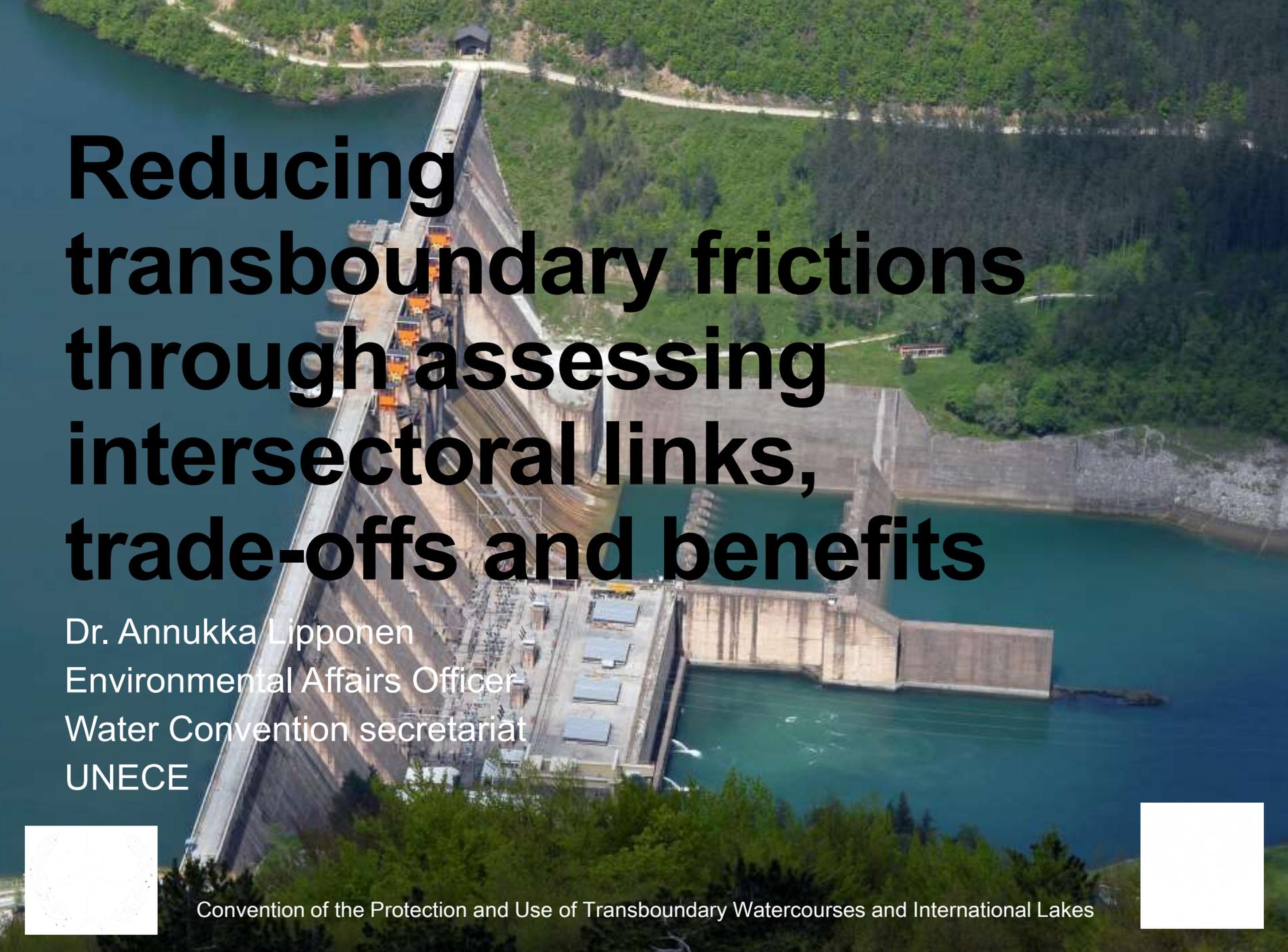




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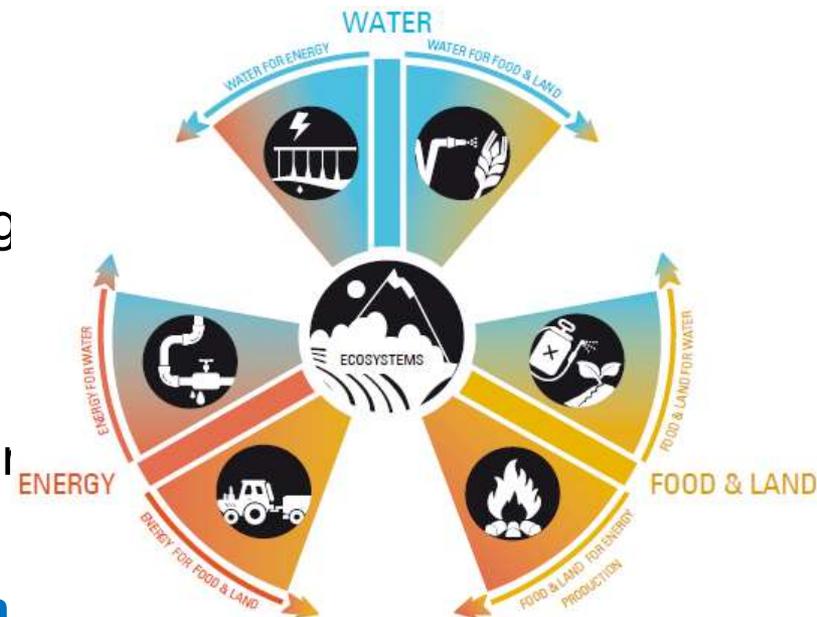
Reducing transboundary frictions through assessing intersectoral links, trade-offs and benefits

Dr. Annukka Lipponen
Environmental Affairs Officer
Water Convention secretariat
UNECE

Interlinked resource securities: water as the entry point



- Securing availability, quality and manageable variability of water resources is too commonly inferred to be best achieved through **national means** when **transboundary cooperation and intersectoral coordination** may be effective strategies to that end.
- **Water security is linked to other resource securities** – notably food and energy – and environmental security, and these interlinkages need to be taken into account in planning and management for overall sustainability and conflict reduction.
- **Does speaking about resource securities politicise resource management?** Can shifting the perspective to co-optimization and seeing the broader benefits help?
- Nexus assessment approach invites to consider the threats and effects on water resources **broadly**, not just through water uses and discharges, but how sectoral policies indirectly influence the dynamics and **where improved sustainability can be achieved through joint action.**



Nexus assessments under the UNECE Water Convention: the framework



- A part of the **Programme of Work** 2013-2015 under the UNECE Water Convention (a global instrument), adopted by the Parties (some 40); continuation to 2016-2018 endorsed with more basin assessments
- **Task Force** on the Water-Food-Energy-Ecosystems Nexus established to guide the work and to provide oversight;
- Aims: **Foster transboundary cooperation** (intersectoral synergies & measures to reduce tensions); assist countries (resource use optimization, capacity building);
- **Demand-driven participatory assessments** prepared in close cooperation with and reviewed by the national administrations;
- Meeting of the Parties **endorsed the methodology** & general conclusions (November 2015)



A devoted methodology developed for the Nexus Assessment: 6 Steps



Step	Location	Sectors
1 Identification of basin conditions, socio economics	Desk study	General. Information normally used to underpin sectoral planning. Key elements include general socio-economic goals.
2 Identification of key sectors, stakeholders	Desk study	General. Requires expert judgment understanding of local context, governance.
3 Analysis of the key sectors	Desk study/ 1 st Workshop	Individual sector experts and plans. Key elements include identifying resource flows and institutional mapping.
4 Identification of intersectoral issues	1 st Workshop	Sectoral group discussion on interlinkages (input needs, impacts and trade-offs), and discussion on sectoral plans
5 Nexus dialogue and future developments	1 st Workshop	Agreeing on a prioritization of main interlinkages. Expected changes the interlinkages (trends, uncertainties, drivers)
6 Identification of opportunities for improvement	1 st & 2 nd Workshop /Desk study	Identification of solutions with multiple impacts between sectors, scales and boundaries

Nexus opportunities (examples)



Isonzo/ Soča
 Link RES generation to existing agriculture infrastructure (small hydropower, solar, biomass); improve river continuity and increase drought resilience

Sava
 Develop hydropower sustainably and integrate other renewable energies

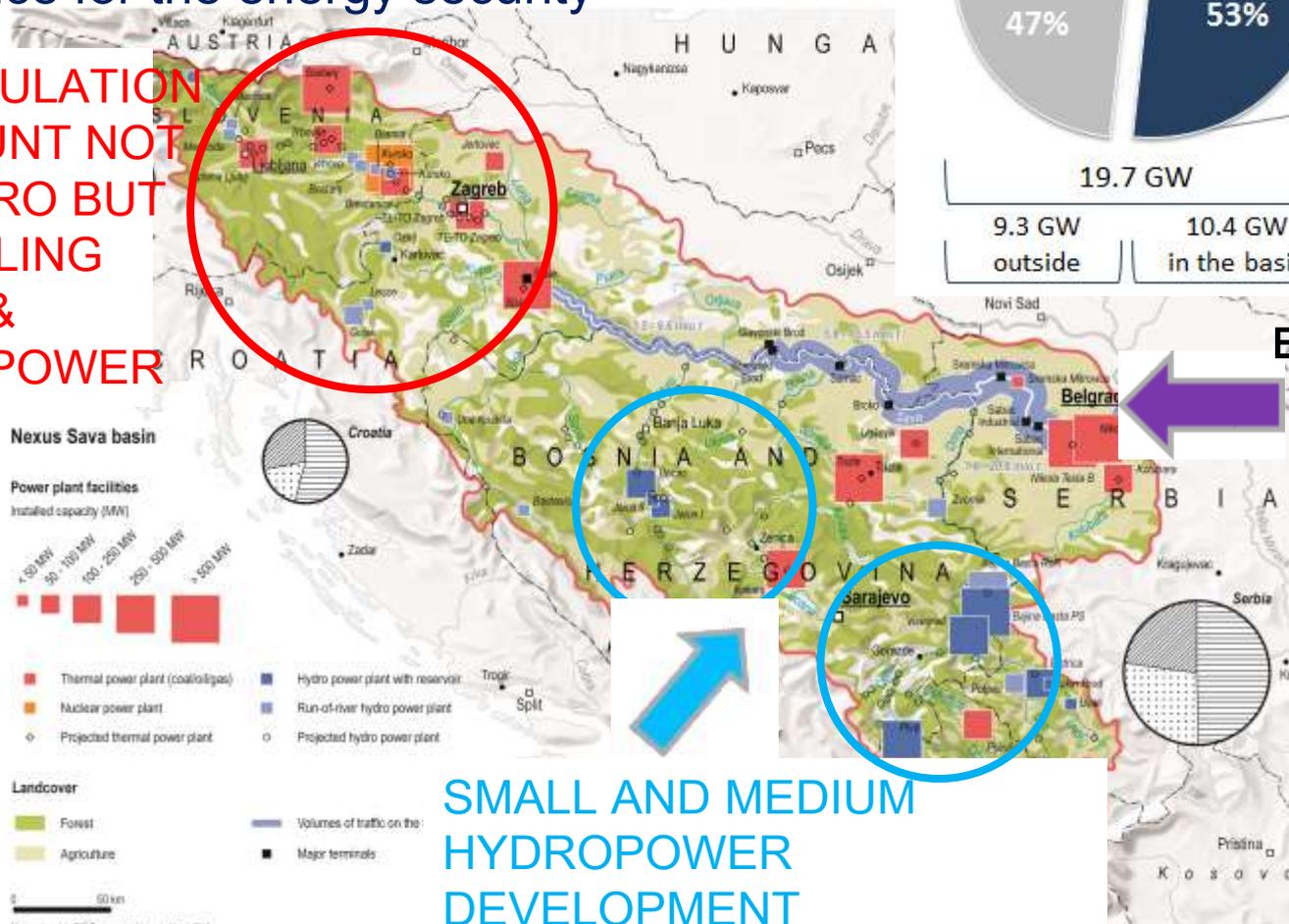
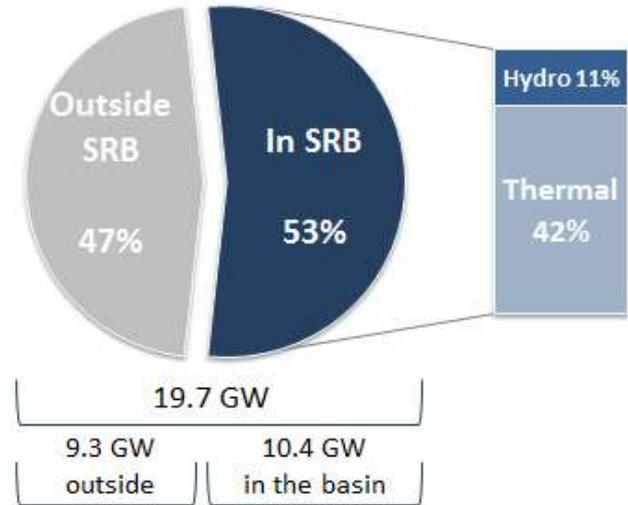
Alazani/Ganykh
 Facilitate access to modern energy sources and energy trade; minimize impacts from new hydropower development; catchment management to control erosion

Syr Darya
 Promote restoring and vitalizing energy market, develop the currently minimal trade in agricultural products; improve efficiency in energy generation, transmission and use; improve efficiency in water use (esp. in agriculture)

Balancing different water uses in the Sava Basin

Basin water resources are of paramount importance for the energy security

FLOW REGULATION TO ACCOUNT NOT ONLY HYDRO BUT ALSO COOLING THERMAL & NUCLEAR POWER



EXPANSION OF IRRIGATION PLANNED INCREASED WATER SCARCITY PREDICTED NAVIGABILITY NEEDS TO BE ENSURED WETLANDS SERVE FLOOD PROTECTION

SMALL AND MEDIUM HYDROPOWER DEVELOPMENT ON THE TRIBUTARIES

Water resource and energy indicators

Complementarity at the transboundary level to capitalize on!



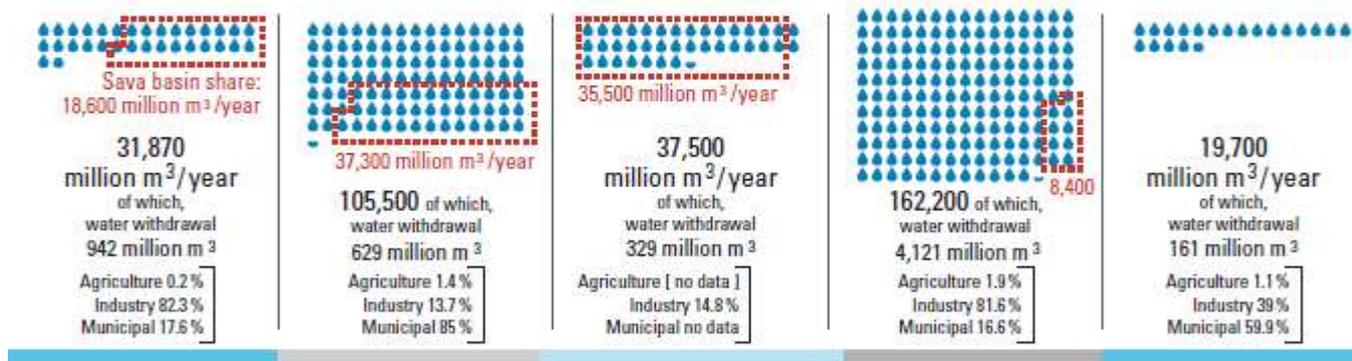
Sava Basin



River length
945 km
River basin area
97,713 km²
Water use
4,069 million m³/year

Slovenia	Croatia	Bosnia Herzegovina	Serbia	Montenegro
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TOTAL RENEWABLE FRESHWATER RESOURCES



INSTALLED ELECTRICITY GENERATING CAPACITY & HYDROPOWER



* including pumped storage

Reconciling climate and energy policy targets without compromising environmental and water resources sustainability (or other water uses): energy mix, co-optimize flow regulation, trade energy and balancing services, harmonize regulation etc.

Different tracks of solutions



	<u>National application of a solution</u>	<u>Advantage of a transboundary scale</u>	<u>Example: Sava</u>
<u>Information</u>	Information on the national territory only limited	Shared information harmonized strengthens the base for planning & common understanding about priorities; notification & consultation	Application of agreed guidelines , e.g. Guidelines for Sustainable Development of Hydropower (ICPDR)
<u>Institutions</u>	Uncoordinated national development plans risk being inefficient or even affect negatively	Institutions for cooperation - platforms for negotiating & evaluation. Adequate assessments and agreement about priority projects reduces investment risks	Developing a consultation process to review impacts of national & sectoral development strategies on basin resources, through ISRBC
<u>Instruments</u>	Without harmonization, application of instruments may have limited impact; e.g. EIA (transboundary impact!)	Consistency that regional frameworks and legal instruments contribute to building policy coherence. Experience can be shared.	Appropriate mixes of instruments, economic & policy ; SEAs have potential for integrating nexus thinking into policy making
<u>Infrastructure</u>	Managing risks at the national level can be costly (e.g. duplicating infrastructure) & not effective	Coordination for more optimal performance. Different riparians' awareness & interest, considering options can broaden the funding base and consensus; joint projects	Promoting multiple and flexible use of infrastructure ; Coordinating investments (e.g. hydropower and other RES)

Some conclusions: value of a nexus assessment



- The Water Convention's nexus approach — non-prescriptive, inclusive and indicative — provides a good basis for **the identification of cooperation opportunities**. It can provide for a **broadening or restarting a dialogue**
- Nexus assessment could be oriented towards: (i) **restoring cooperation**; (ii) **reviewing the scope of cooperation** (new opportunities etc.); (iii) **quantifying interlinkages** for setting priorities or for determining whether measures are required (adequate data, fit-for-purpose support tools...); or (iv) **assessing** the appropriateness and effects of a **certain policy**
- Achieving the **Sustainable Development Goals** (food security, water, energy etc.) will require taking into account intersectoral effects
- The best options for intersectoral coordination and consultation vary and applying the nexus approach should **build on the existing** — e.g. multisector structures, intersectoral processes (SEA etc.), review policy and economic instruments, consultation on and coordination of investments ...
- Result of the assessment may be controversial to a sector or a country; the process design and **institutional framework important** to ensure acceptance (intergovernmental nature of the Convention adds value). The framework can also introduce a bias (broad participation! Taking the dialogue to other sectors)
- The improvement opportunities are to some degree **context-specific** and the cooperation situation — trust, mandates etc. — influences what can be done.