



# Tackling plastic pollution in the Danube River Basin – Coordinated transboundary actions



Plastic Cup

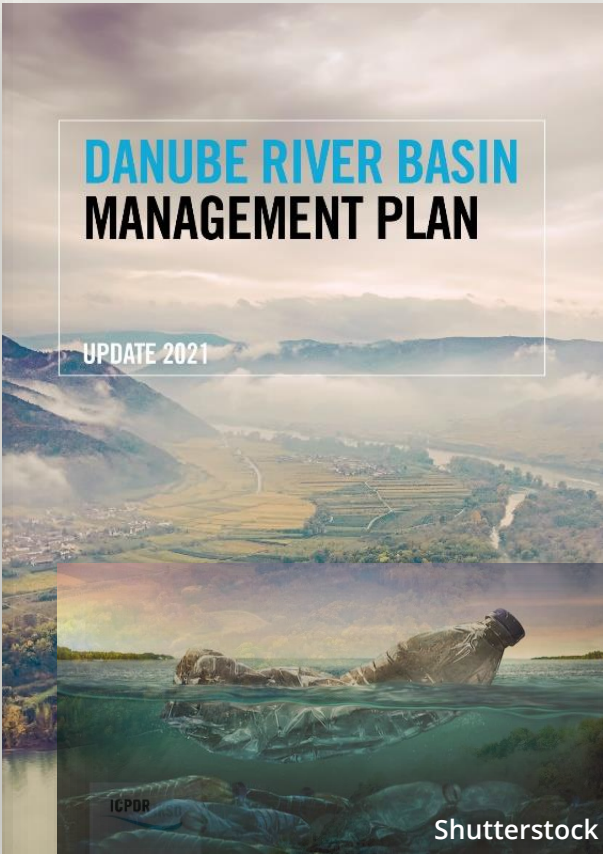
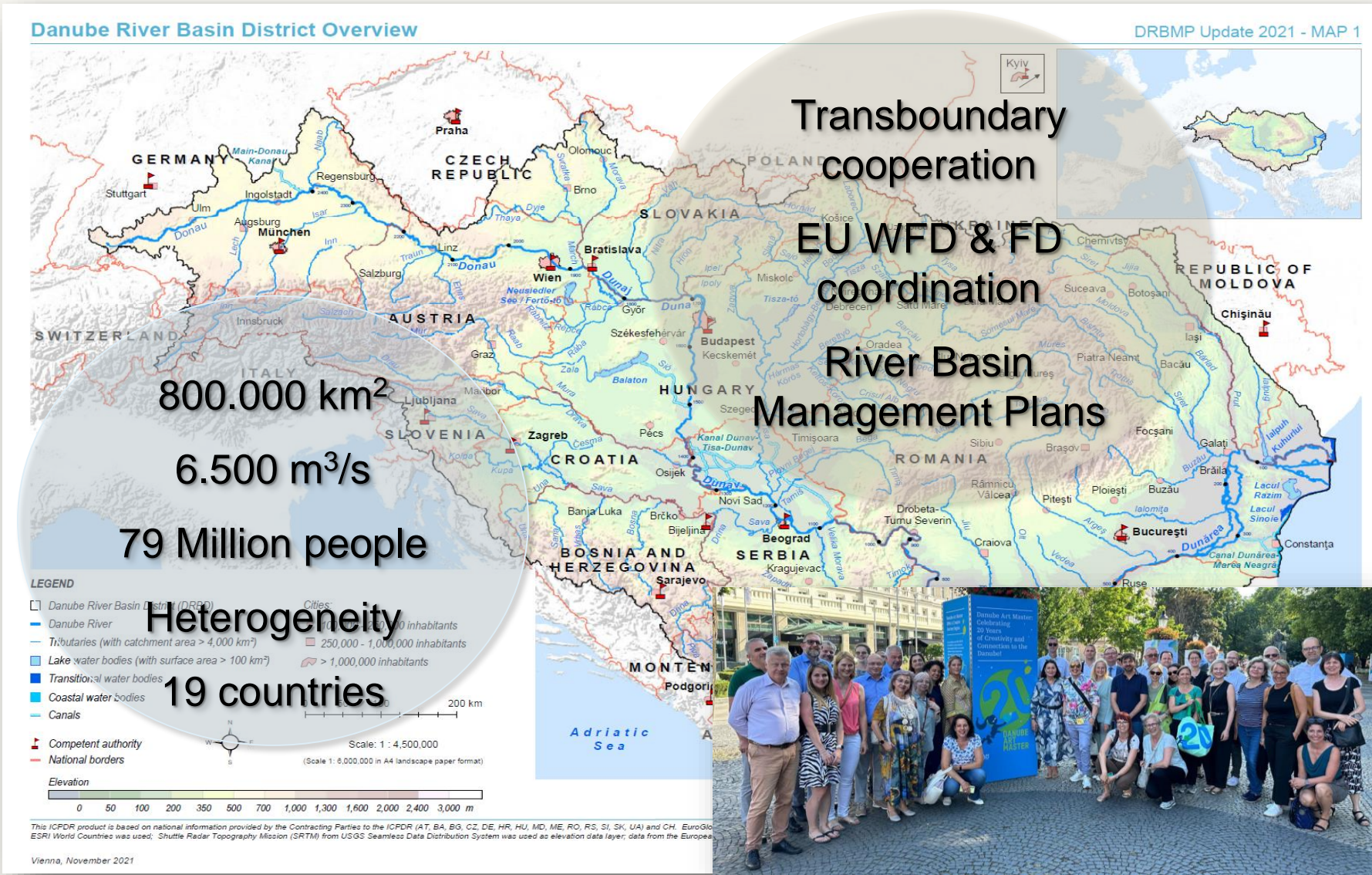


Plastic Cup

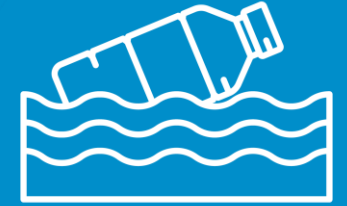
Adam Kovacs  
ICPDR Secretariat



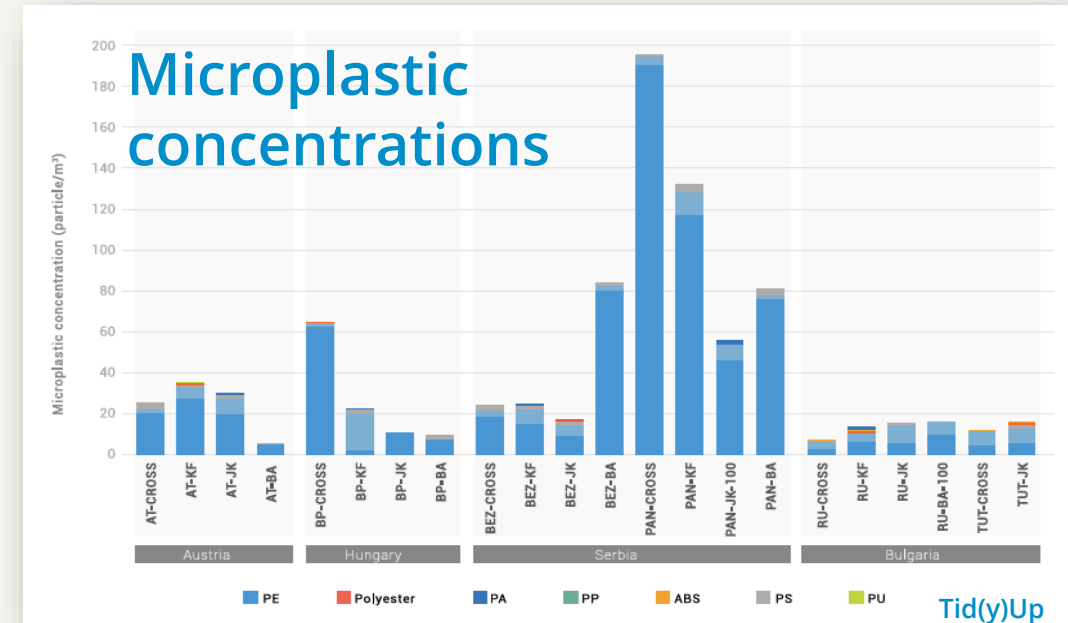
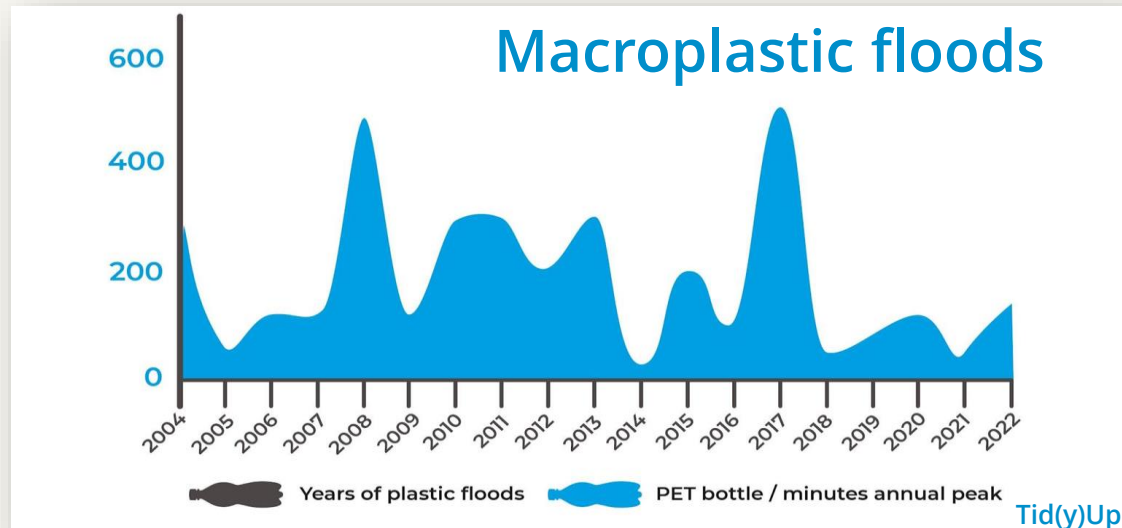
# Danube River Basin & ICPDR



# Plastic Pollution Figures in the DRB



- Danube **load into the Black Sea**: ca. 1,500 tons/year of plastic debris
- Danube **river samples**: 5-200 particles/m<sup>3</sup>
- **Wastewater samples**: influents – from 800 to 4,400 particles/m<sup>3</sup>, effluents – from 12 to 85 particles/m<sup>3</sup>
- Estimated amount of **unmanaged waste** in the Upper-Tisza basin: 10,000 tons/year

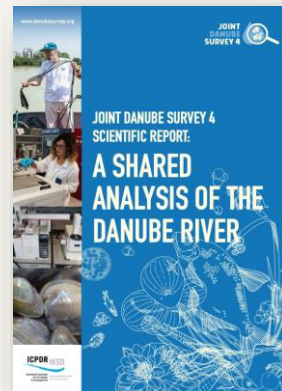
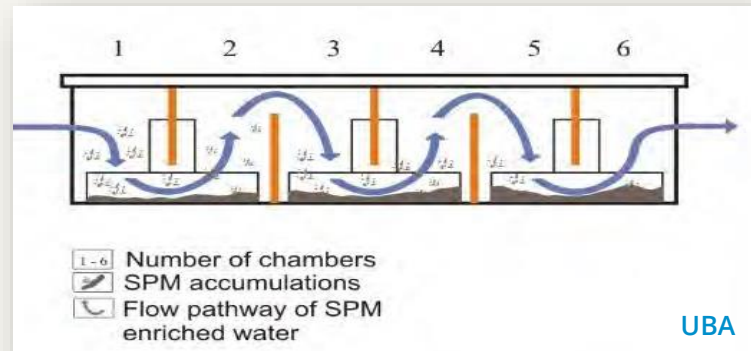
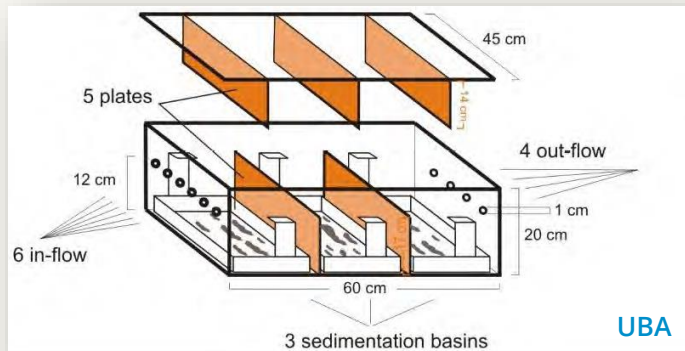




# Microplastic Monitoring in Joint Danube Survey 4 (2019)

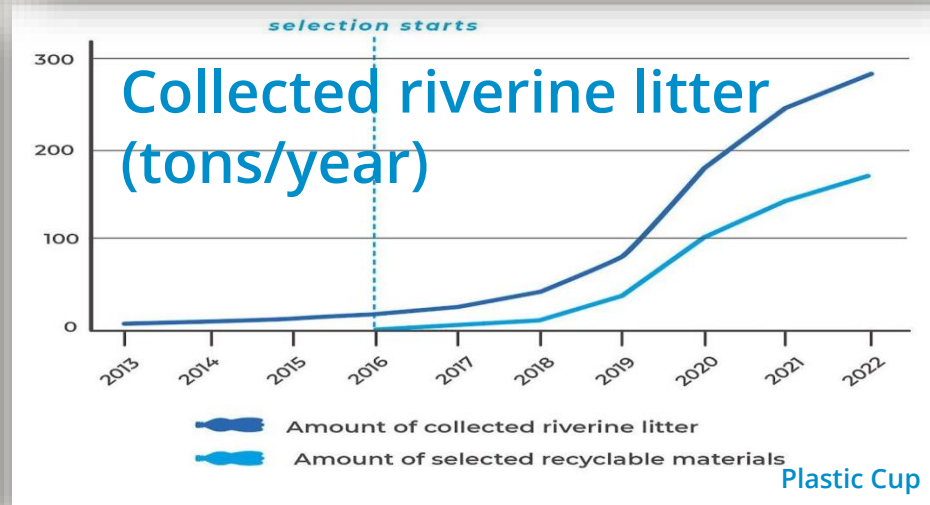


- **Comparable and harmonized** riverine plastic data set for the entire length of the Danube to describe microplastics pollution
- Composite (14 days) sampling with a specific **sedimentation box** (22 sites) and lab analysis (fine grain suspended solids) & sampling mussel species
- Total amount of plastic polymers: 0.1-10  $\mu\text{g}/\text{mg}$ , highest values in correlation with impacts of **tributaries and major cities**
- Plastic polymers detected in **all water and mussel samples**, polyethylene (PE) and polyethylene terephthalate (PET) as the most abundant components





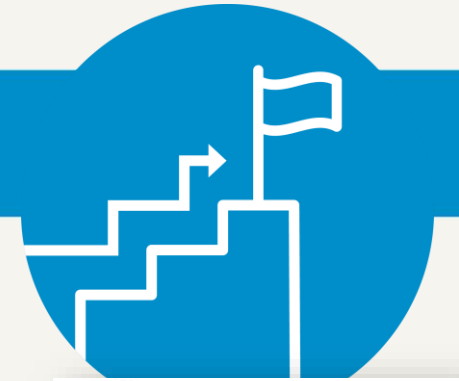
# River Cleanup Activities in the Tisza River: Plastic Cup





# Tid(y)Up Project & its Main Results

- Launching **integrated actions**, providing **practical tools** and initiating **intersectoral cooperation** to address plastic pollution
  - **Protocol for plastic monitoring** including tested sampling methods for micro- and microplastic
  - Online **pollution map** with a database
  - **Cleanup handguide** including a step-by-step illustration about how to organize cleanup interventions
  - **Floating Exhibition** (FLEX) hosting awareness raising and educational activities
  - **Waste reduction toolkit** targeting riverside holiday resorts, restaurants, local governments and the public
  - **Policy guidance** towards preventing and reducing plastic pollution (in cooperation with the ICPDR)



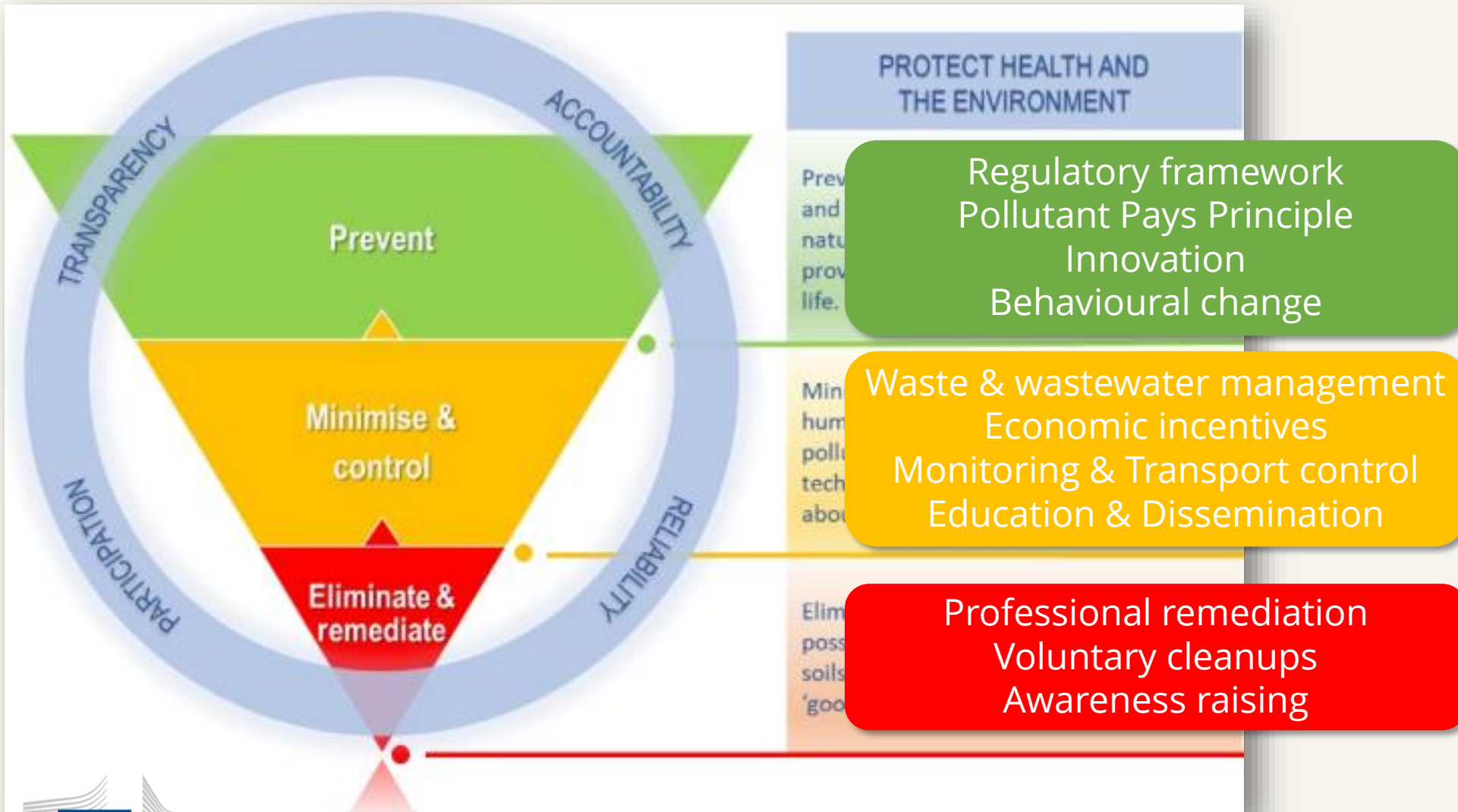
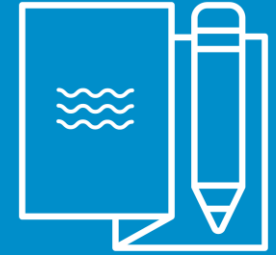
# Policy Guidance on Tackling Riverine Plastic Pollution



- A **strategic document** aiming to:
  - offer guidance on **preventing and reducing plastic pollution**
  - provide **regulatory and legislative recommendations**
  - promote **financial and planning** instruments
  - **raise awareness** among key actors
  - facilitate **harmonized actions** with other sectors
  - encourage **communities and decision makers** to organize local/regional/transnational actions
  - assist **non-EU member states** with knowledge and technology transfer
- Co-developed and **implemented** by the Danube countries



# Key Mechanisms and Measures

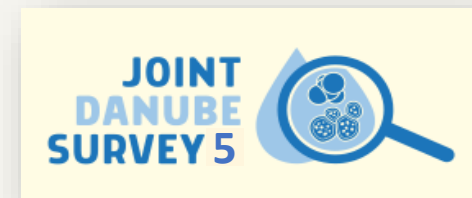




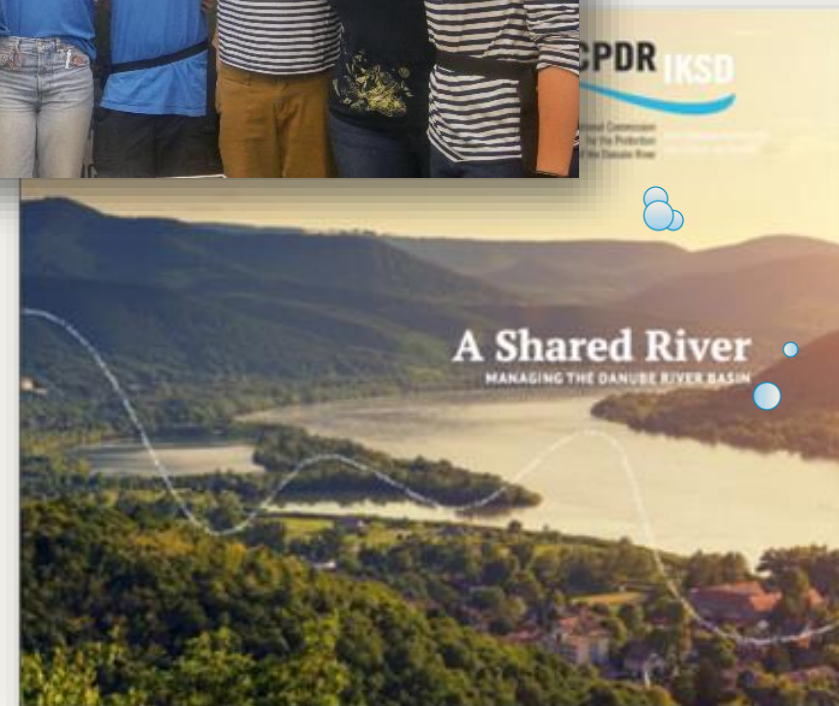
# On-going Initiatives to Tackle Plastic Pollution



- **Transnational projects** focusing on coordinated actions and tools to prevent, detect and eliminate plastic pollution:
  - Providing **guidance and technical tools** to manage plastic pollution
  - Developing solutions to detect plastic **waste accumulations** and manage and recycle large **waste deposits**
  - Monitoring and managing **microplastic pollution** in surface water, groundwater and drinking water
- Additional **monitoring campaign** to be carried out in JDS 5 (2025)
- Future **exchange with the Black Sea Commission** on marine litter pollution
- Supporting the **EC-UNEP Working Group** on plastic pollution



# Thank you very much for your attention!



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