council Resolution 1244 (1999).

# Implementing nexus solutions – some general lessons

- Strong multi sectoral planning enhances implementing solutions
- Investing better, rather than more, advances nexus infrastructure
- Bottlenecks for implementing the nexus solutions: Capacities or frameworks lacking, strong sectoral interests etc.
- Sharing information across sectors is essential, including to evaluate impacts, identify synergies and opportunities
- International agencies and donors can support but the political willingness and decisions about response actions are with the countries.
- Nexus solutions need to be picked up in strategies and plans at different levels
- A progressive application of a nexus approach or partial solutions can pave the way for more ambitious and comprehensive solutions
- Arrangements for coordinating SDG implementation, climate change action: Opportunities for discussing nexus solutions with value added beyond individual sectors?



**UNECE**

# Development of a synthesis document on nexus solutions and investments under the Water Convention: the process



The 8th meeting of the Parties (2018, Nursultan) requested the secretariat to undertake the preparation of a synthesis document to fill gaps related to the experience of nexus solutions.

- Stocktaking of experiences around the world, developed by UNECE. An analytical framework developed, linking nexus solutions (categories) to most common problems in transboundary basins (GEF:IW projects). Questionnaire survey distributed on-line and responses collected.
- The analytical framework links the typical problems in TB basins to their root causes and different types of solutions and related factors of success; results from questionnaire. The framework and the preliminary conclusions were discussed at the 6th Task Force on the Water-Food-Energy-Ecosystems Nexus (22-23 October 2020)
- Experience from consultations with experts and nexus dialogues in different regions of the world. Follow up about the cases & complementing the information. Devoted on-line meeting on Latin America and the Caribbean held with ECLAC and IDB on 22 February 2021, the present meeting on the Balkans on 26 May 2021.
- Draft synthesis document & preliminary findings available for a review by the joint session of the Working Group on IWRM and Working Group on Monitoring and Assessment (Geneva, 26-28 April 2021).
- Synthesis of Nexus Solutions and Investments to be presented to the next Meeting of the Parties (30 September-1 October 2021).



# Selected findings from the Synthesis document on nexus solutions and investments

The stocktaking aimed to demonstrate how the nexus approach translates into “**nexus solutions and investments**” that directly or indirectly provide **transboundary benefit**; indicate factors of success; mapping financing opportunities; reflecting on regional differences.

**The highest-ranking enabling factors:** stronger transboundary cooperation; shared data and information; increased awareness of options and benefits for cross-sector, transboundary trade-offs, compromise and synergies; and innovative infrastructure operating rules

Without effective cooperation, “**economic sectors**” **find their own solutions** to solve their immediate problems without a common vision of sustainable basin development: missed benefits for water management and environment protection from these projects.

Depending on mandate, **River Basin Organizations** can play a key role in facilitating cross-sectoral dialogue that is needed to develop water **investments** and to develop “nexus proofed” master plans, e.g. by coordinating with economic & sectoral regional organizations

# Financing nexus solutions: insights from the global stocktaking



- 5 dimensions were taken into account in the survey: The type of water, the type of financing, the source of finance, financing pathways and transaction models involved
- All the investments are **dominated by Public finance, development finance or combination of both**; mostly very traditional delivery pathways. Some examples of Innovative financing. Little private and blended finance though “green” investments in agriculture, energy, tourism, etc. There are **opportunities: leverage private investments , coherent planning & joint prioritization** → de-risking investments through developing and reinforcing cooperation
- A correlation between **infrastructural measures and adaptable programmatic financing?** (where funds are allocated to a cross-sectoral programme, e.g. modernization of irrigations systems in a basin, without connection to a specific project)
- Transboundary cross-sectoral investments are heavily oriented towards **institutions**; while infrastructure investments are also urgent.
- Multi-sectoral projects can be crucial to access climate funds, as well as environmental funds.