



Co-funded by
the European Union

EU4ENERGY PHASE II

Welcome address

4 October 2023

EU4Environment Water and Data programme



Funded by
the European Union

EU4Environment

Water and Data in Eastern Partner Countries

WATER RESOURCES



ENVIRONMENTAL DATA



Implementing partners



Co-funded by





Funded by
the European Union

EU4Environment
Water and Data in Eastern Partner Countries



NEXUS APPROACH TO ASSESSING THE WATER-FOOD-ENERGY-ECOSYSTEMS IN TRANSBOUNDARY RIVER SYSTEMS

Tamara Kutonova

Convention on the Protection and Use of Transboundary Watercourses and International Lakes
United Nations Economic Commission for Europe

<https://unece.org/environment-policy/water/areas-work-convention/water-food-energy-ecosystem-nexus>



Funded by
the European Union

EU4Environment
Water and Data in Eastern Partner Countries

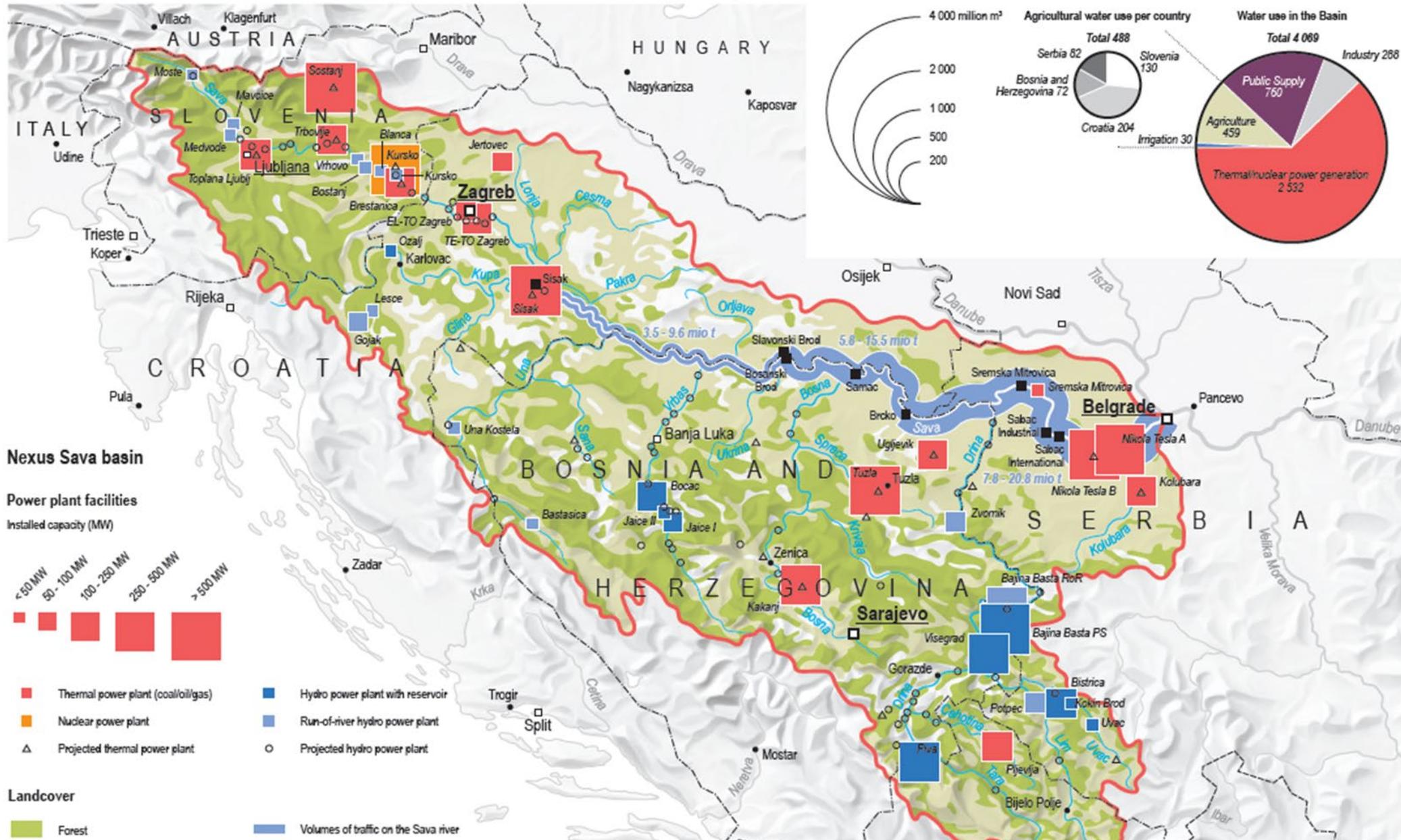


WHAT IS THE “NEXUS APPROACH”?

It is a response to managing interlinked resources

A way to enhance water, energy and food security by increasing efficiency, reducing trade-offs, building synergies and improving governance, while protecting ecosystems

NEXUS ASSESSMENT IN THE SAVA RIVER BASIN



BASIN TRENDS

PRECIPITATION	Going down at basin scale?	↘
TEMPERATURE	Going up at basin scale?	↗
ECOSYSTEM SERVICES		↘
POPULATION		↘
ECONOMY (medium term)		↗

NEXUS FUTURE IN THE SAVA BASIN



NATIONAL TRENDS	Slovenia	Croatia	Bosnia and Herzegovina	Montenegro	Serbia
WATER FOR FOOD & LAND Irrigation needs	↗↗	↗↗	↗	↗	↗↗
WATER FOR ENERGY Electricity generation needs, cooling	↗↗	↗	↗↗	↗	↗↗
ENERGY FOR WATER Treat, move and store water	↗	↗	↗	↗	↗
ENERGY FOR FOOD & LAND Grow, store, process and move food	↗	↗	↗	↗	↘
FOOD & LAND FOR ENERGY Food-energy competition for water, biofuel production	↗	↗	↗	↗	↗
IMPACT OF FOOD & LAND ON WATER RESOURCE Water pollution, agricultural use	↗	↗	↗	↗	↗



Funded by
the European Union

EU4Environment
Water and Data in Eastern Partner Countries



MAIN CATEGORIES OF SOLUTIONS

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



Transboundary cooperation is key to balance trade off and exploit synergies but current transboundary water cooperation is not suited to harness the nexus



Funded by
the European Union

EU4Environment
Water and Data in Eastern Partner Countries



A QUESTION: PLEASE RESPOND IN THE CHAT

Think of a river basin or lake in your country and write the sectors (and subsectors, if you can) which you think depend on water from this river / lake

E.g.:

A Strong River: sector 1 (subsector A, subsector B...), sector 2 (subsector A, subsector B, ...), etc.

