Ministry for Recovery, Infrastructure and Transport of Ukraine

PPP Projects in the Water Sector

Modernising water supply and wastewater services in Dnipro, Khust and Uzhhorod

Ukraine's Water Sector at a Glance

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Ageing networks, high losses and energy intensity point to systemic underinvestment

94%

of cities have centralized water supply and sewerage

55%

of water supply services are provided to households

35%

of 111,000 km of water networks require replacement

20%

of non-revenue water comes from missing or inaccurate meters

14 regions

with building-meter coverage below 50%; missing meters drive 20–30% of non-revenue water

600–1,100

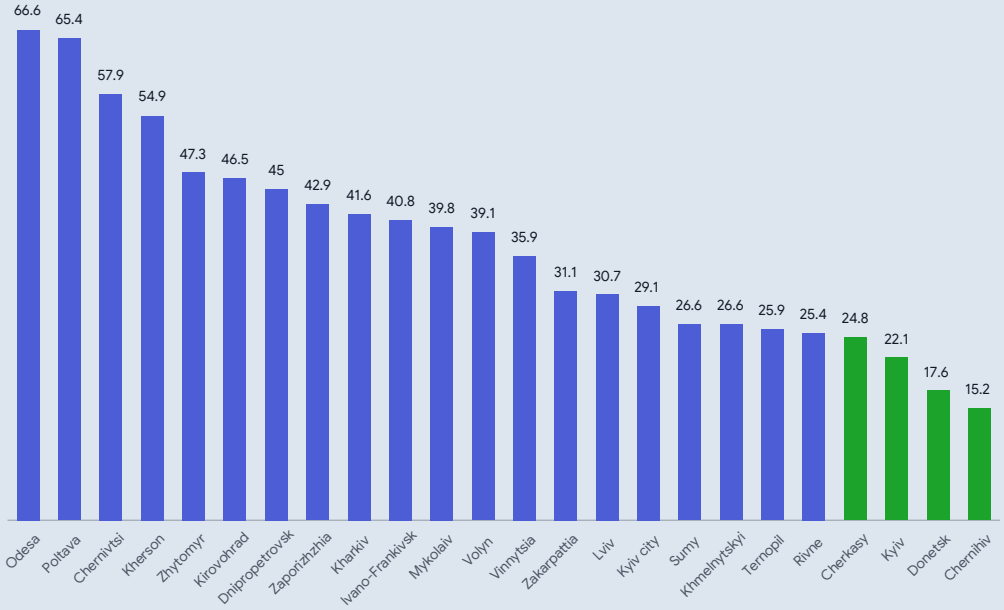
kWh per 1,000 m^3 abstracted in most regions – electricity is a top cost item

Sources: National Report on the Quality of Drinking Water and the State of Drinking Water Supply and Sewerage in Ukraine in 2024; NEURC licensee monitoring 2024. Electricity tariff UAH 9.17/kWh incl. VAT (sample of 2024 utility tenders).

Non-Revenue Water by Region

Share of abstracted water that generates no revenue, 2024, %

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38%

national average

20 of 24

regions above the 25% threshold (blue bars)

What drives losses

- Leakages (physical losses)
- Unaccounted water: missing or inaccurate meters
- Unauthorised connections
- Operational use

Water Sector Project Pipeline in DREAM

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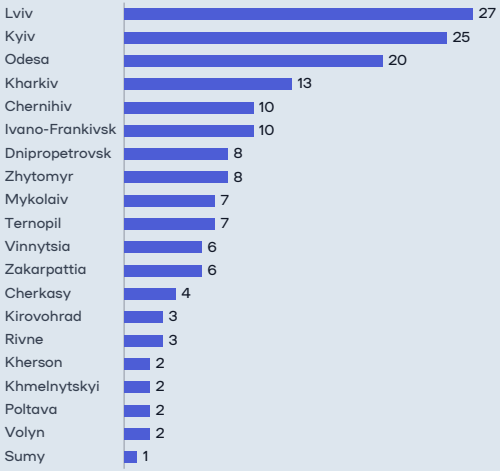
Water supply and sewerage projects added by Ukrainian communities, January–September 2026

166 projects for EUR **487** million added to DREAM

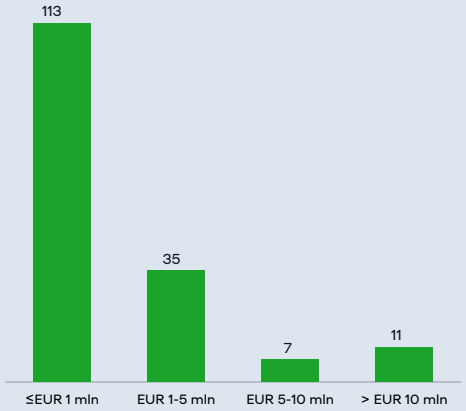
90,4%
150 projects at investment feasibility study stage

9,6%
16 projects at preliminary feasibility study stage

Projects by region



Projects by cost range*



Strong demand: communities across Ukraine need rehabilitation and modernisation of water and sewerage infrastructure

* Based on the highest available project cost estimate. Exchange rate: UAH 50.6455 per EUR, official NBU rate as of 9 November 2026.

Water PPP Portfolio

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EUR 70 mln — **Dnipro Reconstruction of the Kaidatska Pumping and Filtration Station**

Indicative CAPEX

The project combines rehabilitation of usable structures with replacement of obsolete equipment. New facilities will be built only where rehabilitation is technically unfeasible.

EUR 27.3 mln — **Khust: Reconstruction of the Water Supply and Sewerage System**

Indicative CAPEX

The project combines the transition to 24/7 water supply with wastewater network modernisation and construction of a new treatment facility. Existing facilities will remain operational until the new complex is commissioned.

EUR 24.0 mln — **Uzhhorod: New Wastewater Treatment Facility Line and Sludge Processing**

Indicative CAPEX

The project involves constructing a new 50,000 m^3/day treatment line while maintaining existing operations. Subsequent rehabilitation of existing facilities could increase total capacity to 75,000 m^3/day.

Total: 3 water PPP projects with indicative CAPEX of about EUR 121 mln; estimates will be refined at the concept note and feasibility study stages

Dnipro: Reconstruction of the Kaidatska Pumping and Filtration Station

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Current situation

10–15 years
remaining life of critical assets

Modernisation concept

EUR 70 mln
Indicative CAPEX · 10–15 years

PPP preparation

Concept note
current stage

Key facts, planned works and status

- Design capacity 250,000 m^3/day; actual 103,500 m^3/day
- ~500,000 residents; operator ME "Dniprovodokanal"
- Filter blocks built 1912–1968; treatment below current standards
- War damage and unstable power supply

- Intake and first-lift pumping
- Clarification and rapid filtration
- Disinfection, reservoirs, second-lift pumping
- Backwash-water and sludge treatment
- Standby power, solar, automation, telemetry

Done: pre-feasibility study and DREAM uploading
Now: concept note preparation
02.12.2026 concept note to City Council
31.12.2026 City Council approval
Next: feasibility study
Partners: FCDO/PwC, UNICEF/UTA, IFC

Expected impact

- Energy use –22.4%
- Grid electricity –29.1%

- Station water use –50%
- CO_2 –4.3 thousand t/year

- Capacity 250,000 m^3/day
- Output 71.0 mln m^3/year

Uzhhorod: New Wastewater Treatment Facility Line and Sludge Processing

Ministry for Recovery, Infrastructure and Transport of Ukraine

Current situation

58,7%
of treated volume is infiltration

Modernisation concept

EUR 24.0 mln
Indicative CAPEX · 2–3 years

PPP preparation

Data collection
current stage

Key facts, planned works and status

- Capacity 50,000 m³/day; 2025 inflow 43,773 m³/day
- Wet-weather inflow 65,000–95,000 m³/day
- Built 1975–1986; 40% of assets critical, 40% poor
- Combined sewers, overloads, no SCADA
- ~10 ha of free land on the site

- Inlet works, screening, grit and grease removal
- 7,650 m³ flow-equalisation tank
- Primary and secondary clarifiers
- Nitrogen and phosphorus removal, UV
- Sludge dewatering, SCADA, backup power, solar

Now: data collection
Next: pre-feasibility study and concept note
Then: City Council approval of the concept note
Partners: UNICEF/UTA; concept note adviser to be confirmed

Expected impact

- New line 50,000 m³/day
- 75,000 m³/day after Phase II

- Sludge cake 4–5× smaller
- Existing plant runs during works

- 30–40% of organics removed
- 50–60% of suspended solids removed

Khust: Community Profile

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Community profile

One of Zakarpattia's largest communities: 3rd by population and 7th by area among the region's 64 communities

Strategic location: at the crossroads of road and rail routes to the regional centre, border areas and international transport corridors

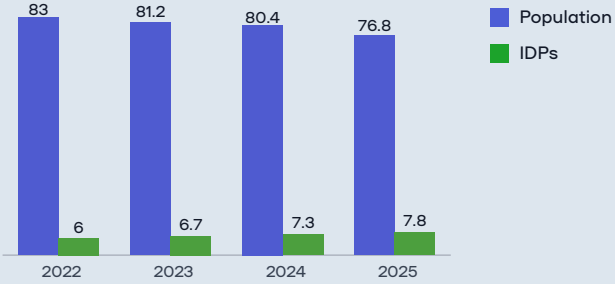
Local economy: driven mainly by small businesses in retail trade and consumer services

Emerging industrial potential: six relocated enterprises and the KHUST Industrial Park, with over UAH 1.2 bn of expected investment and 538 planned jobs

402.3 km²	community area
76.8 thsd	population (2026), 26.5 thsd in Khust city
7.8 thsd	IDPs (2026), 5.9 thsd in Khust city



Population and IDPs in the community, thsd personsv



Khust: Current state and challenges

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Intermittent supply, limited coverage and no reliable water balance

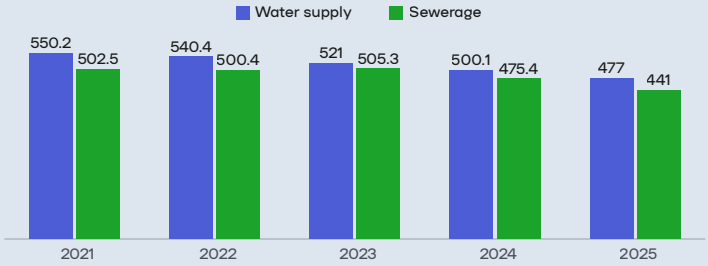
Current state

Service coverage (water / sewerage)* 59% / 38%	Customer accounts (water / sewerage) 8.4 / 6.3 thsd
Metering: apartments / private houses 85–90% / 60–65%	Borehole and building-level meters None
Water supply regime ~6 hours/day	Reported water losses** 23.5–25.8%
Electricity use (water / sewerage) 1.7 / 0.6 kWh/m³	Average age of major facilities ~40–45 years

* Estimated from the latest available population and customer-account data.

** Without direct borehole metering, a reliable water balance and actual losses cannot be verified.

Service volumes, thsd m³



Key challenges

- Aged and deteriorated infrastructure
- Intermittent supply (~6 hours/day)
- Limited service coverage
- Ineffective wastewater treatment
- High energy intensity
- Insufficient metering
- Limited capacity for future demand

Khust: Water Utility Infrastructure

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Water intake and pumping

- Rika and Tysa groundwater intakes: 11 boreholes, 20,000 m³/day design capacity
- Supplementary sources: dug well on Zavodska Street, borehole in Rokosovo
- Boreholes and pumps mostly in poor condition; some pumping-station buildings critical
- Limited borehole redundancy, outdated pumps, no metering of abstracted water

Wastewater treatment

- Main WWTP 13,000 m³/day and local Zavodska facility 35 m³/day
- Main WWTP structures, equipment and biological treatment in critical condition
- Only one of four blowers works; no SCADA or mechanical sludge dewatering
- Zavodska facility in good technical condition

Water supply and sewerage networks

66.9 km	of water networks, ~70% physically deteriorated
37.4 km	of sewers; ~4.1 km (11%) deteriorated or in emergency condition
~114	water-network failures in 2025, i.e. 1.7 per km

Damaged sewers let in storm and groundwater, overloading the system and raising pumping costs







20,000 m³/day

Intake design capacity

13,035 m³/day

Treatment design capacity

Khust: Project Implementation Outcomes

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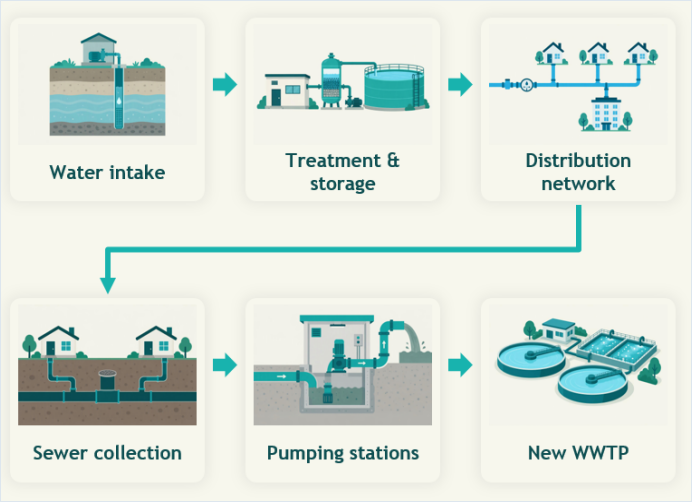
Project targets

Water service ~6 h/day → 24/7	Specific energy use 35–40% lower
Water losses 23.5% → below 12%	Metering 100% technological and commercial
New WWTP capacity 7,000–10,000 m³/day	Solar PV for the new WWTP 150–200 kW
Coverage (neutral scenario) Water 65% · sewerage 50%	Dewatered sludge moisture 75–78%

Non-quantified benefits

- Better drinking water through modern treatment and disinfection
- Reliable wastewater collection; UV disinfection improves microbiological quality
- Centralised monitoring and operational control through SCADA
- Improved public health and sanitary conditions
- Greater resilience of essential municipal services
- Improved access for residents and vulnerable groups
- Capacity for new housing and business development
- Higher investment attractiveness of Khust
- Replicable model for other Ukrainian municipalities

EUR 27.3 million	Indicative CAPEX
20 years	Indicative period



Reconstruction will cover the entire technological cycle, from water intake to wastewater treatment

Khust: Proposed Financial Structuring

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How the viability gap is covered

~EUR 34.6 mln

Total capital investment required
including inflation; ~EUR 27.3 mln without inflation

~EUR 13.9 mln

Viability gap
discounted cash flows at current tariffs with a realistic growth rate

EUR 7.5 mln

Expected grant financing
cash or in kind

Proposed solution to cover the adjusted viability gap

~EUR 1.9 mln

Adjusted viability gap
after grant financing

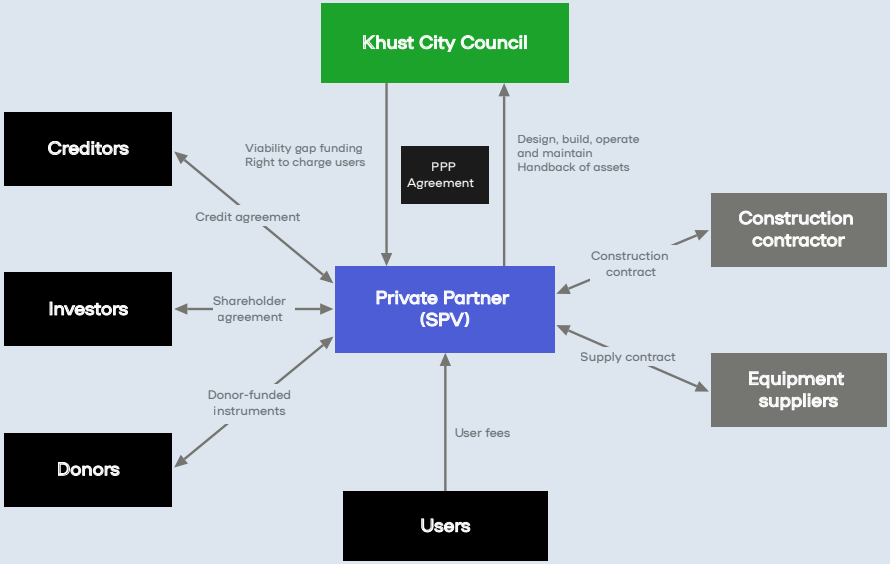
EUR 970 thsd / year

Annual availability payment from the city budget
for 14 years after commissioning, at a fixed exchange rate

Khust – PPP Structuring

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Indicative DBOM PPP with viability gap funding and the right to charge users



Legal highlights

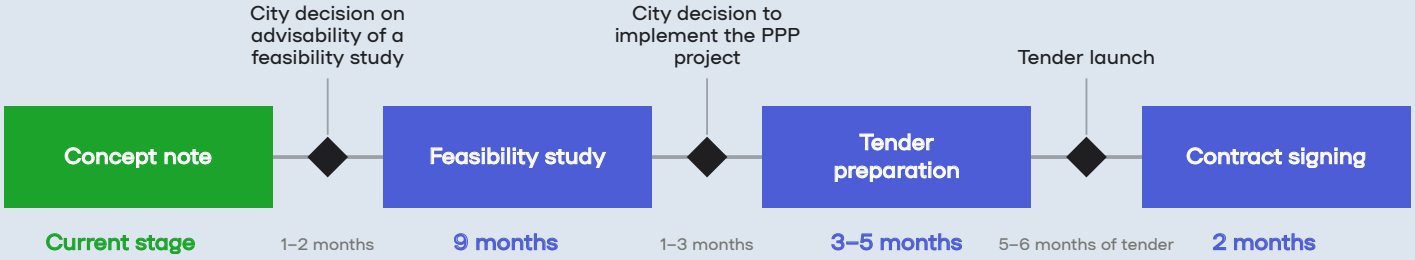
Asset ownership: Khust City Council fully owns and controls the water and wastewater assets and may manage or dispose of them

Land: municipally owned; land plots will be allotted in due course

Tariffs: Set by the City Council, which may adopt an economically justified level reflecting the utility's condition, accumulated losses and modernisation needs

Khust: Project Preparation Plan

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Indicative timeline from concept note to contract signing: ~21–27 months

Stakeholders involved

Ministry for Recovery, Infrastructure and Transport of Ukraine
Overall coordination and support

UK Government Centre of Expertise Green Cities, Infrastructure and Energy Programme
Financial, legal and economic analysis

IFC
Concept note review support

UNICEF
Technical and engineering support

Ministry for Recovery, Infrastructure and Transport of Ukraine

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PPP Project Portfolio Official Website