

UKRAINE WATER AND SEWAGE SECTOR

a report by SeeNews Competitive Intelligence



May 2015

Contents

Snapshot of Ukraine’s water supply and sewerage sector. Key bodies	2
1 Water Situation. Main challenges facing the sector	3
1.1 Water resources	3
1.2 Service provision	4
1.3 Drinking Water Supply	5
1.4 Service Coverage	5
1.5 Key sector challenges	6
2. Water supply network	6
2.1 Water distribution network in Ukraine	9
2.2 Water metering in Ukraine	11
2.3 Sewerage system	12
2.4 Waste water treatment facilities	14
2.5 Sewerage network	15
3. Performance of services	17
3.1 Quality of service	17
3.2 Efficiency of Services	18
4 Financing of Services	18
4.1 Overall Sector Financing	18
4.2 Investments	19
4.3 Cost recovery and tariffs	21
5 Key regulations that should be taken into account when entering the sector	21

Snapshot of Ukraine's water supply and sewerage sector. Key bodies

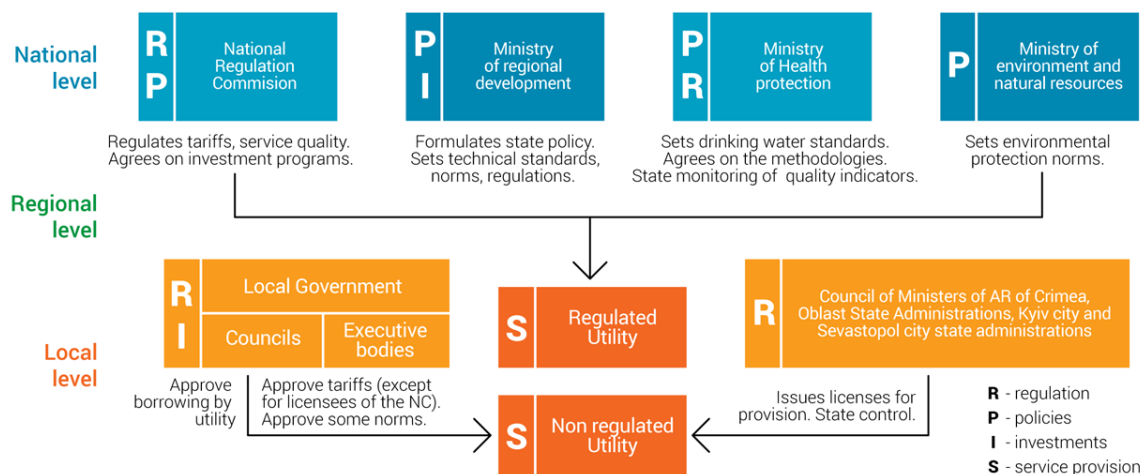
Several ministries and agencies control the water sector at the national level, with no clear line ministry and mandate overlaps. There is a lack of rational and optimal distribution of responsibilities among the administrative authority levels, which include:

- The *Ministry of Regional Development, Construction and Housing and Communal Services* through the State Water Resources Agency. The agency is responsible for government policy setting in the field of water management and use of surface water resources and is also in charge of issuing and invalidating permits for activities in the segment. According to its website, it is particularly responsible for providing permits related to dredging, laying of cables, pipelines and other facilities in areas with water.
- The *Ministry of Ecology and Natural Resources*, which is responsible for the policy on environmental protection and use of natural resources. The State Environmental Inspection and the State Agency for Water Resources are in charge of implementing this policy through controls and inspection
- The *Ministry of Health*, which is responsible for setting environmental norms for drinking water quality and for defining associated measurement methodologies. The State Sanitary and Epidemiological Service is in charge of implementing this policy
- The *State Executive Body in the Sphere of Standardisation, under the Ministry of Economy Department of Technical Regulation*, which is responsible for approving the state standards for drinking water. It also approves the measurement methodologies of drinking water quality
- The National Commission for State Energy and Public Utilities Regulation, which is subordinate and accountable to the President and the Parliament. The authority provides a number of administrative services, including licences related to water supply and sewerage services. The commission also sets tariffs according to a "rate-of-return" methodology, which includes an investment programme jointly approved by the commission and the Ministry of Regional Development, Construction and Housing and Communal Economy of Ukraine. All utilities that do not meet the licensing criteria of the National Commission receive their operating license from one of 25 Oblast State Administrations or the Kyiv State Administration. They apply for a tariff review to the executive body of local self-government, which approves or rejects their request. The utility must then inform customers about future tariff changes. As a result of this institutional setting, water utilities, depending on their size and scale, are regulated by different entities using dissimilar price-setting processes.

On its website, the commission has listed the type of documents that should be filed together with the application for obtaining a permit for carrying out activities in the field of water supply and sewerage. These include information confirming the availability of a material and technical base needed for conducting the respective type of activity; information about the number of employees and their educational and qualification level, which should comply with the regulatory requirements for the type of activity concerned; information about the availability of accredited laboratory exercising control over the activities or a contract with an accredited laboratory of another organisation for exercising such control; a list of the metering devices and

their location; technical characteristics of the network, buildings or other objects and their scheme; financial report for the last reporting date.

FIGURE 2: WATER SERVICES SECTOR ORGANIZATION



SOURCE: AUTHORS' ELABORATION.
 Source: The World Bank

1 Water Situation. Main challenges facing the sector

1.1 Water resources

Ukraine's main water source is the Dnieper river, Ukraine's longest river. The country also covers its water supply needs from the Danube, Dniester, Southern Bug (Pivdennyi Buh), Tisza and Prut rivers among others. It is important to note that about 90% of the settlements in Ukraine are located in the valleys of small rivers which they use to meet their water supply needs. According to a report published by *Kateryna Novak, hydrogeologist at Ukrgeologstom*, Ukraine uses both surface (70%) and underground water (30%) sources to meet its drinking water demand. The country's underground water sources are considerable, located unevenly across the country's territory depending on the structural, geological and physiographic conditions of the regions. The majority of Ukraine's underground water resources, or about 60%, are concentrated in the northern and western regions (Chernihiv, Kyiv, Poltava, Rivne, Sumy, Lviv), while the smallest quantities of underground water are in the Chernivtsi, Kirovohrad, Mykolaiv, Ivano-Frankivsk, Zhytomyr and Odessa regions.

Water resources formed within the country are estimated at 50 billion m³ per year, including 21 billion m³ forming a strategic base for drinking water (*National Institute for Strategic Studies 2012*). With 3,066 m³/capita/year, Ukraine faces an uneven spatial distribution of water resources. Currently, reservoirs and ponds contain about 58 billion m³ of water, which exceeds the local annual flow of all rivers throughout the country. In general, the regulation of the flow of most rivers reached or even exceeded the upper margin of water and environmental destruction (more than 75% of the total length of the channels at a maximum of 25% to 30%), which dramatically reduces and often completely destroys their self-cleaning ability (*MinRegion 2013*).

Over 80% of the population uses water from open reservoirs to meet drinking water and household needs, with the Dnieper river being used as a major water source for nearly 30 million Ukrainians. Unfortunately, almost all river basins across the country can be classified as polluted

or very polluted mostly by nitrogen compounds, oil products, phenols, heavy metals and others. The rivers with the most contaminated water crossing the country are Danube, Dniester, Southern Bug, Dnieper and Siverskui Donets.

The critical state of water basins and the disastrous ecological state of water resources is further aggravated by the extremely high water-requiring manufacturing processes and water-intensive technologies in Ukraine, which require 2-6 times more water than technologies used in developed countries across Europe and North America. The industry's water needs equal about 20% of the water consumed by local households as a whole, with agriculture being the sector using the largest quantities. When it comes to pollution, the main sources of contamination are chemical plants, refineries, pulp and paper mills, large livestock complexes and mines.

Among the main sources of pollution of Ukraine's rivers are: rain containing substances of industrial origin, urban waste water (household sewage containing harmful synthetic detergents), industrial waste water and agricultural waste water (waste from livestock farms, pesticides from treated fields washed by rains). Industrial waste water is responsible for the largest share of water pollution, with half of the amount being discharged into water sources without treatment.

Indicator	Year	Source	Value	Non-EU average	Danube average	Danube best
Number of formal water service providers	2013	NKREKP 2013	1,595	824	661	n.a.
Average population served [inhabitants]	2013	Authors' elab.	18,538	18,882	9,496	n.a.
Dominant service provider type	Communal Unitary Enterprises					
Service scope	Water and sanitation					
Ownership	Private, state, communal form of ownership					
Geographic scope	One to a few cities, regions					
Water services law?	Yes					
Single line ministry?	Yes [Ministry of Regional Development]					
Regulatory agency?	Yes [NEURC]					
Utility performance indicators publicly available?	No					
National utility association?	Yes [UWA for water and wastewater]					
Private sector participation	Few cases of public-private partnerships in water supply and wastewater disposal service provision (in Odessa, Kiev, Lugansk, Berdyansk, in Vinnitska, Kirovohradka, Kharkivska, and Khersonska oblasts, in Crimea)					

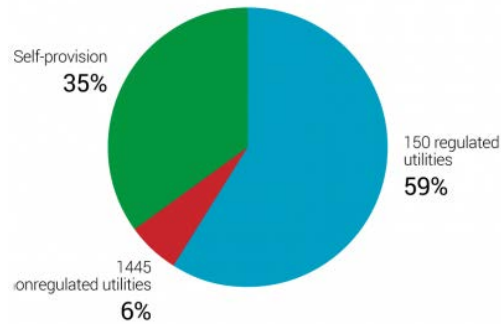
Source: The World Bank

1.2 Service provision

Local self-governments are the owners of water and wastewater infrastructure. During the years of post-Soviet independence, the national government withdrew from water and sanitation services, delegating responsibility to local authorities. According to the regional State Administrations, **there are 1,595 utilities in the water and wastewater sector** serving 65% of the population. The fragmentation of the water sector in Ukraine derives from a high number of medium and small residential settlements, giving rise to a high number of water supply operators. As of the end of 2013, 150 utilities, serving 59% of the population, were subject to state regulation by the National Commission. In addition, there are a number of community-based organisations (cooperatives) serving piped water to 6% of the population. The rest of the inhabitants rely on self-provision. The water utilities can have different forms of ownership. They can be private companies (or individual entrepreneurs) operating under private ownership, public utilities owned by municipalities, state utilities operating under the ownership of the state, or utilities with mixed ownership. The most typical and commonly used form of organisation for water supply

and wastewater utilities is the communal unitary enterprise fully owned by the local self-government (of a city, village, or residential settlement). In many cases, these municipal utilities provide other local public services in addition to water. [The World Bank]

FIGURE 1: WATER SERVICES PROVIDER TYPES AND MARKET SHARES



SOURCE: RZS 2012B.

Source: The World Bank

1.3 Drinking Water Supply

Given the current state of water supply in Ukraine and the quality of drinking water overall, consumers who care about their health mostly use bottled water. Among the major reasons for the low quality is the significant human impact on water resources and the outdated technologies used for turning raw water into drinking water. The use of chlorine, the inefficient coagulation and the absence of absorption filters with activated carbon leads to the presence of a significant volume of inorganic and organic pollutants in drinking water, which can adversely affect human health. In addition, surface water sources are potentially dangerous due to the possible presence of viruses, because the current technologies used for turning natural water into drinking water do not guarantee their removal. The main sources of pollution for surface water are the overloaded sewage treatment plants and networks, which are in poor condition and in need of capital repairs or reconstruction. The lack of funding, however, hinders the implementation of most projects related to the construction and reconstruction of water supply facilities, state and municipal programmes for improving water management, water conservation and quality of drinking water

Another problem facing the sector is the lack of 24-hour access to water supply in many regions. At present, less than five regions have uninterrupted access to water.

Overall, the supply of drinking water with good quality remains an extremely harsh problem for Ukraine. As such, the government has developed a nationwide programme called “Drinking Water Ukraine” until 2020, which is aimed at providing the population with clean drinking water.

1.4 Service Coverage

Ukraine has an average level of access to water supply and sanitation services. A total of 86% of the urban population has access to piped water, but only 22% has access in rural areas; 72% of the population has access to flush toilets; and only 37% of the population, most of which live in urban areas, is connected to a wastewater treatment. Only over a third of the wastewater collected is effectively treated, resulting in a large volume of untreated wastewater being directly discharged into the environment, causing pollution and health hazards. [The World Bank]

1.5 Key sector challenges

- **Improving and clarifying the legal regulatory framework of the water sector.** Ukraine is one of the 10 most energy-intensive economies in the world (IEA 2009). The National Commission for State Energy and Public Utilities Regulation has only a limited political independence, which can jeopardise the effectiveness of its regulatory mission. Moreover, utilities serving more than 20,000 customers are supervised by various administrative bodies, which causes confusion and overlaps. From an economic development perspective, the administrative structure in Ukraine and the numerous water operators are not facilitating efficiency gains achievement (through economies of scale) and sustainability of water systems. Coordination between regions, district and rural levels, on the one hand, and water companies operating in rural areas on the other hand, is weak.
- **Ensuring tariff setting according to the cost recovery principle to improve overall efficiency.** Water tariffs are among the lowest in the region and there is space for increases without generating an unacceptable burden on households. With water tariffs being kept low for political reasons, water companies do not have enough financial resources to fund operations and capital investment. As a result, the sector has suffered from underinvestment and poor maintenance for decades.
- **Improving staff capacity and expertise.** Education and training of staff at all levels of water utilities are key to ensure long-lasting operational efficiency and sustainability of the water sector. Capacity and expertise of utility staff and local governments regarding legal interpretation, contractual arrangements, interactions among utility providers, tariff procedures, regulatory impact assessment, and external fund raising for infrastructure development are weak. [The World Bank]

2. Water supply network

Ukraine water supply network has the capacity to distribute over 14.3 million cubic metres of water a day, which provides for average daily water consumption of 326 litres per capita, while municipal waste water treatment plants have the capacity to store 11.5 million cu m of waste water a day.

Each year, Ukraine's Ministry of Regional Development publishes a detailed report on the quality of drinking water in the country. Its most recent report of 2013 shows that cities in all domestic regions had 100% access to centralised water supply services except Lviv (93.2%) and Chernivtsi (90.9%). In rural areas, however, access to centralised water supply, like in previous years, was much lower. Data provided on this particular indicator shows that the rate was the highest in the Kherson region, at 88%, followed by Zaporizhia with 60.4% and Mykolaiv with 57.5%. The villages with the lowest access to centralised water supply services were in the regions of Rivne (2.7%), Chernivtsi (6.3%), Vinnytsia (6.3%) and Ivano-Frankivsk (9%). In all other regions the provision of centralised water supply in rural areas was between 11% and 50% on average.

Only three regions turned out to have 24-hour access to water supply in 2013, namely Volyn, Kharkiv and Chernihiv, as well as the capital Kyiv. The rate exceeded 90% in the regions of Rivne (99.6%), Vinnytsia (98.7%), Chernivtsi (92.8%), Ivano-Frankivsk (91.7%) and Ternopil (91%). In five

other regions, the rate was higher than 50% while in the regions of Odessa and Donetsk only 4.7% and 14.1% of households, respectively, had continuous access to water supply services.

Table 1 – Volume of centralised water supply in mln cu m, in 2013/2012

	2013	2012
Raw water collected	2,971.99	3,063.59
Water treated	2,150.97	2,181.53
Drinking water distributed	1,842.45	1,912.62
Losses along the water supply network	1,129.74	1,140.97

Source: The Ministry of Regional Development, Construction and Housing and Communal Services

As the table shows, the volume of drinking water continued to decline in 2013, but the rate of distribution remained almost unchanged compared with the previous year.

State of water pumping equipment in Ukraine

	2013	2012
Requires replacement	28.5%	29.7%
Replaced throughout the year	30.2%	27.3%

It is important to note, however, that these figures are relative and do not reflect the actual state of pumping equipment in each region. In the Ternopil region, for example, over 60% of the water pumping equipment needed replacement in 2013, while in the Zhytomyr region the rate was about 44%. At the same time, the share of equipment requiring replacement in six other regions and the capital Kyiv was below 20%.

Table 2 – Share of water pumping equipment requiring replacement in 2013 per region

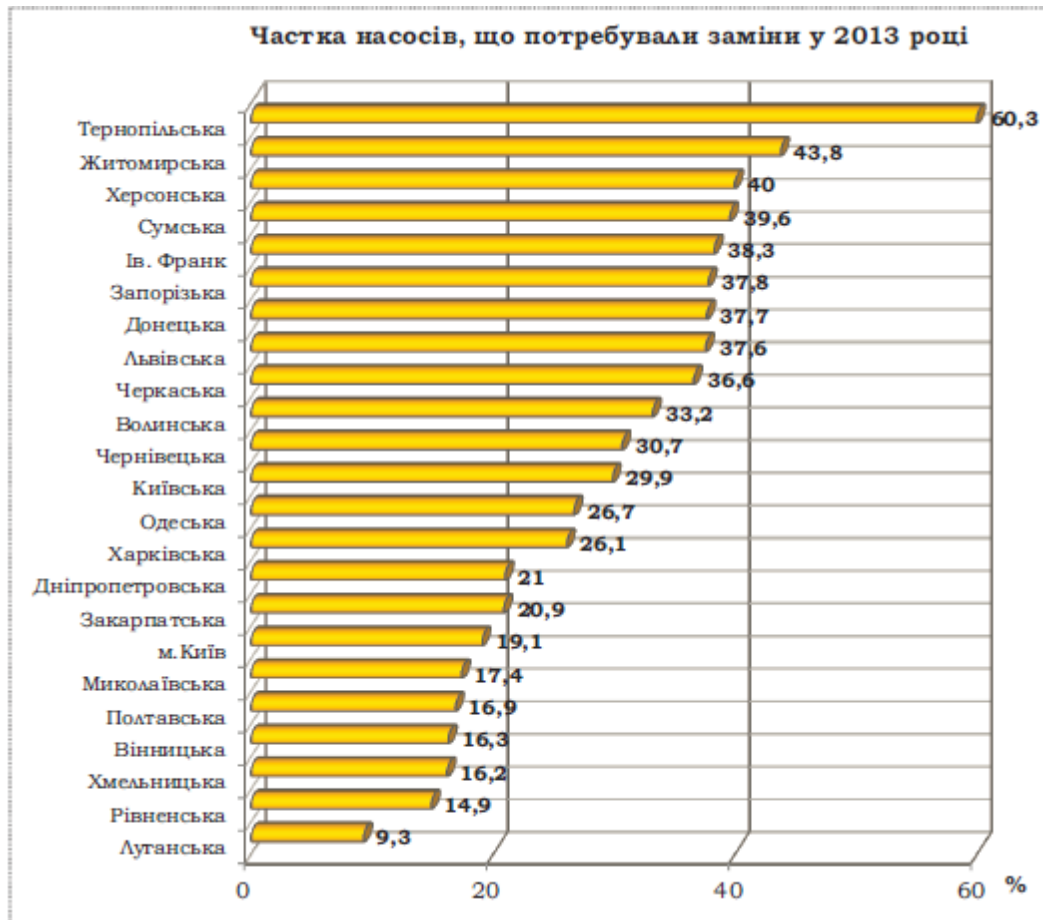
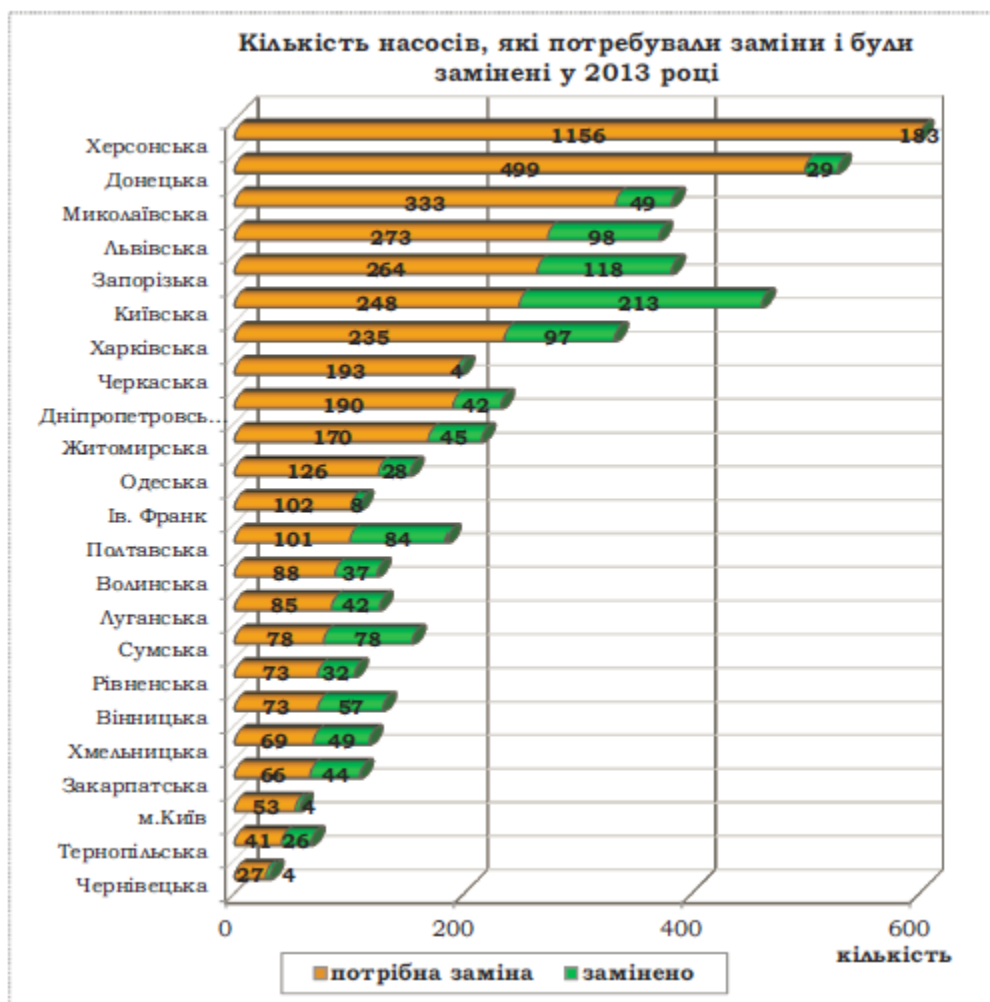


Table 3 – Number of pumps that required replacement and were replaced in 2013 per region



2.1 Water distribution network in Ukraine

As of 2013, Ukraine’s water distribution network was 132,670 kilometres long, of which 48,230 kilometres required repairs. About 1,040 kilometres of the network was replaced in the period.

State of Ukraine’s water distribution network

	2013	2012
Requires replacement	36.4%	37.9%
Replaced throughout the year	2.2%	2%

The state of the water distribution network in separate regions, as in previous years, was considerably varied. The network in the most critical state was that of the region of Luhansk, with 72.7% of it requiring major upgrades or replacement, as well as that of Kirovohrad, where 52% of it needs to be changed. On the other end of the line is the Zakarpatya region, where just 11.5% of the water supply network requires replacement.

Table 4 – Share of water distribution network requiring replacement in 2013 per region

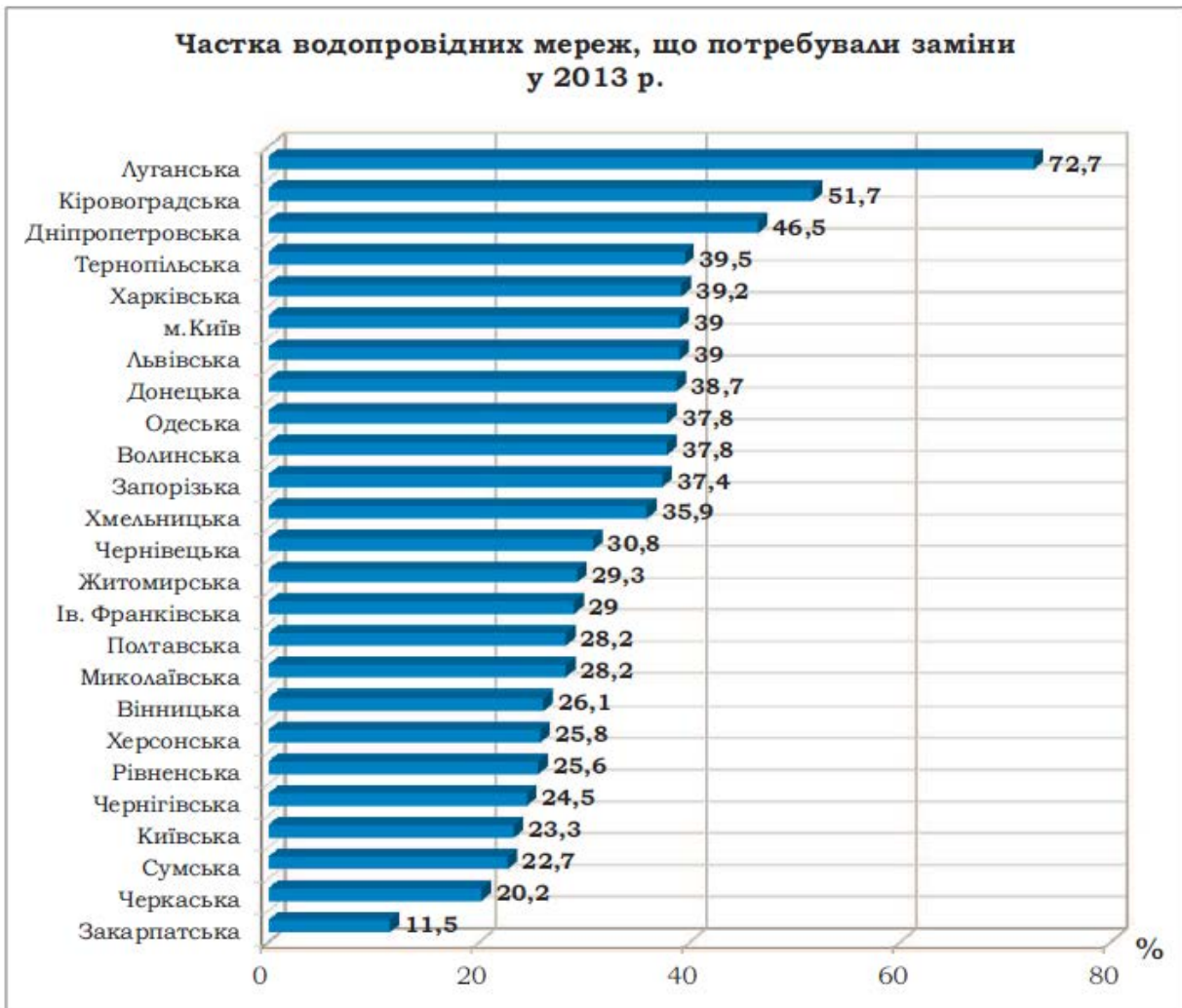


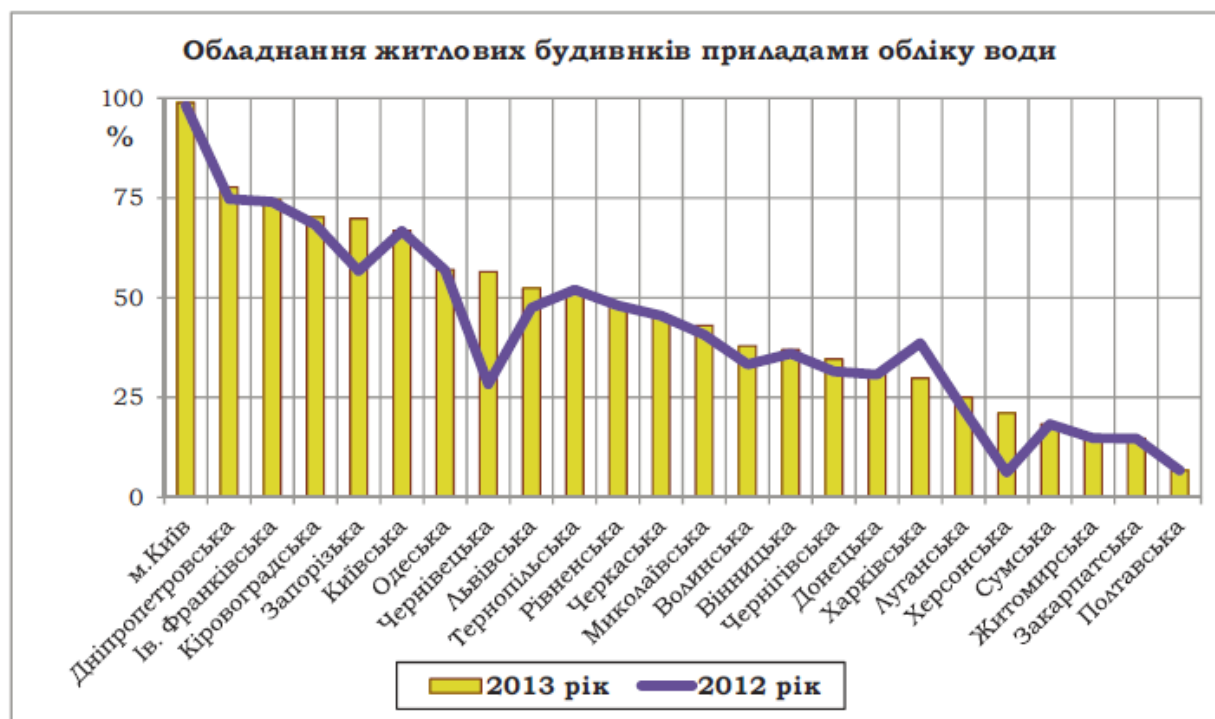
Table 5 – Length of water distribution network requiring replacement and that was replaced in 2013 per region



2.2 Water metering in Ukraine

As a whole, the share of residential buildings equipped with water metering devices increased in most regions in 2013. The main reason for the lower rate of equipment or absence of such devices in some regions was the lack of funds for the replacement of old water meters or failure to pass metrological verification among others. The capital Kyiv had the highest number of devices measuring water use, with 98.8% of residential buildings in the city being equipped meters, followed by the Dnipropetrovsk region with 77.7%, Ivano-Frankivsk with 74.5% and Kirovohrad with 70.2%. In six other regions (Zaporizhia, Kyiv, Odessa, Chernivtsi, Lviv and Rivne) the rate exceeded 50%. In Poltava, however, only 6.5% of residential buildings had water metering devices, while the rate in Zakarpatya and Zhytomyr was 14.7% and 14.9%, respectively.

Table 6 – Rate of equipment with water metering devices in residential buildings in 2013 per region



2.3 Sewerage system

In the reviewed period, only cities in 16 Ukrainian regions were provided with 100% access to centralised water sewerage services. The rate was above 90% in the regions of Dnipropetrovsk (95%), Kharkiv (94.1%), Chernihiv (93.8%), Kirovohrad (91.7%) and Lviv (90%) and was relatively high in Chernivtsi (81.8%), Volyn (81.8%) and Odessa (79%). In rural areas, however, access to centralised water sewerage services, like in previous years, was much lower.

Table 7 – Volume of waste water 2013/2012, in mln cu m

	2013	2012
Waste water discharged	1,943.40	1,994.38
Waste water treated at water purification facilities	1,866.46	1,910.98
Waste water that underwent complete biological treatment	1,710.36	1,774.28
Waste water that underwent additional treatment	63.38	60.50

State of water sewerage equipment in Ukraine

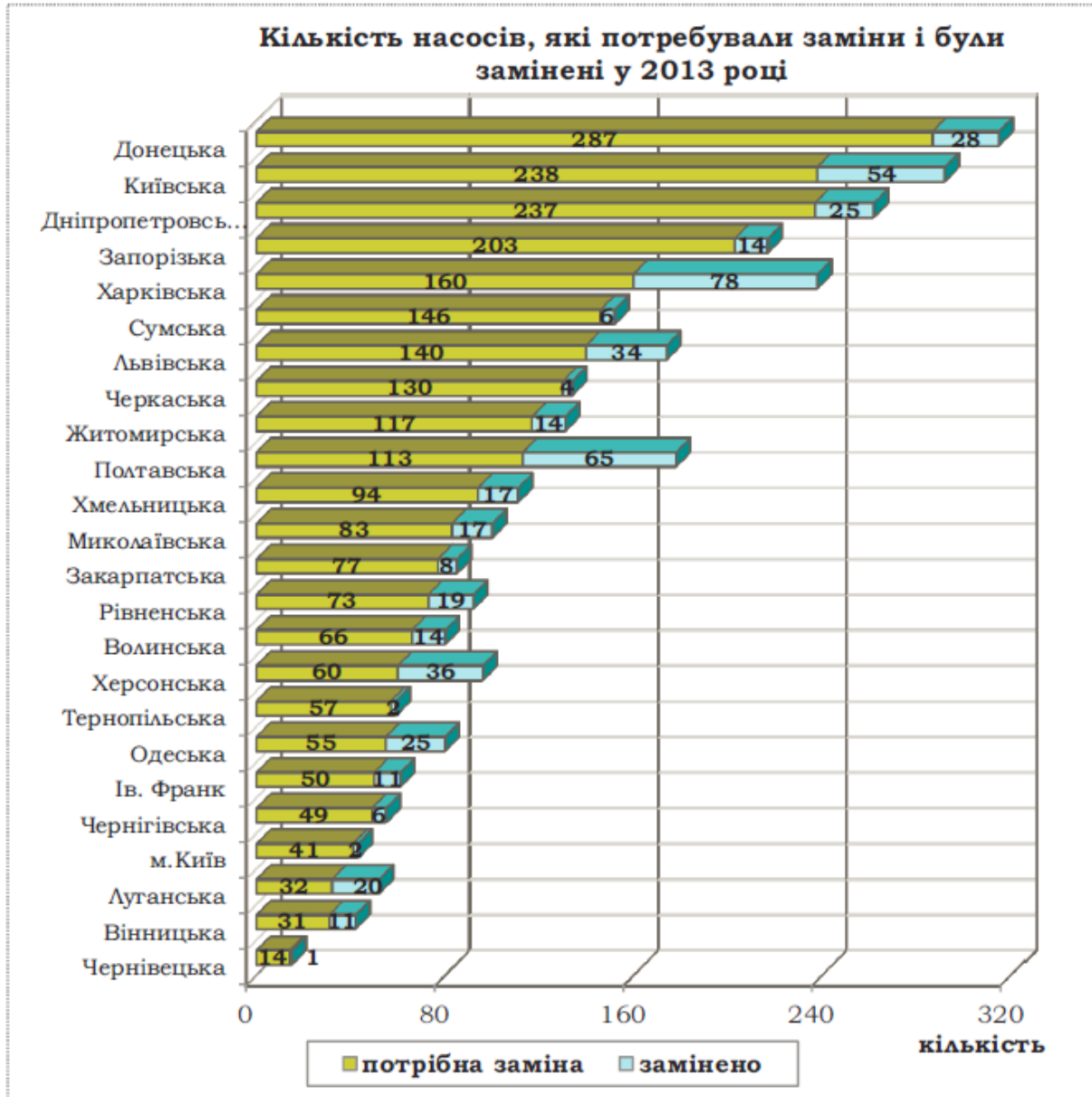
	2013	2012
Requires replacement	33.4%	34.1%
Replaced throughout the year	20%	16.5%

It should be noted, however, that these figures are relative and do not reflect the actual state of sewerage equipment in each particular region. In the Ternopil region, for instance, over 85% of the waste water disposal equipment needed replacement in 2013, while in the Zaporizhia, Sumy and Kherson regions the rate was nearly 50%. At the same time, the share of equipment requiring replacement in three other regions was below 15%.

Table 8 – Share of water sewerage equipment requiring replacement in 2013 per region:



Table 9 – Number of sewerage pipes that required replacement and were replaced in 2013 per region



2.4 Waste water treatment facilities

No significant changes in the state of waste water treatment facilities were observed in 2013, as over half of the existing plants in most of the regions continued to require reconstruction. In 11 regions, between 70% and 80% of the facilities had to be upgraded; In Lviv and Zhytomyr, the share of waste water treatment facilities requiring repairs represented 16% and 25% of the total, respectively.

Table 10 – Share of waste water treatment facilities requiring reconstruction in 2013 per region



2.5 Sewerage network

As of 2013, Ukraine's sewerage network was 42,760 kilometres long, of which 16,060 kilometres required repairs. About 176 kilometres of the network was replaced in the period.

State of Ukraine's sewerage network

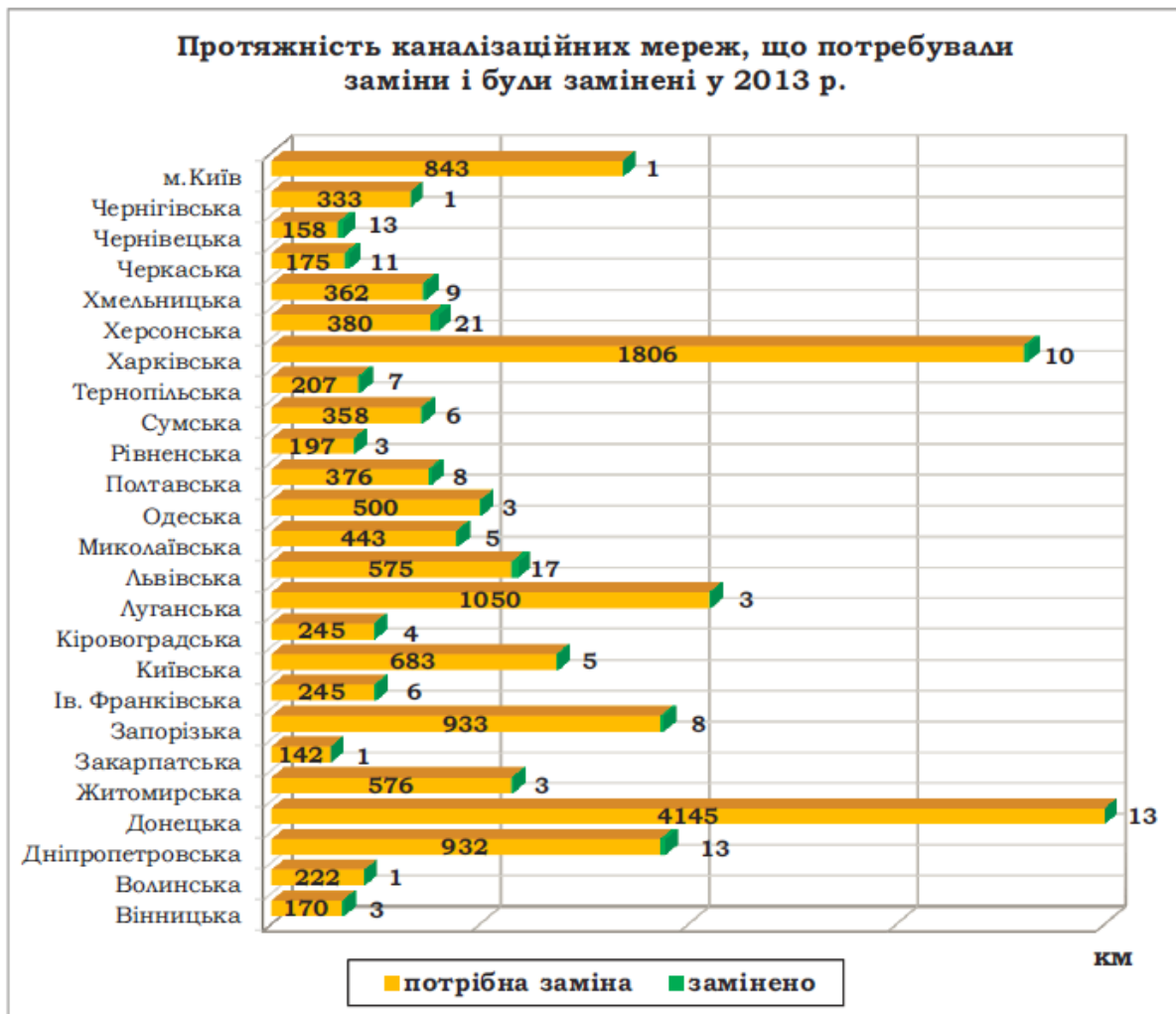
	2013	2012
Requires replacement	37.5%	37.4%
Replaced throughout the year	1.1%	1.2%

The state of the sewerage network in separate regions, as in previous years, was considerably varied. The networks in the most critical state were that of cities in the Donetsk, Luhansk and Kharkiv regions, where a respective 60.3%, 59.9% and 57.2% of them required major upgrades, as well as that of the Zaporizhia region, where 43% of it needed to be repaired. In other regions, the share of the sewerage network requiring replacement averaged 27.6%-38.1%.

Table 11 – Share of sewerage network requiring replacement in 2013 per region



Table 12 – Length of sewerage network requiring replacement and that was replaced in 2013 per region



3. Performance of services

3.1 Quality of service

The service quality is not yet satisfactory and needs to be improved. The average continuity of water supply is 14 hours for rural settlements and 17 hours, on average, for the whole population. These indicators increased by 44% and 9%, respectively, between 2005 and 2013 (MinRegion 2013c). In 2008, drinking water compliance with physical-chemical parameters was 87%, and for bacteriological standards it was 96.5% (MinEnv 2010). Average water consumption by households ranges from 88 liters per person per day to 174 liters per person per day (NKREKP 2013). [The World Bank]

3.2 Efficiency of Services

The satisfaction of the Ukrainian population with the quality of water (per Gallup Poll) is low, at 43%. This number is considerably lower than in most countries in the region (Gallup 2013).

Overall efficiency. The efficiency of water and wastewater service providers is an issue in Ukraine. In 2013, nonrevenue water reached 30%. The average collection rate was 98% in 2013, and the metering level was 70%, which is below the average metering rate across the Danube region. Such a low metering level does not allow for consistent measurement of all water consumption, and as a result, there may be a discrepancy between the volumes consumed and billed (Ukrstat 2013).

Recent trends. Limited progress has been made in efficiency over the last 10 years. Nonrevenue water (expressed in cu m/km/day) increased by 24% between 2001 and 2013, reflecting poor network maintenance, underinvestment, and improvement in metering level, which increased to 70% in 2013 from 32% in 2004. Nonrevenue water, expressed in cu m/customer/day, decreased by 26%, mainly due to water consumption reduction. On the positive side, the collection rate increased by 18% from 2001 to 2013, rising to 98% from 84%. This evolution shows a better capacity of utilities to generate revenues. [The World Bank]

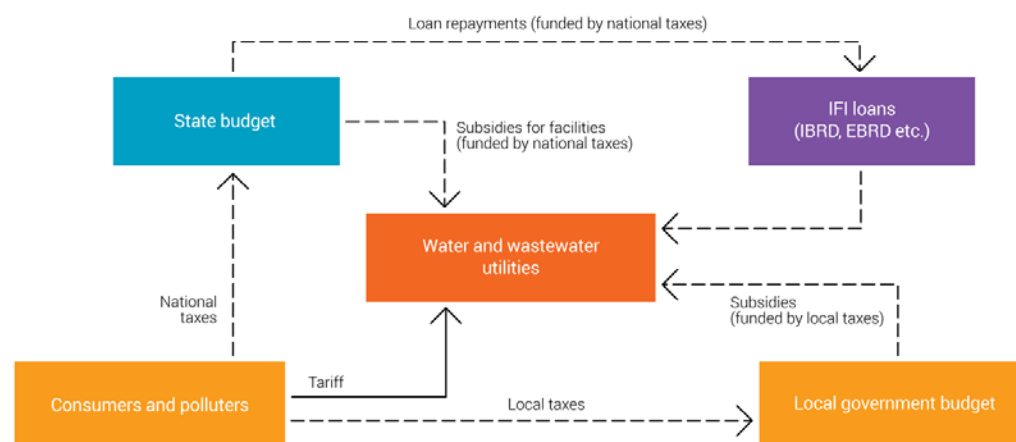
4 Financing of Services

4.1 Overall Sector Financing

Water supply and sewerage projects in Ukraine are chiefly funded by the government under various projects, most recently under the Drinking Water Ukraine programme until 2020, as well as with financing from regional and municipal budgets and water utilities' own funds based on their development programmes. Ukraine's regional ministry also collaborates with international financing organisations, including the World Bank, the European Investment Bank, the European Bank for Reconstruction and Development (EBRD) and the Nordic Environment Financial Corporation (NEFCO), on a number of projects in the sector.

Some of the regions also rely on government subsidies to upgrade their water supply and sewerage networks. In 2013, the regional ministry allocated UAH 440 million in subsidies for 285 sites in the regions of Dnipropetrovsk, Donetsk, Zaporizhia, Luhansk, Mykolaiv and Kherson that required capital repairs. [The World Bank]

FIGURE 6: MAIN SOURCES OF FUNDING OF WATER AND WASTEWATER SERVICES



SOURCE: AUTHORS' ELABORATION

Source: The World Bank

On its website, the State Water Resources Agency has published a report on the use of state budget funds by the agency in 2014. The agency was allocated about UAH 1.453 billion from general and special funds under six state budget programmes to implement projects related to water resources development and environmental rehabilitation of the Dnipro river basin, for ensuring sustainable operations of the country's water resources and their effective management. Expenditures totalled UAH 1.331 billion in the period, or 91.6% of the planned amount. By comparison, the amount of funds allocated from general and special funds under seven state budget programmes for the implementation of similar projects stood at UAH 1.779 billion, with expenditures coming in at UAH 1.566 billion, or 88% of the funding. The government has also published its estimates of the amounts and sources of funding that will be used for the implementation of its programme Drinking Water Ukraine for the period 2011-2020.

Sources of funding	Volume of funding, in million UAH	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
State budget	3,004.30	200.70	238.20	273.50	312.80	346.40	326.54	326.54	326.54	326.54	326.54
Other sources	6,467.40	349.50	408.10	460.30	524.00	570.00	831.10	831.10	831.10	831.10	831.10
Total	9,471.70	550.20	646.30	733.80	836.80	916.40	1,157.64	1,157.64	1,157.64	1,157.64	1,157.64

4.2 Investments

The water sector in Ukraine is characterised by very low investments and tariffs that do not cover operating costs. Water and sanitation utilities suffered from underinvestment for more than a decade, a situation that persists, since only 14% of the costs of the sector are dedicated to investments. Tariffs, which are the major source of sector funding, do not cover operations costs.

It is estimated that investments of more than EUR 6.0 billion are needed in the water sector. No recent estimates exist, but according to a 2006 World Bank study, an estimated EUR 6.2 billion is needed for priority rehabilitation of the water sector, or EUR 15 per capita per year. Sector assets have been depleted significantly since the early 1990s because of years of neglect and underinvestment. Moreover, the current sector equipment is highly energy-intensive and oversized because of low energy prices and irrational consumption during the Soviet era, and requires modernisation. About 60% of these investments are needed in water supply service; the remainder will fund the rehabilitation of sanitation systems. The investments in water supply are essentially aimed at curtailing electricity consumption, reducing technical and commercial losses, and bringing water quality up to healthy standards. The rehabilitation of sanitation systems is intended to curb environmental externalities and reduce electricity consumption (World Bank 2006).

Investment programmes are only partially implemented due to chronic underfunding from the state budget. National and regional state programmes, such as the State Drinking Water of Ukraine Programme, the State Programme of Reforming and Developing Housing and Communal Economy, and the State Programme for Ensuring Priority Centralised Water Supply in Rural Settlements, are financed under general expenditures of the state budget. Local budgets (region, district, or municipality level) and revenues from water tariffs provide only some complementary funding. [The World Bank]

The National Commission for State Energy and Public Utilities Regulation has already endorsed the 2015 investment programmes of a number of water utilities, including Boryspilvodokanal (UAH 7.68 million), Prylukyteplovodopostachannya (UAH 1.03 million), Vodgeo (UA 1.364 million), Kherson water supply and sewerage management authority (UAH 5.3 million), Dniprovodokanal (UAH 31.634 million), Kryvasvodokanal (UAH 23.6 million), Infoksvodokanal (UAH 27.3 million), Novomoskovsk Vodokanal (UAH 1.3 million), Dniro-Kirovograd (UAH 9.5 million), Shepetivka water supply and sewerage management authority (UAH 1.3 million), Pervomaisk water supply and sewerage management authority (UAH 322,300), Konotop water supply and sewerage management authority (UAH 402,770), Vodokanal Karpatviz (107,670), Izmail water supply and sewerage management authority (UAH 582,810), Ternopilvodokanal (UAH 2.65 billion), Vinnytsyaoblvodokanal (UAH 2.71 billion), Rubizhansk water supply and sewerage management authority (UAH 399,000), Nikopol water supply and sewerage management authority (UAH 331,310), Mariupol water supply and sewerage management authority (UAH 11.1 million), Volodymyr-Volyn water supply and sewerage management authority (UAH 361,850), Zhytomyrvodokanal (UAH 5.9 million), Shostka water supply and sewerage management authority (UAH 1.37 million), Balakliysky vodokanal (UAH 234,600).

In February 2012, Ukraine's Parliament approved amendments to legislation regulating investment activities in the housing and communal services sector, including water supply and sewerage services. The law stipulates that investment programmes should be developed by entities in the sector, which should open special accounts to transfer the funds required to carry out the projects. The money in these accounts should be used only for the purposes of their investment programmes. The threshold value of the investment should equal the interest at which the entity attracts the investments and should not exceed 18.48% before taxes. The volume of investments attracted should be in the amount that can be repaid over the term of implementation of the investment programme, while the deadline for the project implementation should be shorter than the repayment period.

Ukraine's main strategy for the development of its water supply and sewerage services sector is detailed in the Drinking Water Ukraine programme for the period 2011-2020. The bill for the

programme says that its aim is to guarantee citizens' rights to an adequate standard of living and environmental security by ensuring the necessary amounts of drinking water in accordance with established standards. Under the programme, the government seeks to bring sanitary zones and protection zones of drinking water sources in line with regulatory requirements; assess the environmental and hygienic condition of drinking water sources; examine the conditions of waste water treatment plants; build and reconstruct water and waste water treatment plants to reduce the volume of untreated wastewater; build facilities for additional treatment of drinking water and bottling facilities using the latest technologies; optimise centralised water supply. The programme is financed with money from the state budget and local budgets, water utilities' own funds, internal and external borrowing and grants from international organisations.

4.3 Cost recovery and tariffs

The water sector lacks funds to ensure proper maintenance of assets and sufficient investments. With an operating ratio of 0.74, water utilities do not generate sufficient revenues to cover their operational costs, not to mention their capital expenditure. Cross-subsidies between commercial and residential customers are widely used. With water tariffs being kept low for social considerations, the sector has suffered from underinvestment and poor maintenance for decades. Moreover, water utility inefficiency translates into high energy consumption, resulting in an accumulated value of outstanding electricity bills of regional water companies of UAH 3.5 billion (approximately EUR 300 million) as of end-2013. Utilities remain one of the largest debtors of electricity supply companies.

Tariffs have been increasing and will continue to increase in the near future. Tariffs for residential customers doubled between 2001 and 2013. In the same period, the annual average inflation rate was 9.3%. Nevertheless, water tariffs remain low and are a major limitation to the sustainability of utilities. They are expected to continue increasing to reach compliance with the cost recovery principle.

Tariff affordability is not an issue for the population. The potential average water and wastewater bill represents 1.9% of average household income, indicating there is ample room for higher tariffs from a social standpoint. For the poorest quintile, it represents more than 3%. The regulatory framework defines a formal subsidy scheme to address affordability issues. A 2014 governmental decree introduced a national social standard approach in the sphere of housing and utility services. According to this decree, subsidies are granted to households for a specific period, and depending on the average income of the household. Subsidies for centralized cold water supply and centralized wastewater service represent from 7 m³ to 9 m³ per person to 4 m³ per person per month, and for centralized hot water supply from 3.5 m³ per person to 1.6 m³ per person per month (Verkhovna Rada 2005a). [The World Bank]

5 Key regulations that should be taken into account when entering the sector

Ukraine has several laws regulating activities in the field of water supply and sewerage services, local association Drinking Water Ukraine says on its website. These include the Water Code of Ukraine, Civil Code of Ukraine, Economic Code of Ukraine, Administrative Offences Code of Ukraine, Land Code of Ukraine, Law on Drinking Water and Water Supply, Law on Housing Services, Law on Licensing Certain Types of Activities, Law on Monopoly, Law on Pipeline

Transport, Law on Metrology and Metrological Activity, Law on Consumer Rights Protection, Law on Ensuring Sanitary and Epidemiological Welfare, Law on Lease of State and Municipal Property, Law on Concessions, Law on National Programme Drinking Water Ukraine until 2020, Law on National Programme for Reforming and Developing Housing Services 2009 – 2014. (The laws can be found in Ukrainian language at <http://www.apvu.org.ua/ukr/perelik/>)

For investors particularly interested in Ukraine's drinking water market, it is important to know that activities in the industry can be carried out by enterprises of all forms of ownership, according to the Law on Drinking Water and Water Supply. State-owned utilities in charge of drinking water supply can be privatised according to law, however all networks, facilities and centralised drinking water equipment in local settlements are considered particularly important objects and they are not subject to privatisation. The change in ownership or transfer of ownership of drinking water supply facilities (excluding centralised drinking water facilities) is carried out in a manner prescribed by law, provided that this does not affect the operation of the relevant networks or parts of them, drinking water quality and service to consumers or leads to an increase in water supply and sewerage services.

Companies in charge of drinking water distribution are required to have a number of documents in order to be eligible for carrying out such operations, including a special water use permit or subsoil use permit (in the case of underground water usage); a licence for performing business activities in the field of water supply and sewerage services; a state act arranging rights for permanent use or ownership of the land; a technical project for the location of the water network, facilities and equipment, agreed and approved in the established order.

Drinking water services should be provided on the basis of contracts with enterprises, institutions, organisations, owners of private buildings and other consumers with direct access to drinking water supply.

According to Ukraine's Law on Licensing Certain Types of Activities, centralised water supply and sewerage services is among the activities that enterprises should obtain a permit for in order to be qualified to perform. The application for obtaining such a licence should contain information about the applicant (name, address, banking credentials, identification number (for a legal entity); the type of activity to be performed, the names of subsidiaries or other affiliated businesses (if any), the location of the activities to be performed. The licence is issued by a specially authorised licensing body.

Last year, Ukraine's regional ministry issued building standard regulations and technical guidance concerning the construction of external water supply networks and facilities (http://www.minregion.gov.ua/attachments/files/bydivnitstvo/tehnichne-regulyuvannya/normuvannya/DBN/2014/DBN_V.2.5-74_2013.pdf) and external sewerage networks and facilities (http://www.minregion.gov.ua/attachments/files/bydivnitstvo/tehnichne-regulyuvannya/normuvannya/DBN/2014/DBN_V.2.5-75_2013.pdf).

DISCLAIMER:

Whilst the information contained in this Profile has been given in good faith and every effort has been made to ensure its accuracy, All Data Processing cannot guarantee the accuracy of this information and hereby expressly disclaims any responsibility for error, misinterpretation and any and all loss, disappointment, negligence or damage caused by reliance on the information contained in the Profile or any failure or alleged failure in the delivery of the Service referred to herein, or in the event of bankruptcy, liquidation or cessation of trade in any company, individual or firm referred to herein. Confirmation of the information accuracy should be sought from the establishments concerned. Unless otherwise stated, the copyrights and any other rights in all material on this site are owned by All Data Processing. Use of this Profile is provided by All Data Processing

subject to the following Terms and Conditions:

1. Use of this Profile constitutes your acceptance of these Terms and Conditions which take effect when you first use this Profile. All Data Processing reserves the right to change these terms and conditions at any time by posting changes on line. You are responsible for reviewing regularly information posted on line to obtain timely notice of such changes. Your continued use of the Profile after changes are posted constitutes your acceptance of this agreement.
2. Neither All Data Processing nor other related parties, whilst endeavouring to provide 24/7 availability, will be held liable if for any reason the Profile is unavailable at any time.
3. Access to this Profile may be suspended temporarily or permanently and without notice.
4. Whilst All Data Processing endeavours to ensure that the information on this site is correct and up-to-date, no warranty, express or implied, is given as to its accuracy and All Data Processing does not accept any liability for error or omission.
5. Part of this Profile contains materials submitted to All Data Processing by third parties. Third parties are responsible for ensuring that materials submitted for inclusion on this Profile complies with national and relevant international law. All Data Processing can not guarantee the accuracy of this material and hereby expressly disclaims any responsibility for error, omission or inaccuracy in the material, misinterpretation and any all loss, disappointment, negligence or damage caused by reliance on the information contained in the Profile or any failure or alleged failure in the delivery of the services referred to herein, or in the event of bankruptcy, liquidation or cessation of trade of any company, individual or firm referred to herein. Confirmation of the information accuracy should be sought from the establishments concerned or from All Data Processing upon explicit request.
6. All Data Processing shall not be liable for any damages (including, without limitation, damages for loss of business or loss of profits) arising in contract, tort or otherwise from the use of or inability to use this Profile, or any data contained in it, or from any action or decision taken as a result of using this Profile or any such information.
7. All Data Processing accepts no responsibility for the content of any site to which a hypertext link from this Profile exists. Such links are provided for your convenience on an "as is" and "as available" basis with no warranty, express or implied, for the information provided within them.
8. If any of these terms should be determined to be illegal, invalid or otherwise unenforceable by reason of the laws of any state or country in which these terms are intended to be effective, then to the extent and within the jurisdiction in which that term is illegal, invalid or enforceable, it shall be severed and deleted from the clause concerned and the remaining terms and conditions shall remain in full force and effect and continue to be binding and enforceable.
9. By accessing and reading any part of this Profile, you should have accepted these Terms in full.

Copyright

All rights reserved. Downloads and print extracts of SeeNews – Research & Profiles content are allowed for personal and non-commercial use only. Re-publication or re-distribution of content, including by framing, is strictly prohibited without the prior written consent of SeeNews – Research & Profiles.

SeeNews Competitive Intelligence and its logo are registered trademarks of All Data Processing Ltd.

SeeNews 2015