WATER CONVENTION

Global Workshop on
Water, Agriculture and Climate Change

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Intersectoral cooperation at transboundary level: The experience of the Water Convention

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UNECE

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
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ADAPTATION FUND

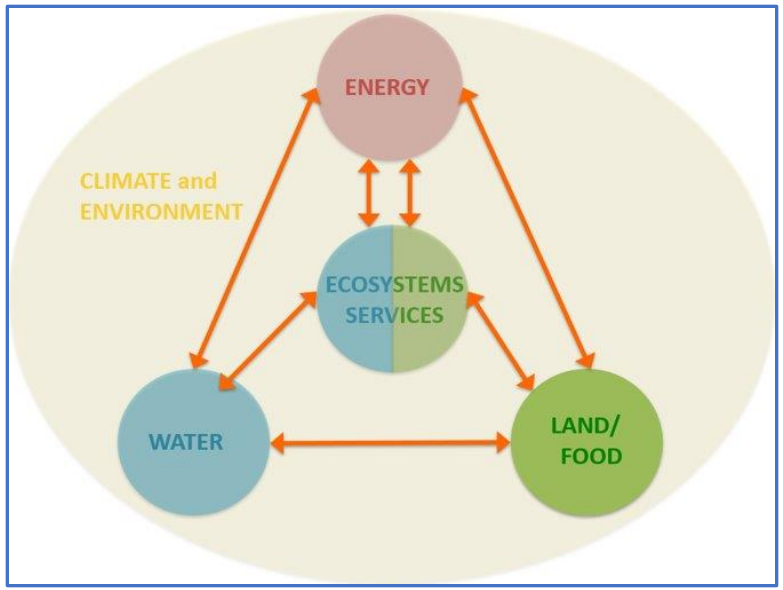
FAO FIAT PANIS

INTERNATIONAL NETWORK OF BASIN ORGANIZATIONS

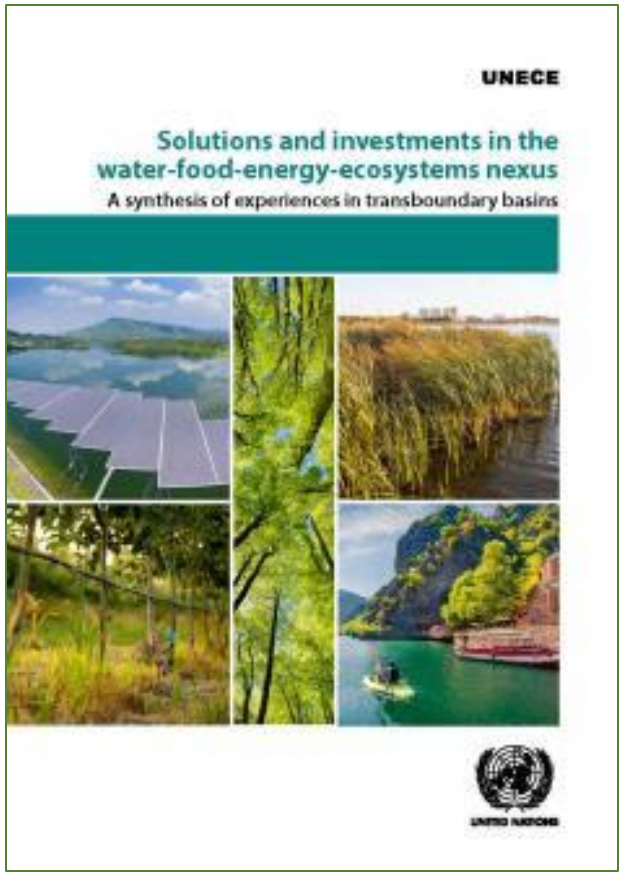
IWMI International Water Management Institute

«Broadening» water cooperation in Transboundary Basins

Shared environment



People, communities



WATER CONVENTION

Activities on Nexus: Global Task Force on Transboundary Nexus

- Objectives of the Task Force:

➢ oversee nexus activities under the Convention

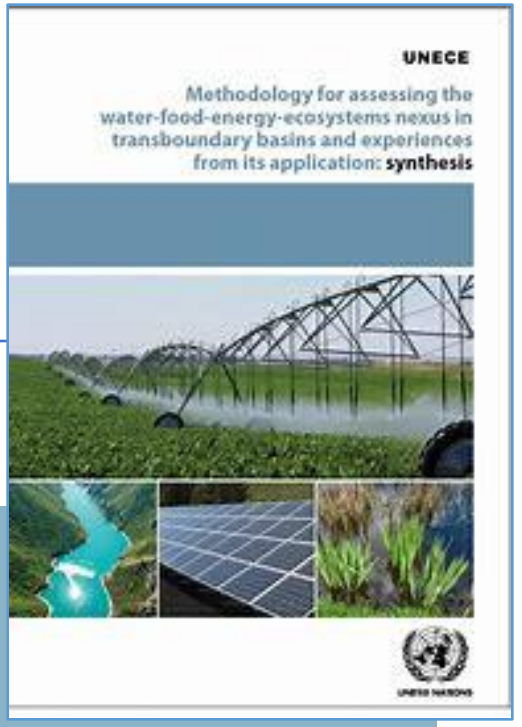
➢ provide a global platform for sharing knowledge and experience in integrated natural resource management in shared basins.

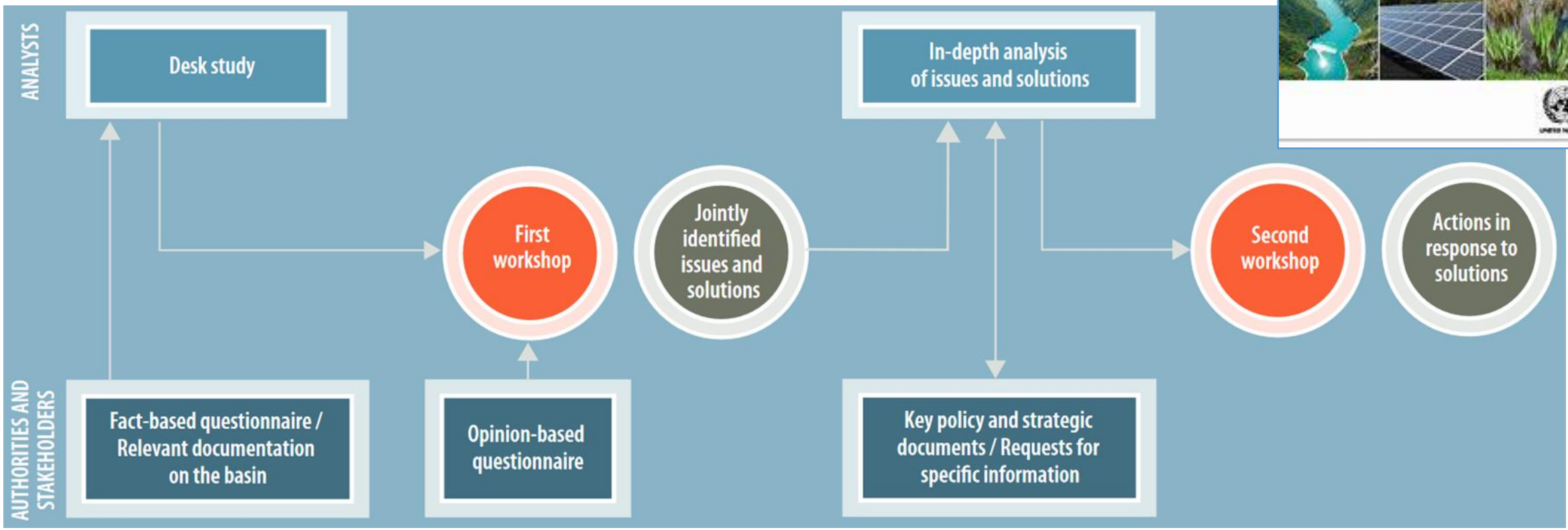
- Includes Parties and non-Parties, country authorities and basins, experts, partner organizations
- created in 2013 and chaired by Finland
- Meets regularly (1-2 years) – next meeting 12-13 December 2022!

Activities on Nexus: Basin Assessments

* United Nations administered territory under the UN Security Council Resolution 1244 (1999)

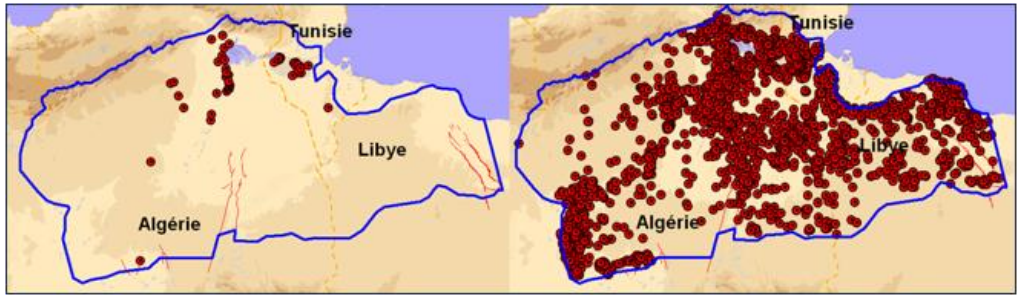
Assessments: the participatory process

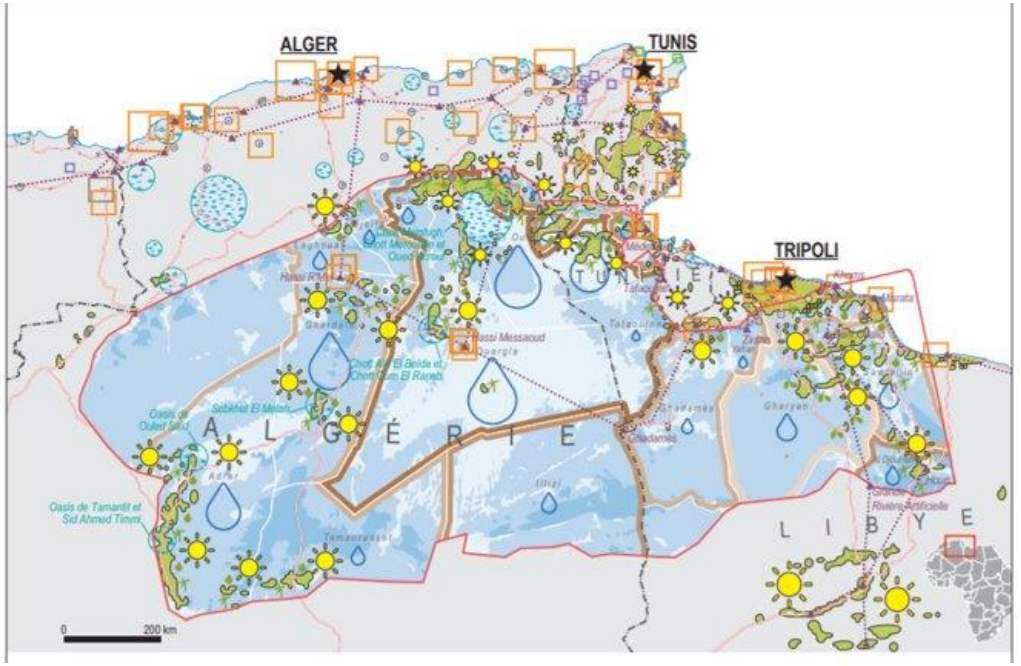




The North-Western Saraha Aquifer System

- Shared by Algeria, Libya and Tunisia (1,000,000 km^2)
- Main challenges: increased demand for water and withdrawals (i.e. energy for pumping), climate change, insufficient infrastructure (irrigation), low value of water
- Integrated modelling (water-energy-agriculture)
- Cross-sectoral dialogue: joint prioritization of problems, development of solutions and synergistic action (a "set of solutions" between sectors)





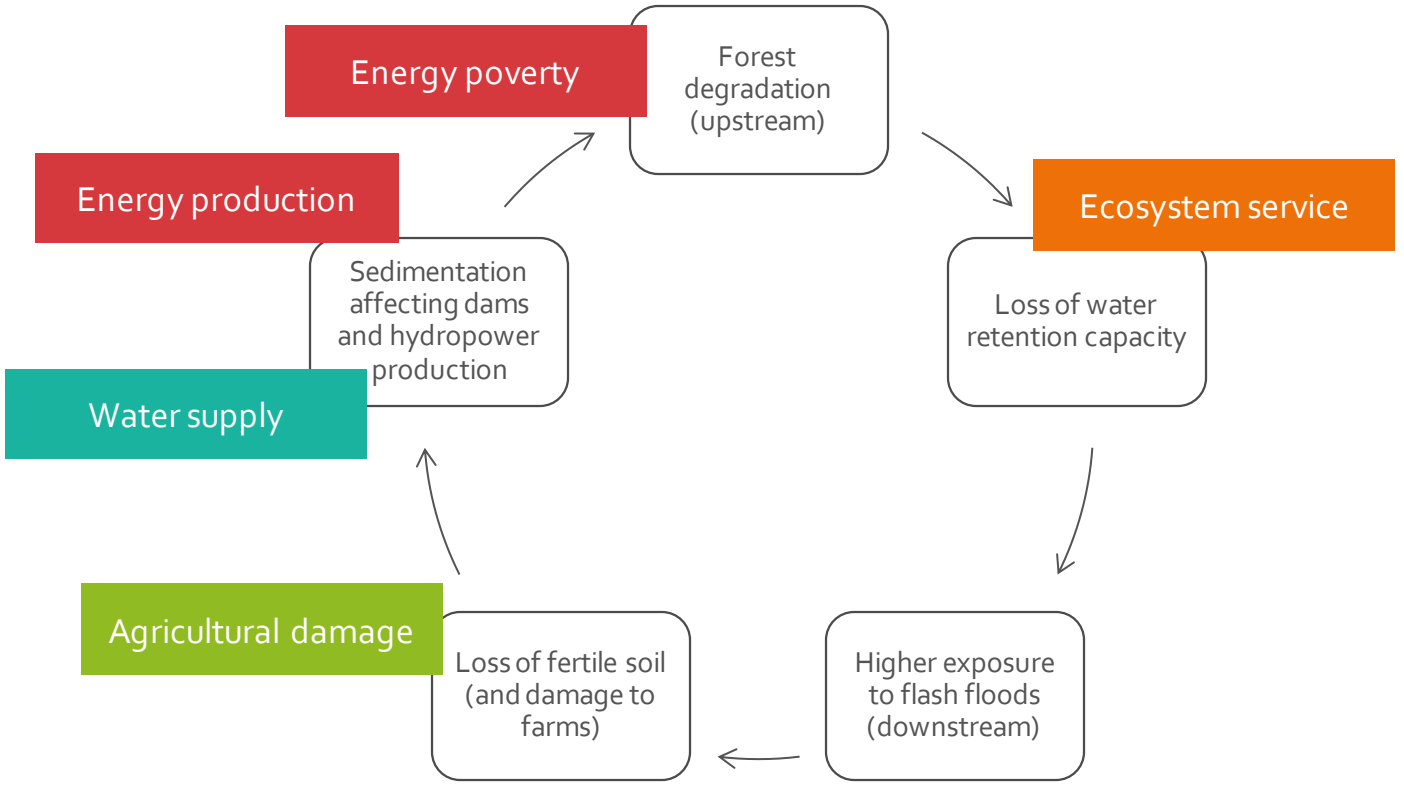
	Water	Energy	Agriculture	Environment
Governance & international cooperation	1. Enhance **local water management** including by: revitalising **participatory** models in oasis and enhancing the enforcement of **existing laws** on water. 2. Reinforce **transboundary cooperation** for sustainable groundwater resource management.	6. Enhance mechanisms for the **coordination of energy development with other sectoral plans**, to anticipate tradeoffs and build on intersectoral synergies.	9. **Set up agricultural policies** oriented toward **reasonable, sustainable and productive agriculture.** 10. **Valorize local products** and strengthen programs for a more **balanced diet** while involving **young people and women** in economic and social development of the oases.	13. Increase **awareness of the trade-offs and synergies** between different sectors in public institutions.
Economic & Policy Instruments	3. Set up dedicated **policies and related incentives** for **wastewater reuse** in agriculture and urban areas. 4. Strengthening **water demand management**, including through water saving programs.	7. Develop a sustainable program for diversified, **multi-purpose renewable energy** and the **sustainable upscale of small-scale solar irrigation.**	11. Promote the **circular economy** including **agroecological practices,** by means of ad-hoc **economic measures and social instrument**.	14. Upgrade **inter-sectoral cooperation** based on a detailed **water balance of the aquifer** that includes sectoral demands as well as environmental needs.
Infrastructure & Innovation	5. Upscale the use of **non-conventional water resources** through desalination and wastewater treatment.	8. Improve the reliability of the **electricity grid in the rural area**, thereby enhancing the integration of renewables for remote and multiple uses.	12. Enhance **innovative practices and techniques for sustainable soil and crop management** and invest in their upscaling and dissemination.	15. Systematize **environmental and social impact assessment** for all new **infrastructure** (large and small scale).

Solutions work in synergy. Example of RE

Example solution 7 (NWSAS):
Actions for sustainable deployment of renewable energy in the basin

Action	Sector
7_1: Develop a scheme to make solar irrigation affordable, reduce the use of fossil fuel-based irrigation, and integrate solar energy into regional and local rural development plans.	ENERGY FOOD
7_2: Ensure that Action 7_1 is accompanied by effective technical measures (i.e. monitoring meters) as well as legal and economical tools (e.g. fiscal incentives, regulatory measures) that limit the exploitation of groundwater resources.	ENERGY WATER FOOD ENVIRONMENT
7_3: Develop solar energy solutions that aggregate various energy demands and distribute the cost of solar energy across different users and/or activities (e.g. irrigation and water desalination, potable water conveyance, lighting and heating)	ENERGY WATER FOOD
7_4: Support the development and diversification of renewable energy sources by making use of all available resources including geothermal energy, biomass, and waste.	ENERGY WATER FOOD
7_5: Gradually restructuring fossil subsidies to accompany and facilitate renewable energy deployment (by motivating a shift from diesel pumps).	ENERGY
7_6: Facilitate transboundary information and experience sharing on renewable energy development, to accelerate sustainable development in the basin.	ENERGY
7_7: Enhance capacity within administrations and trust between administrations and farmers, and raise awareness on renewable energy, energy efficiency and rational use of water resources.	ENERGY WATER FOOD

Example 2: Alazani/Ganykh River Basin



- Basin shared by Georgia and Azerbaijan
- Nexus Assessment carried out in 2013

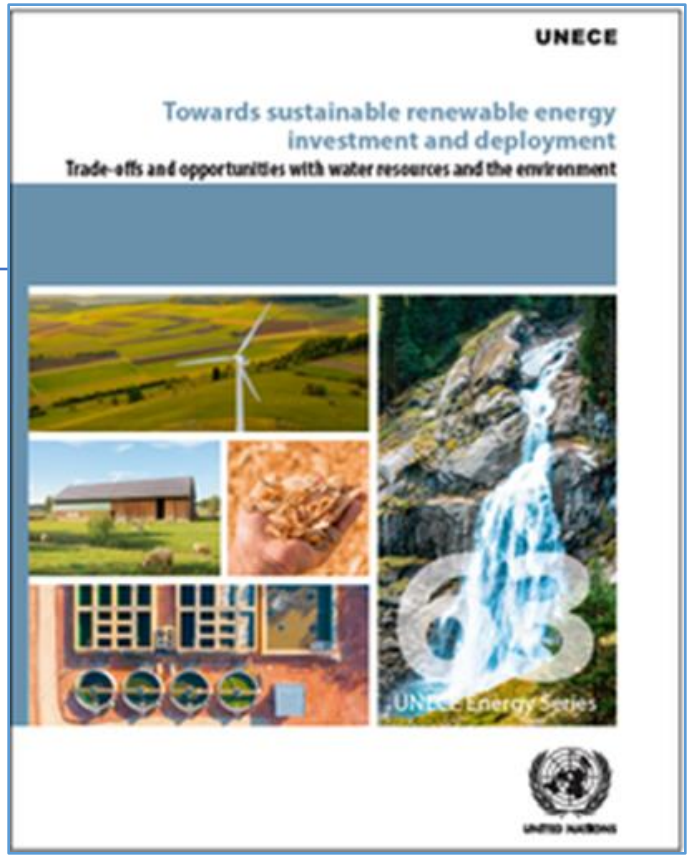
Policy action:
-Facilitate access to modern energy sources
and energy trade
-Control illegal wood harvesting

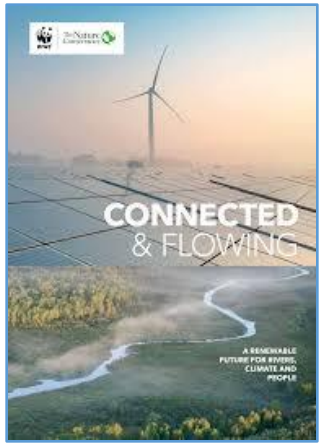
Benefits
-> reduced erosion, to hydrological regime, to ecosystems
-> reduced impacts from flash floods

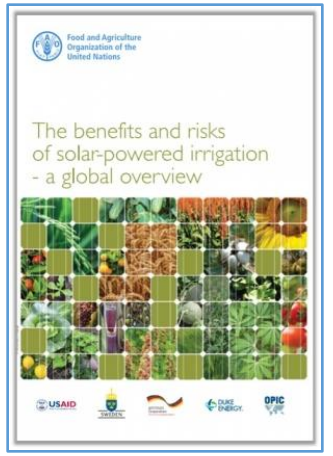
Impact: 50 000 new consumers in 178 villages across 8 municipalities of Kakheti (Georgia) have been connected to the gas network (UNECE, 2021)

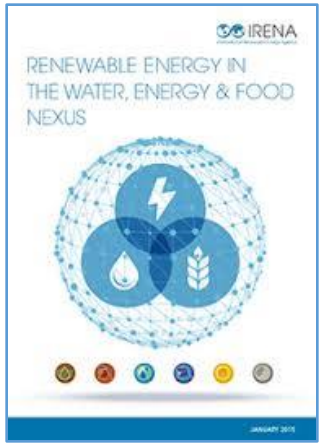
Renewable Energy and TB Nexus

- "Toolkit" for energy policy makers to deploy renewable energy more sustainably in transboundary basins in cooperation with UNECE SED
- "***energy-related objectives can be achieved more effectively*** *through integrated and consultative planning,* ***in synergy with*** *environmental and other sectoral objectives, notably those of the* ***water and agricultural sectors***"
- (same conclusion from different perspectives on RE deployment)

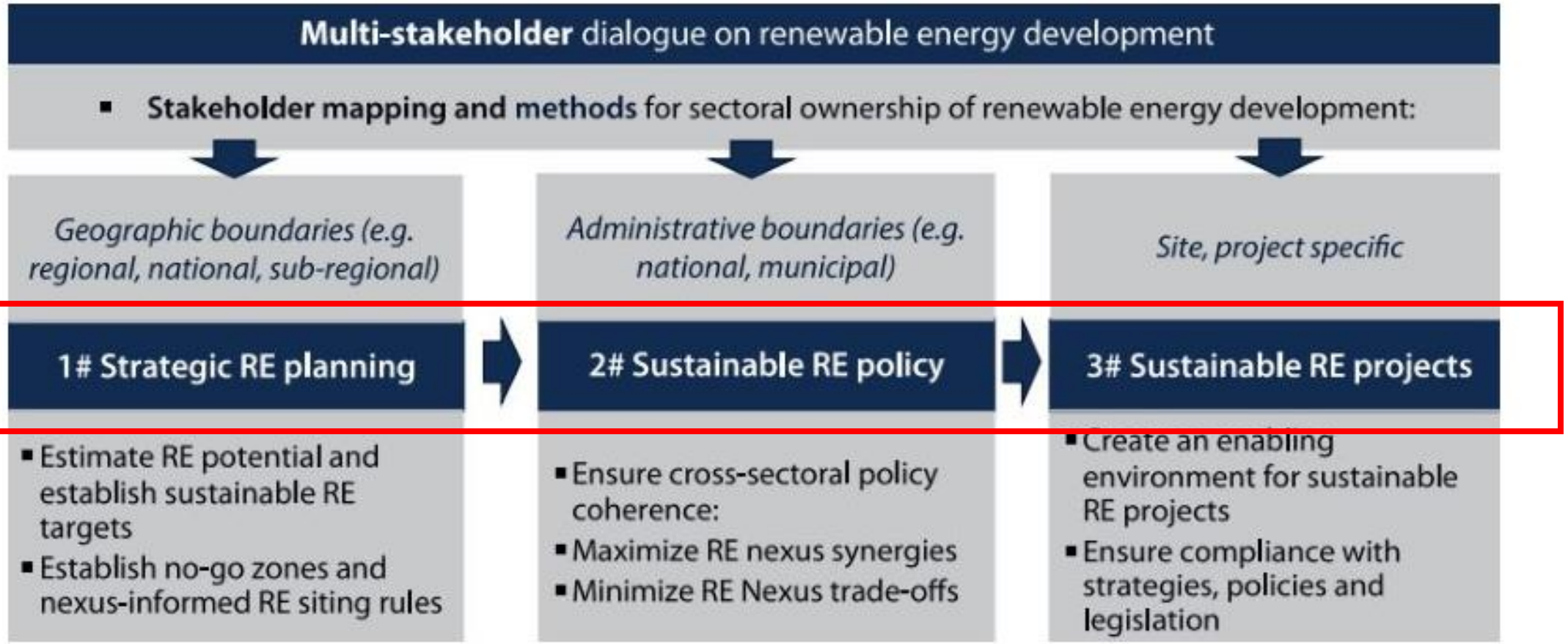








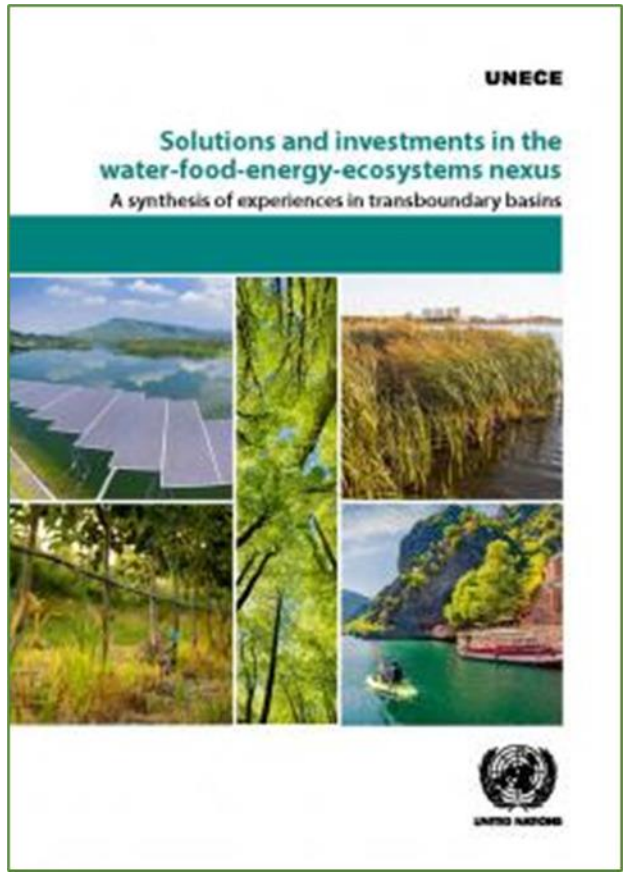
Sustainable RE deployment along 3 tracks



Multi-stakeholder dialogue and the three tracks of sustainable renewable energy development: planning, policy and project

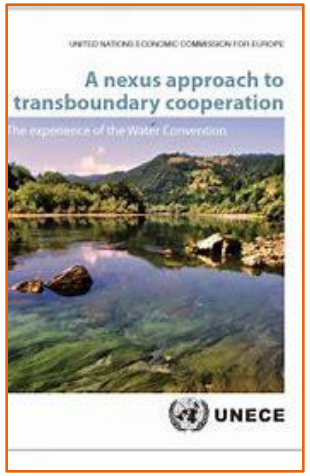
Nexus Solutions and Investments in TB Basins

- A stocktaking of experience from around the world (2020): a survey, a literature review, inputs from expert consultations and a review of regional nexus dialogues.
- Nexus solutions and investments to tackle issues of: **water quantity, water quality and environment.**
- The survey involved **stakeholders from different countries and river basins.**
- **36 case studies** analysed to find: common features and trends related to problems and solutions, financing sources and schemes, obstacles to implementation and enabling factors, perceived added value and benefits.



Conclusions and lessons learned

- **Deep knowledge of natural resources** across water, agriculture, energy, and environment sectors (availability, status, future scenarios, governance, management practices) **is key for climate adaptation and mitigation**.
- Intersectoral dialogues allow for the **joint identification of cross-sectoral issues as well as solutions** (e.g. synergetic RE projects, sustainable rural development, etc.) **and discussing necessary nexus investments**
- Increasing resource scarcity requires the **"nexus-proofing"** of legal, institutional and policy frameworks; strategic infrastructure, etc.
- **Basin-level action plans, coordinated strategies and investment plans** (also regional, facilitated by regional orgs or IFIs) can be important vehicles to implement and upscale nexus solutions and investments in transboundary basins:



Thank you

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