

Technical Support Instrument

Supporting reforms in 27 Member States



**REDUCEREA PIERDERILOR DE APĂ
PENTRU UN MANAGEMENT SUSTENABIL
AL APEI ÎN ROMÂNIA**

ROMANIA: WATER LOSS REDUCTION FOR SUSTAINABLE WATER MANAGEMENT IN ROMANIA (25RO43)

DANUBE WATER FORUM

Efficiency First: Cutting Water Loss to Build Resilience

Teodor Popa, World Bank STC

Sofia, 21 May 2026

This project is carried out with funding by the European Union via the Technical Support Instrument managed by the European Commission's Reform and Investment Task Force (SG REFORM) and implemented by the World Bank with the support and the partnership of SG REFORM.



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- ❖ Water loss level
- ❖ NRW economic and financial impact
- ❖ Funding water infrastructure sources



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*This EU technical support is addressing the requirements of **art. 4.3 of the Drinking Water Directive (EU) 2020/2184** and implemented with **European Union** funding through the Technical Support Instrument led by the European Commission's Investment and Reform Team (**SG REFORM**), initiated by the Authority for the Regulation of Community Services of Public Utilities (**ANRSC**), and implemented by the **World Bank** in partnership with SG REFORM"*



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Project objectives

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Water loss
management



Climate change
resilience increase



Digital platform
for data management



Water service
efficiency

Improve the institutional capacity of the National Regulatory Authority for Community Services of Public Utilities (ANRSC) and Water Service Providers by supporting the preparation of a unitary **methodology for determining water losses** and an **action plans to reduce excessive losses** from water supply systems, to be adopted by ANRSC.



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Project outputs



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O1

Stocktaking Report

O2

Methodology to determine water utility performance and proposal for key functionalities of a digital data collection and management platform

O3

Preparation, consultation and adoption of the
National Loss Reduction Financing and Action Plan

O4

Template for **Utility Loss Reduction Action Plan** and training



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Analysis of the NLRFAP

Assess water losses at the service area(s)



Assess current and future economic and environmental impact of water losses in a business-as-usual scenario



Assess the capacity of service providers to manage water losses



Identify and prioritize interventions to reduce water losses



Define required policy, regulatory and financial incentives for the uptake of prioritized measures



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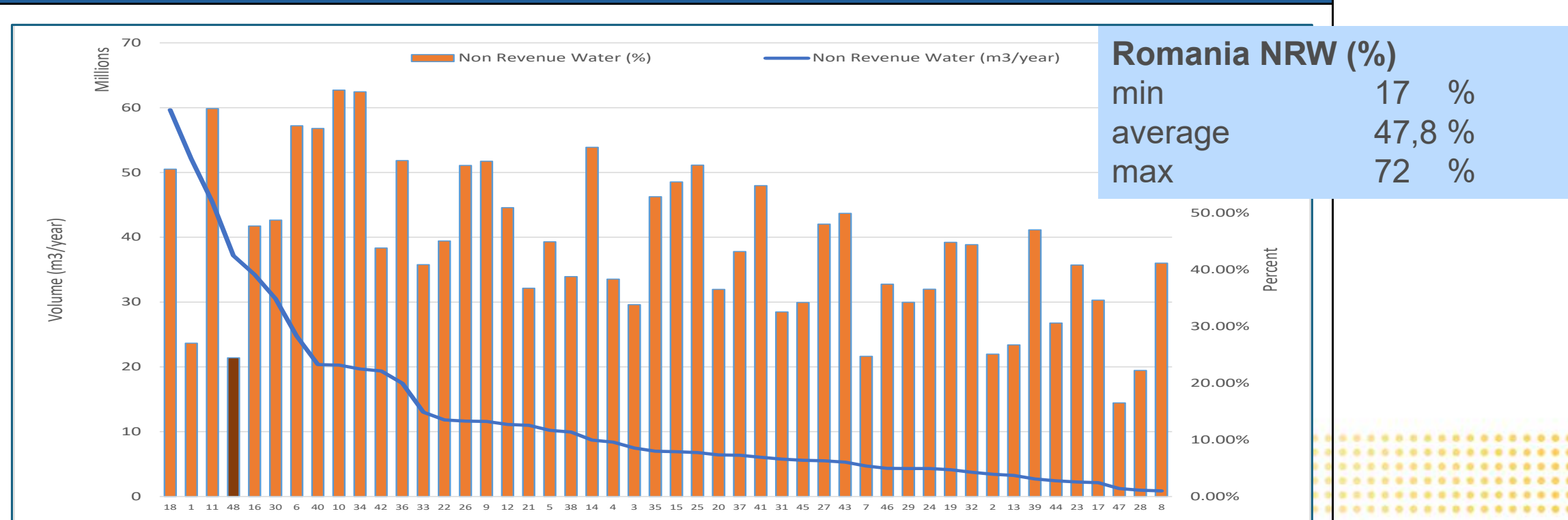


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NRW (m³/year) and (%)

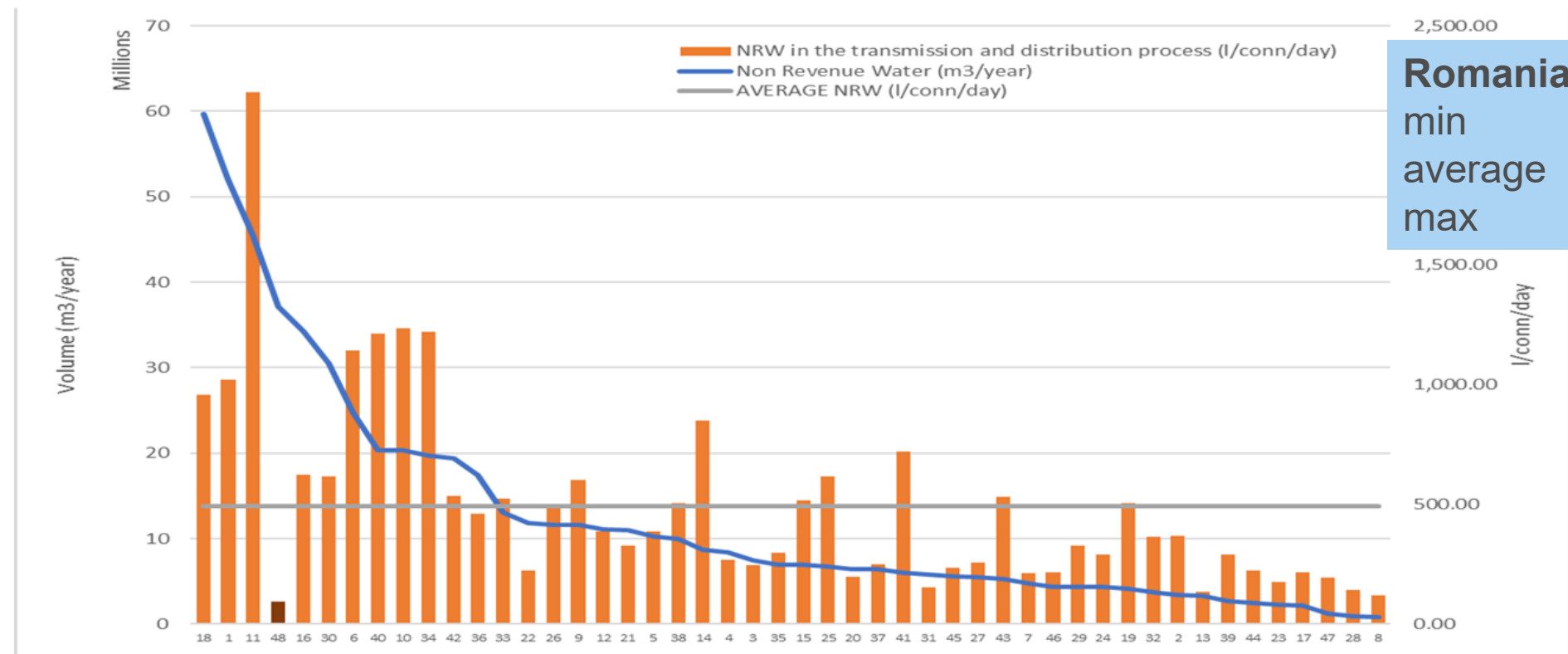
Figure 29: Comparison between NRW volume (m³/year) and % NRW in total abstracted volume, service provider level – 2024 data



Source: 2024 ANRSC benchmarking data

NRW (l/connection/day)

Figure 30: Comparison between water loss volumes and volumes per number of connections - 2024



Romania l/ connection/ day	
min	11.245
average	21.093
max	82.586

Source: 2024 ANRSC benchmarking data



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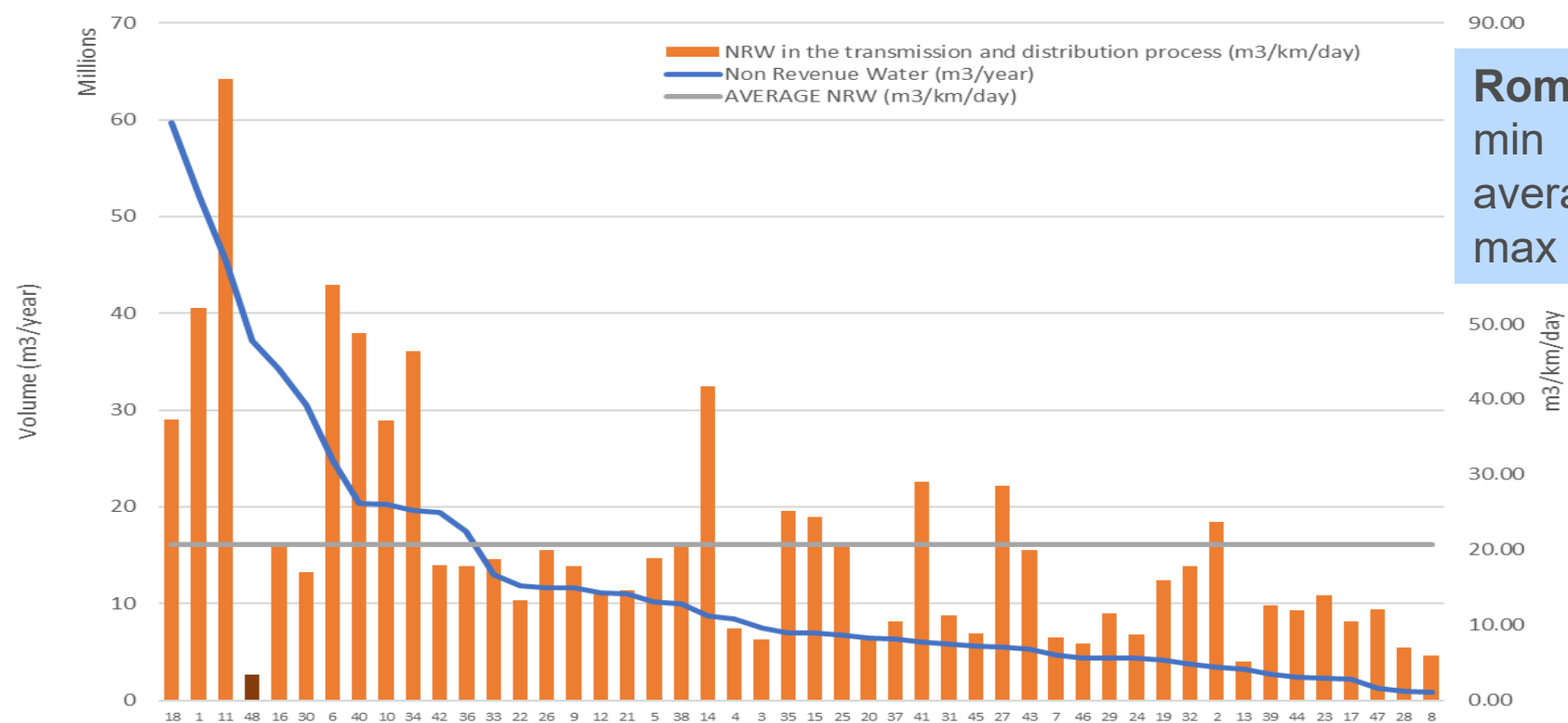


NRW (m³/km/day)



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Figure 31: Comparison between water loss volumes and volumes per total network length - 2024



Romania (m³ /km/ day)

min	11,2
average	21,1
max	82,6

Source: 2024 ANRSC benchmarking data



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Recast DWD Art. 4(3) – Assessment water l

DRAFT

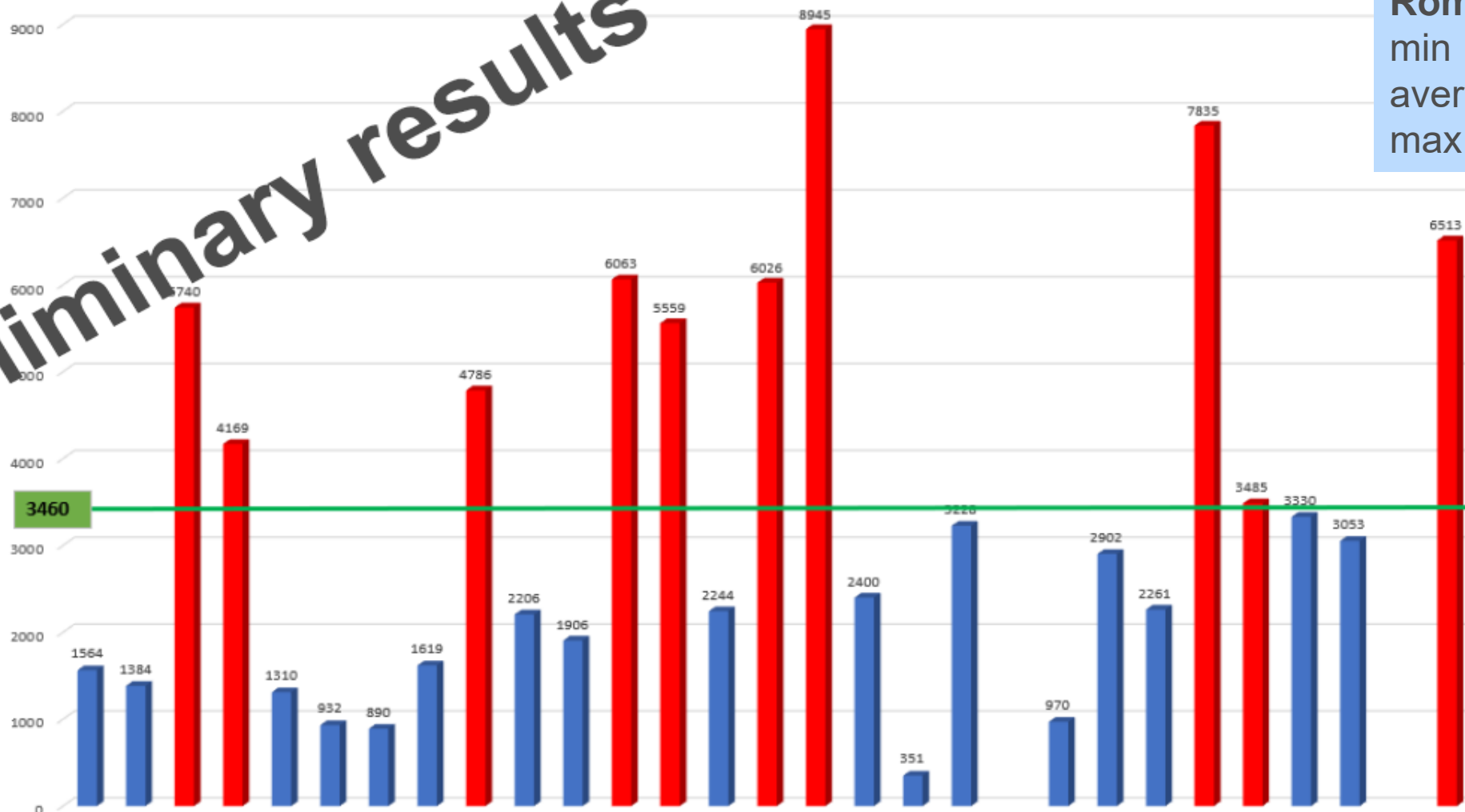
National water leakage indicator [in m³/year.km]

Romania m³/km/year

min 4.105

average 7.699

max 30.144

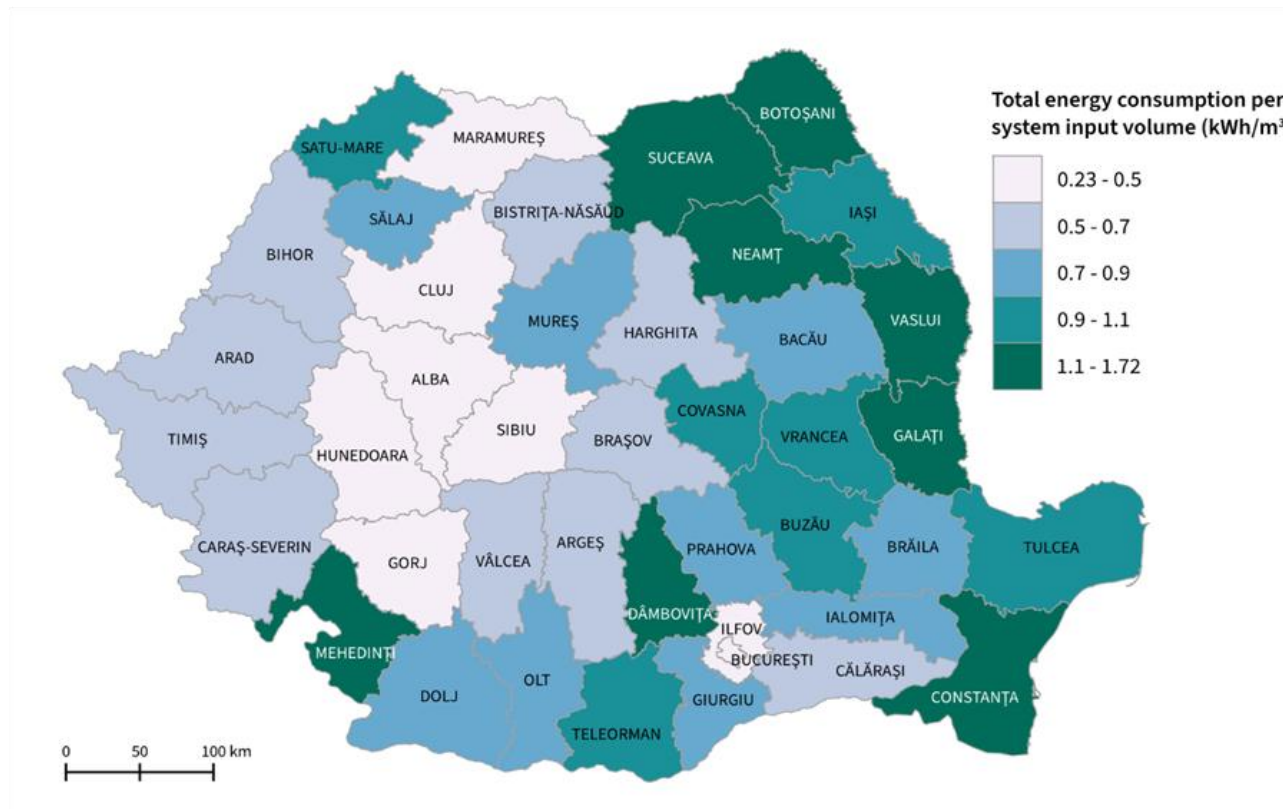


Energy water production (kWh/m³)



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Figure 55: Spatial distribution of the total energy consumption per system input volume (kWh/m³) at county level



Source: World Bank team based on the ANRSC's benchmarking data



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NRW financial and economic impact

Figure 62: Aggregated financial impact of NRW for the 47 largest utilities of the country

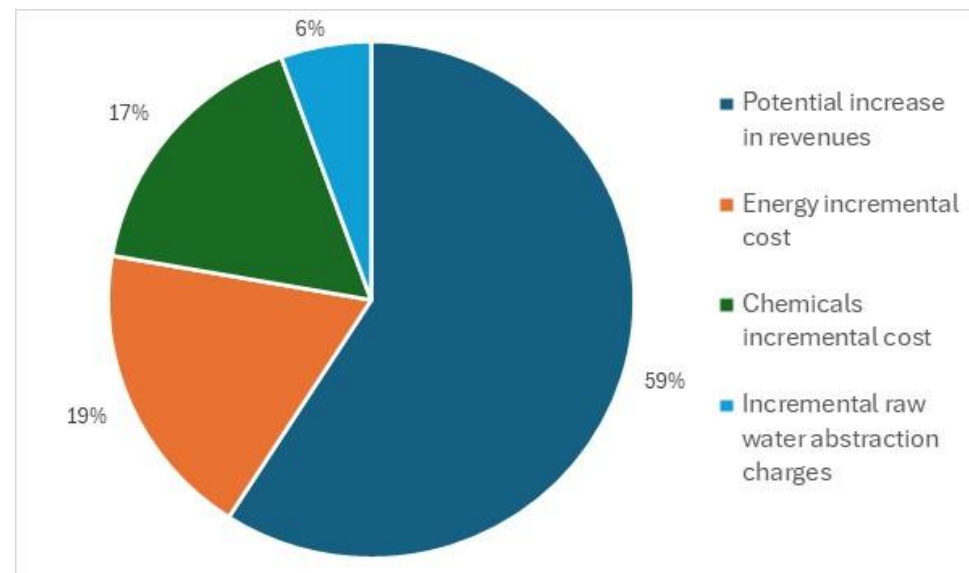
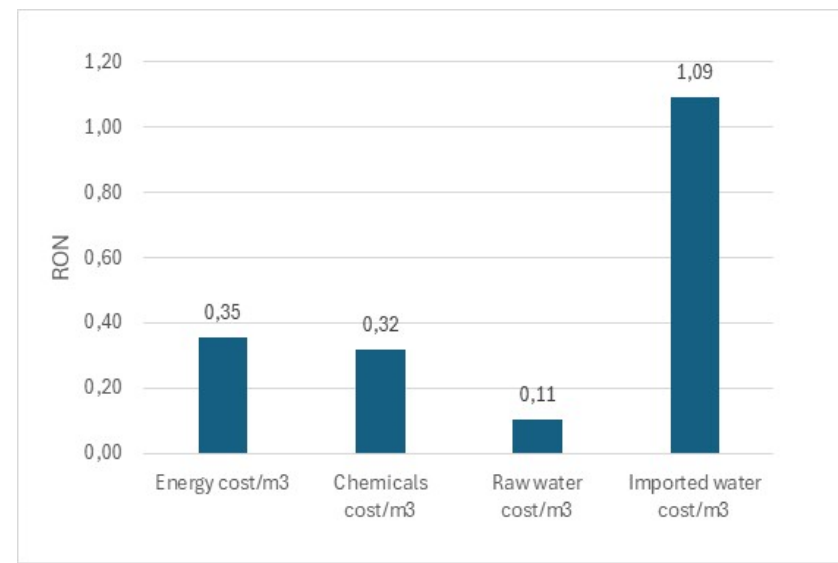


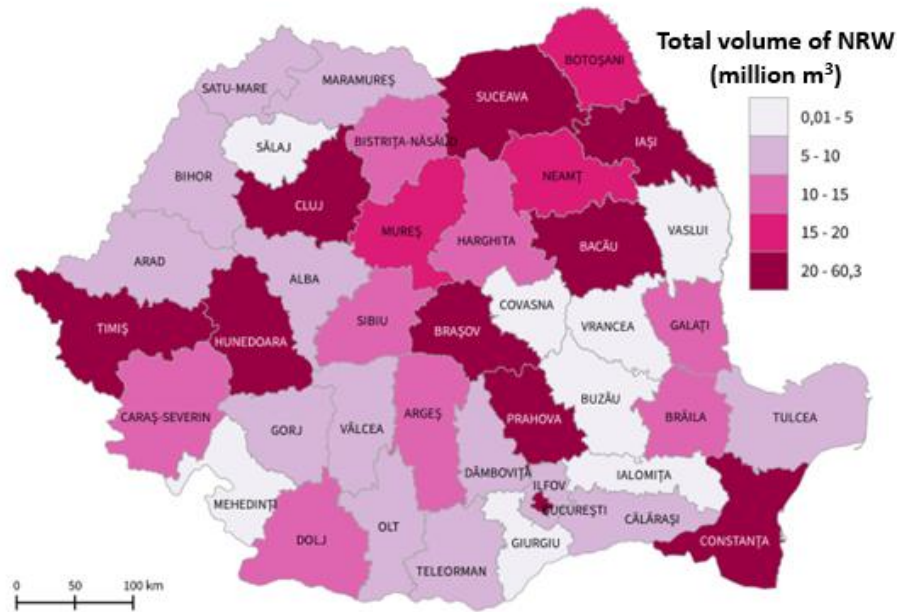
Figure 63: typical cost of an additional m³ of NRW



Source: World Bank's calculations based on ANRSC 2024 benchmarking And Survey data

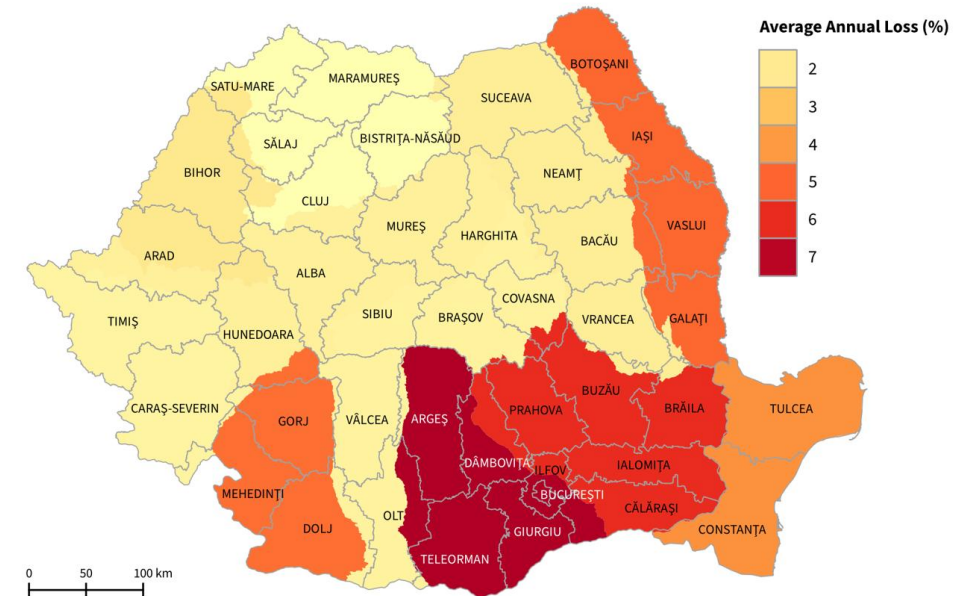
NRW vs drought

Figure 58: Spatial distribution of NRW volume (million m) at county level



Source: World Bank, based on the ANRSC's benchmarking data

Figure 59: Drought risk for bulk water deliveries to utilities in current climate conditions by county

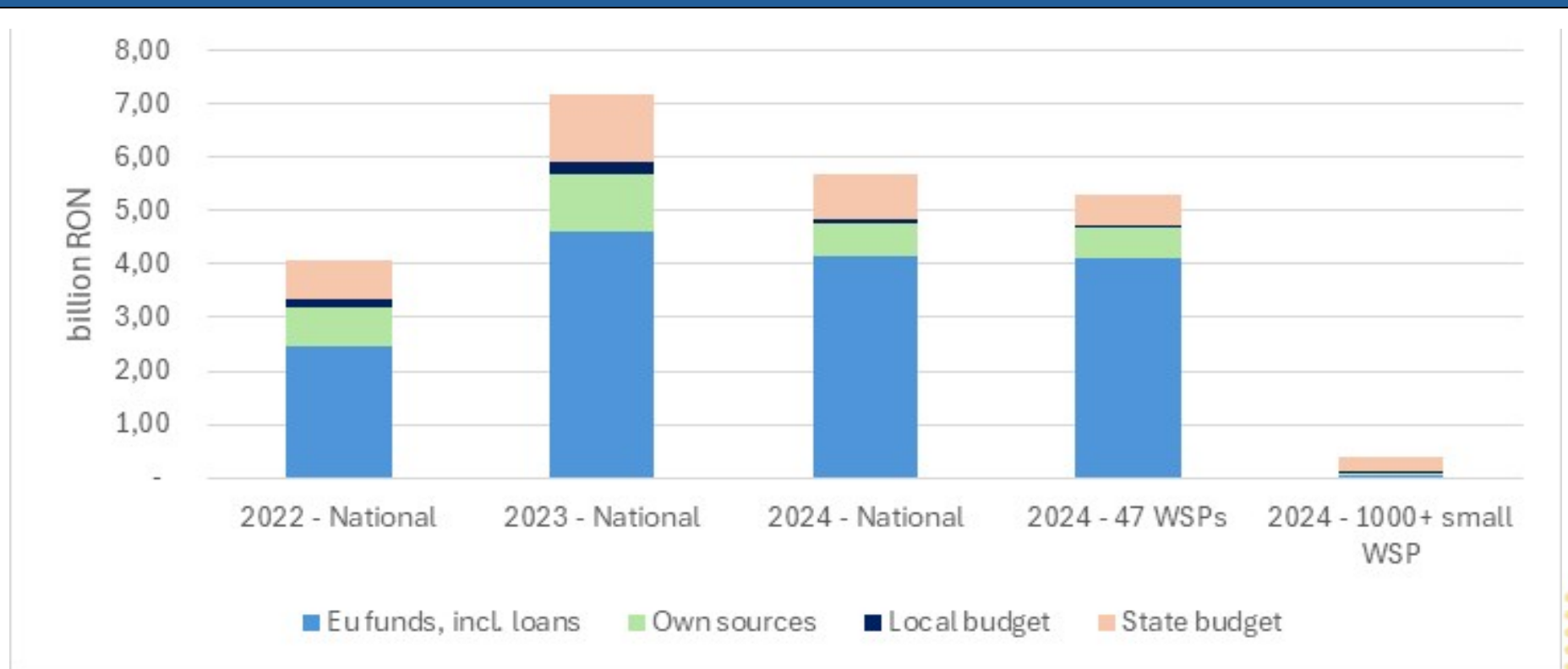


Funding sources of investments 2022-2024



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Figure 14: Investments and sources of funding of capital investments in the water sector 2022-24



Source: World Bank, based on ANRSC 2024 benchmarking database



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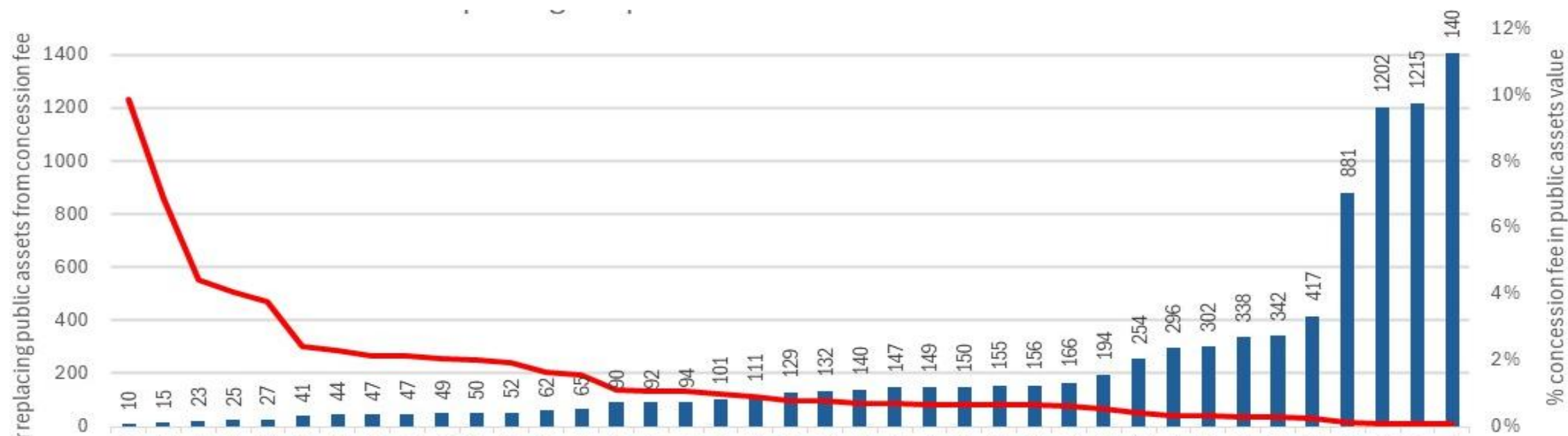


Water infrastructure replacement period



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Figure 13: Years required to replace infrastructure assets using exclusively royalty revenues



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Thank you!

Mulumesc!

Acknowledgements:

This presentation includes contribution of the Project team:

Zael Sanz Uriarte, Sr. Water Expert, TTL

Alexandru Aldea, Anca Mitrache (Bors), Elena Daniela Ghita, Gabriel Simion



Planificarea reducerii
pierderilor de apă



Creșterea rezilienței în fața
schimbărilor climatice



Platforma digitalizată
pentru colectarea și
managementul datelor



Eficiența
serviciilor de apă



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This presentation has been delivered in May 2026, under the EC Contract No. TF 074304– REFORM/IM2025/008 Trust Fund Donor code 24RO43



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