# Wastewater management in the Danube River Basin



### **Progressing but unfinished business**







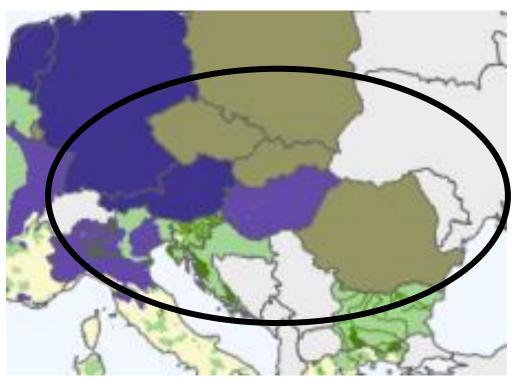
Adam Kovacs
Technical Expert
ICPDR

## Specific regional objectives \_ICPDR IKSD from land to sea



International Commission for the Protection of the Danube River

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- Sensitive area (MS applies Art. 5(4) and Art. 5(8))
- Sensitive area (MS applies Art. 5(4))
- Normal areas
- Non-EU countries

Sensitive areas (MS applies Art.

Catchments of sensitive areas (MS applies Art. 5(2-3))

Sensitive area (MS applies Art.

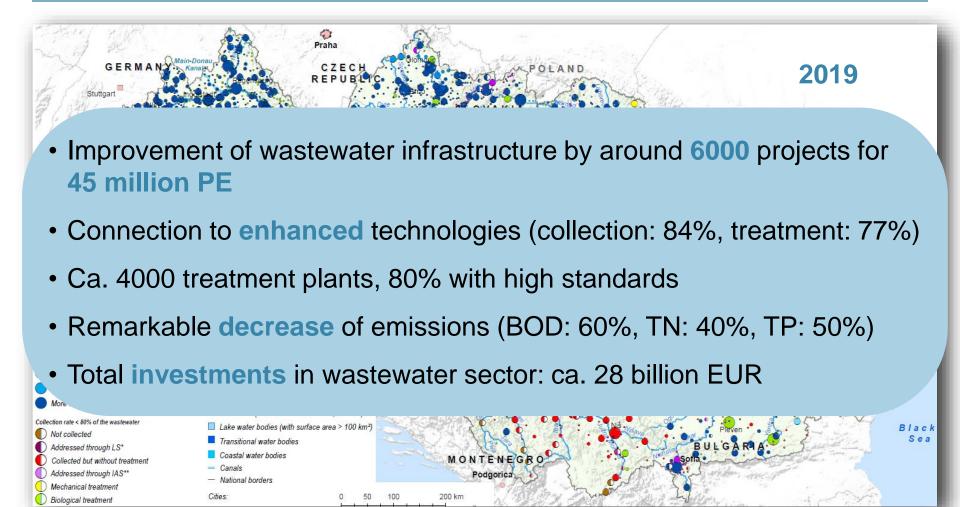
5(2-3) and Art. 5(8))

5(2-3))

- Black Sea coastal area designated as sensitive area by Romania under Art 5(1) in 2007
- DRB as catchment of the sensitive area (Art 5(5))
- 68 million PE at ca. 1,300 agglomerations above 10,000 PE: tertiary
- 18 million PE at ca. 4,400 agglomerations below 10,000 PE: secondary

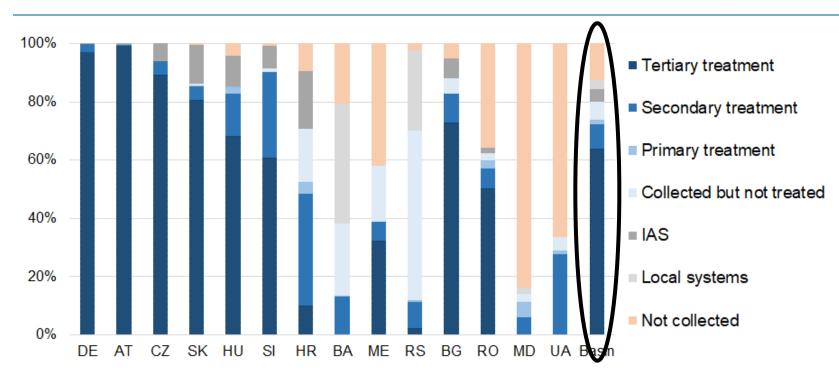
## Recent developments





## Future development needs





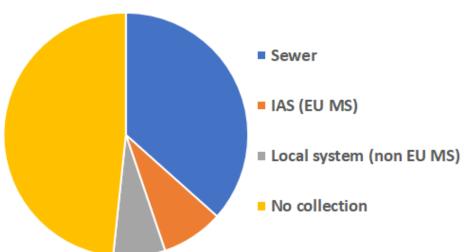
- Need of basic infrastructural development for 20 million PE (collection and treatment)
- Need of technological upgrade for 5.5 million PE (from secondary to tertiary)
- Country investments needed in wastewater sector by 2040: 57 billion EUR (WB estimate)

# Agglomerations between 2,000-5,000 PE



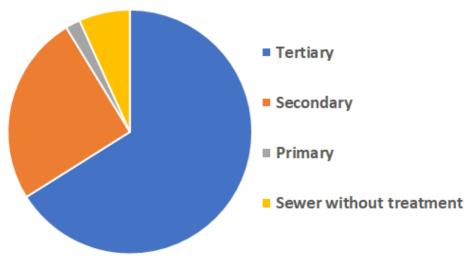
#### **Wastewater collection:**

**3,254** agglomerations **9,830,048** PE



#### **Centralized wastewater treatment:**

**1,245** agglomerations **3,598,162** PE



### Number of agglomerations and population below 2,000 inhabitants:

55,000 (EU MS) + 16,000 (non EU MS) agglomerations 16 million (EU MS) + 5 million (non EU MS) PE

## **Future challenges**



- High number of wastewater treatment and sewer projects still to come in the DRB (new investments for more than 25 million PE & maintenance)
- Old EU MS: proper maintenance and rehabilitation of existing infrastructure, ensuring good performance
- New and non-EU MS: financing infrastructure projects, tariff setting and affordability, establishing proper legal framework and restructuring the utility sector, service provision for small rural agglomerations
- Addressing new challenges such as emerging contaminants, microplastic pollution, urban runoff management
- Going to circular: water reuse, sludge management, energy optimization
- Need for capacity strengthening at national and local administration level as well as at utility level

## Thank you for your attention!



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For more information, please visit the ICPDR website:

http://www.icpdr.org











