

Background note

Enabling environment for investment in water security

Pilot test in the EU's Eastern Partner Countries: Preliminary analysis

(for consultation)

11th Roundtable on Financing Water 30-31 May, Brussels

This paper will inform discussions at the 11th Roundtable on Financing Water: regional meeting on the EU's Eastern Partnership (EaP) countries (Brussels, 30-31 May 2024), co-convened by the OECD and the European Commission.

It presents an overall assessment based on the analysis of individual countries, covering Armenia, Azerbaijan, Georgia, Republic of Moldova, and Ukraine. The analyses of these countries, along with the revised version of this report, will be compiled in a common report.

This background document is intended as a draft for consultation during the Roundtable. We welcome written feedback to further inform and enhance the subsequent working paper.

This document was produced with the financial assistance of the European Union. The views expressed herein can in no way be taken to reflect the official opinion of the European Union, the OECD, or their member countries.

Keywords: water security, investment, public and private finance, enabling environment, tool, data, policy, regulation, water supply, sanitation, wastewater, water resource management, irrigation, Eastern European Countries

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This paper is part of a series of country and regional projects aimed at pilot testing a Scorecard designed to assess the enabling environment for investment in water security. This document is part of the second round of pilot tests that took place in the EU's Eastern Partnership countries. This will culminate in an overall publication presenting regional and country findings and policy recommendations. An overarching report outlining findings from the initial phase [ENV/EPOC/WPBWE(2023)6], and a country specific report focusing on Armenia [ENV/EPOC/WPBWE(2023)7] are available. Subsequent reports will encompass the findings and policy recommendations of a third series of pilot tests in OECD member countries and partners.

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Executive Summary

This report summarises initial findings from the pilot application of the OECD's Scorecard for assessing the enabling conditions for investment in water security in countries that form part of the European Union's (EU) Eastern Partnership (EaP). This tool aims to identify existing barriers to investment in water security for public and private investors. Findings can help inform policy reforms aimed at addressing these barriers. Water security in this context refers to having reliable access to a sufficient quantity of clean water.

The assessment in EaP countries, conducted as part of the "European Union for Environment" programme offers policy makers and investors a snapshot of the current situation and recommendations on how to enhance the enabling environment for investing in water. This builds on the OECD's long-standing work on water in both OECD member countries and Eastern Europe and the Caucasus, spanning more than two decades.

Launched in 2009, the EaP is a strategic and ambitious initiative that builds on common values and rules, mutual interests and commitments, as well as shared ownership and responsibility. It aims to strengthen and deepen the political and economic relations between the EU, its Member States, and the partner countries, as well as supports sustainable reform processes in countries of Eastern Partnership.

The Eastern Partnership Countries – Armenia, Azerbaijan, Georgia, Republic of Moldova and Ukraine – share a common historical legacy that influences water financing challenges today. That legacy lives on through commonalities in terms of infrastructure, regulatory approaches, and policy frameworks. There are also major differences – in terms of available natural resources, population distribution and economic structure and growth. Ukraine has also suffered significant negative impacts on its environment, economy, and infrastructure due to the ongoing Russian aggression.

As the countries work to enhance their water security and come into closer alignment with the EU's water *acquis*, they face challenges in terms of mobilising public and private domestic finance, as well as international finance, due to issues related to limited fiscal space, macroeconomic conditions, and geopolitical instability. Addressing the water financing challenge requires improving the enabling environment for investment. This involves evaluating current conditions to identify and address barriers. Although the region has access to finance from international donors, which can be used to address some barriers and attract additional sources of funding, comprehensive efforts are crucial. Overcoming these barriers will optimise the use of and access to both international and public financing, ultimately enhancing water security in Eastern Partnership countries.

How mature is the enabling environment for investment in water security in the region?

Over the past two decades, Eastern Partnership countries have made significant progress in establishing sound policy frameworks for investment, water resources management, and environmental and social sustainability of infrastructure projects. In this process, they have benefitted from comprehensive support from the European Union. Given that the pace of reforms has not been uniform, the EaP countries are at varying stages of maturity of the enabling environment for investment in water security.

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At the same time, common barriers for such investment still exist across the region. A major barrier relates to the inefficient implementation of economic instruments for water resources management and water related service delivery. While all countries have some form of abstraction and pollution charges and legal frameworks that mandate cost recovery principles for tariffs, these instruments are not fully adequate to encourage rational use, reduce pollution, or fund sufficient investments in the water sector, plus they are poorly enforced in most cases. This undermines investments aimed at improving water quality and results in higher overall costs. Governments must address these challenges to effectively deploy the ambitious wastewater investment plans outlined in the River Basin Management Plans, which are currently being developed or implemented across the region.

The countries face a dual reality very often: relatively well-performing utilities in major urban areas are able to ensure revenue and attract investors, including private ones, whilst numerous smaller service providers with limited capacity in peri-urban and rural areas are less able to do so. These smaller service providers face challenges in complying with regulatory requirements and developing investment plans, which leads to unsustainable service delivery. Challenges around accessing finance are exacerbated by the small size of projects, the absence of clear funding guidelines and mapping of funding sources, and limited human capacity that restricts the allocation of funding and financing to remote areas.

Non-revenue water remains a significant problem in the region, largely unaddressed in recent years due to unbalanced contract arrangements between service providers and service authorities, and limited sectoral investment planning. Given the increasing threat of water scarcity due to climate change and human impacts on water quantity and quality, addressing water losses can no longer be postponed in the region. High levels of non-revenue water remain a significant deterrent to cost-recovery and to investment.

Service delivery in rural areas lacks comprehensive national or local strategies and investment plans, which impedes unlocking larger funding opportunities and potential cost reductions. A portion of the rural population relies on unregulated service providers. The division of responsibilities among different Ministries with separate mandates for water and for rural areas complicates the development of a unified national strategy, perpetuating a "project-to-project" short-sighted approach, which is typically dependent upon the availability of donor funding.

What can be prioritised to improve the enabling environment for investment in water security?

The countries' strong relationship with the EU should be leveraged to continue establishing a robust enabling environment for water related investment. There is a unique opportunity to learn from the experiences of EU member states that have a recent experience of approximation, such as Estonia, Latvia, Lithuania, Bulgaria, and Romania. Understanding the challenges these countries faced when they embarked on the accession process and how barriers were overcome will be critical, including for improving service delivery in rural areas.

National strategies and investment plans should be developed to enhance service levels throughout the sector and particularly in rural areas, focusing on the necessary goals and conditions for success rather than exclusively on the mechanisms employed. Countries should consider diversifying technology types for service delivery and ensuring the long-term maintenance of these technologies. Additionally, consolidating service providers and formalising unlicensed service providers can create a more cohesive and integrated approach where appropriate.

To enhance the regulatory frameworks for wastewater and improve the efficiency of economic instruments, detailed national action plans should be designed. It should aim to align wastewater standards with EU Directives across all the countries and include a mechanism for progressive enforcement and periodic revision of economic instruments. This will enhance the use of existing investment plans (through the River Basin Management Plans), help mobilise domestic funding and financing sources, and attract additional funds by reducing the pollution cost burden on the public. This approach requires increasing the cost of misusing and polluting water, mobilising and deploying resources for monitoring and enforcement,

restructuring subsidies that do not promote water security, and enhancing public awareness, particularly during water scarcity events.

Donor funding can also support capacity building to establish and strengthen existing government units, ensuring long-term sustainability and independence from donors. For instance, creating centralised units to support service providers with investment planning and project preparation can help ensure bankable projects are identified, financed, and implemented to deliver their objectives. This will require clear guidelines around project application procedures. These units should not be tied to a specific donor model but rather established independently, with a well-designed finance strategy that gradually makes these units independent of donors, and capable of engaging with multiple donors.

Funds for climate mitigation and adaption should also be explored to diversify sources of finance to address the major challenge of non-revenue water. Addressing non-revenue water represents an opportunity to reduce greenhouse gases emissions and natural resource consumption while improving vital service delivery for the population, as well as an opportunity to support the energy transition as well as reduced operating costs.

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1 State of play of Eastern Partner Countries

Project context

1. This report presents initial findings from the assessment of the enabling environment for investment in water security in Armenia, Azerbaijan, Georgia, the Republic of Moldova (hereafter Moldova), and Ukraine. The report will serve as background for discussions at the 11th Roundtable on Financing Water on 30-31 May 2024. It was produced within the water pillar of the "European Union for Environment" programme. Under the programme, action on ensuring water security focuses on River Basin Management Plans (RBMPs) and their associated Programmes of Measures. This involves support for drafting and implementing RBMPs, reforming domestic revenue-raising instruments such as taxes and tariffs, enhancing the mechanisms for water allocation and improving interaction among users, and identifying innovative and cost-effective approaches for financing the Programmes of Measures.

2. Since 2016, RBMPs for 12 pilot river basins in the EaP countries have been refined or newly developed with EU support. Their official approval is advancing. Improved water management in these basins will benefit 30 million people and will concern 390,000 km². Transboundary cooperation is improving in several river basins: Kura and its sub-basins Araz and Khrami-Debed, Dniester/Nistru, and Danube.

3. Although the average investment needs were estimated at EUR 25 per inhabitant per year, water infrastructure in the region chronically lacks resources for development, maintenance, and repair. To help address the finance gap, the EU has leveraged funding in cooperation with several multilateral and bilateral providers of development finance, including AFD, EIB, EBRD, KfW, and NEFCO. Two consecutive regional programmes (2016-2021 and 2021-2024) helped to improve water management and involved Austria, France, UNECE, and the OECD as implementing partners.

4. OECD's work with Eastern Partner countries (EaP) over many years has shown that despite a clear need for investment in water security, countries find it difficult to mobilise finance and investors find it challenging to identify bankable projects and develop sustainable pipelines of projects for investment.

5. The OECD believe that a holistic analysis of the enabling environment can provide evidence to support the long-standing discussion on the urgent need for investment in clean water and sanitation services, irrigation services and other water-related investments. Such analysis engages ministries of finance, economy, agriculture, energy, regional development, infrastructure, health, disaster recovery and promotes a whole-of-government view of the importance of water security and the barriers to investment in this area. It presents the issues and barriers in a single evidence-based document, drawing technical and political attention and dialogue.

EU and Eastern Partnership: common efforts for enhanced water security

6. The European Union's Eastern Partnership was established in 2009 as a joint initiative involving the European Union, its Member States, and six Eastern European partners: Armenia, Azerbaijan, Belarus¹, Georgia, Moldova, and Ukraine. The primary aim of the Eastern Partnership is to build a common area of shared democracy, prosperity, stability, and increased cooperation. Another critical objective is to accelerate political association and further economic integration between the European Union and the partner countries.

7. Georgia, Moldova, and Ukraine share the status of EU candidate countries, with Georgia achieving this status in 2023, and both Moldova and Ukraine since 2022. Each country has entered into an Association Agreement with the EU, which incorporates a Deep and Comprehensive Free Trade Area (Georgia, Moldova and Ukraine), and standard Association Agreement commitments (Georgia). These ambitions commit the countries to gradually harmonise their national legislation with EU regulations, including critical environmental directives such as the Water Framework Directive, Floods Directive, Marine Strategy Framework Directive, Urban Wastewater Directive, Drinking Water Directive, and Nitrates Directive.

8. The Association Agreements with the European Union set the ambition and direction of water policies and contain time-bound requirements to approximate to EU legislation including the Water Framework Directive (OECD, 2021_[1]). The integration of water law is a standard element of the association agreements, ensuring that water management practices are increasingly aligned with EU and international norms. The Association Agreements with Georgia, Moldova, and Ukraine, as well as the Comprehensive and Enhanced Partnership Agreement with Armenia, contain ambitious time-bound commitments to reform water policies and implement EU water-related directives. There are six relevant Directives to be transposed in relation to water. Roadmaps or action plans were developed in support of implementation. Deadlines for approximation are listed in Annexes to Association Agreements; for example, river basin management plans should be prepared within 10 years from entry into force of the respective association agreement (European Union, 2020_[2]).

9. Furthermore, the Association Agreements influence the enabling environment, shaping the policy frameworks, prioritising certain elements, and defining the type and availability of investment, which also in turn indirectly shapes the enabling environments of the respective countries and the region.

10. The EU-Armenia Comprehensive and Enhanced Partnership Agreement (CEPA) provides a framework for bilateral ties, underpinning cooperation to support reforms and stimulate development in a wide range of areas. Water features heavily as part of the environmental protection elements of CEPA, including time-bound commitments to harmonize with the EU Water Framework Directive, Floods Directive, Urban Wastewater Directive, Drinking Water Directive, and Nitrates Directive.

11. The EU and Azerbaijan relations are based on the EU-Azerbaijan Partnership and Cooperation Agreement in force since 1999. In particular, the EU and Azerbaijan are working closely to advance the country's prospects for achieving its environmental and climate change related goals. For example, Azerbaijan joined the Eastern Europe Energy Efficiency and Environment Partnership (E5P) in 2019 to advance green investments.

12. The post-2020 Eastern Partnership's agenda for recovery, resilience and reform is underpinned by an ambitious <u>Economic and Investment Plan</u> (EIP). The plan is expected to leverage up to €17 billion in public and private investments to stimulate jobs and growth, support connectivity and the green and digital transition. EU support provided to the partner countries in conjunction with the EIP includes investments in the water sector. Guarantees and blending are critical instruments of the EIP, helping to

¹ Relations with Belarus are currently suspended.

facilitate and de-risk projects which may not be sufficiently attractive to investors. Conditionality exists in contexts like the Eastern Partnership and the Neighborhood Investment Platform, particularly for projects related to environmental sustainability, which would include water management.

13. Since the start of Russia's war of aggression against Ukraine in February 2022, the EU stands firmly with Ukraine and its people, and will continue providing political, financial, economic, humanitarian, military, and diplomatic support. The Ukraine Facility, which entered into force on 1 March 2024, foresees up to €50 billion of stable financing, in grants and loans, to support Ukraine's recovery, reconstruction, and modernisation for the period 2024 to 2027. Of this, up to €32 billion of the Ukraine Facility is indicatively earmarked to support reforms and investments set out in the 'Ukraine Plan', whereby disbursements will be conditioned to the delivery of identified indicators. On 14 May 2014, the Council of the EU adopted an implementing decision giving a positive assessment to the 'Ukraine Plan'. The plan emphasizes structural reforms and investments in the sectors with the largest growth potential. Financial support under the 'Ukraine Plan' will be made available under the precondition that Ukraine continues to uphold and respect effective democratic mechanisms, strengthen the rule of law, uphold the independence of the judiciary, strengthen the public administration reform, and fight corruption and money laundering.

The current status of water security in European Union's Eastern Partnership

14. Water security varies widely among the Eastern Partnership Countries. Armenia and Azerbaijan, face significant water stress at the sub-national level, with pressures from climate change increasing the frequency of droughts and unpredictability of rainfall. Moldova and Georgia, have relatively abundant freshwater resources but have issues with distribution and access to clean drinking water in rural areas. All countries face issues with limited access of the population to wastewater treatment. The countries with formal obligations with the European Union have a particular challenge with a set timetable and ambition for progression of water-related reforms. In particular, the requirements for alignment with the Water Framework Directive and associated EU Directives pose legislative, institutional, technical and financial challenges (OECD, 2021[1]).

15. In all of the Eastern Partnership countries there are governmental authorities responsible for water management and environmental protection. Overall, ministries of environment are the main governmental bodies responsible for developing water management policy and legislation. Within these ministries are dedicated institutions for monitoring, analysing and disseminating data and information on water quality and quantity. The service delivery mandate, including water and wastewater services, has been delegated to local governments in many cases.

16. The Eastern Partnership countries have a considerable backlog of needed investments in water and wastewater infrastructure. The infrastructure gap is particularly notable with regard to meeting obligations under the EU's Urban Wastewater Treatment Directive and achieving SDG 6.1 and 6.2 targets in rural areas in particular. The establishment of technically and financially sustainable River Basin Management Organisations also poses a significant challenge.

17. In 2022, the region had high rates of population using safely managed water service, as depicted Figure 1.1, being approximately three-quarters of the total population. Ukraine benefited from the highest coverage, with nearly 90% of its population utilising safely managed drinking water services in 2022, although that has now been negatively impacted by Russia's war of aggression. Armenia follows, providing over 80% of its residents with similar access. Moldova has achieved a coverage of 75% as of 2022. Meanwhile, in Azerbaijan and Georgia, the proportion stands at approximately 70% (2022).



Figure 1.1. Evolution of the proportion of population using safely managed drinking water and sanitation services at national level (2012 to 2022) – SDG 6.1.1 and 6.2.1

Note: Azerbaijan does not have" Safely Managed" Sanitation data for 2022. Republic of Moldova does not have" Safely Managed" Sanitation data.

Source: WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP)- <u>https://washdata.org/data/household#!/</u>, 2024.

18. Treatment of wastewater remains insufficient in the region (Figure 1.1). In 2022, less than half of the population had access to safely managed sanitation services - with Ukraine being the exception with a coverage of more than 70% of the population (UN Water, $2022_{[3]})^2$, prior to Russia's war of aggression.

19. For instance, in Armenia, treatment is only a physical filter. In Baku, the capital of Azerbaijan, only half of the collected water is treated. In Georgia, wastewater treatment facilities featuring both physical and biological processes are primarily found in major urban areas such as Tbilisi, Rustavi, Gardabani (served by Georgian Water and Power, LTD), and Batumi, Kobuleti, Poti (operated by Batumi Water). Additional facilities are under construction in other large cities including Kutaisi, Telavi, Zugdidi, and Khashuri. However, many smaller urban settlements lack proper treatment systems, resulting in untreated wastewater being discharged directly into water bodies. In rural areas, there are no sewerage networks, and households typically use pit holes or septic tanks. In Moldova, most treatment plants operate with primary treatment only, which means that organic wastewater is not processed. In addition, poorly treated industrial wastewater affects the performance of municipal treatment plants, and much untreated industrial wastewater is discharged directly into rivers. In Ukraine, urban treatment plants had insufficient capacity,

² This is likely to have changed with the conflict; however, no updated data is currently available.

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lack any tertiary treatment and technically were in poor condition, while there was a general lack of sewage networks in rural areas (European Environment Agency, 2020[4]).

20. Water quality is major issue, mainly due to low levels of wastewater treatment as well as point and diffuse pollution from agriculture, industry and mining. Water quality data in the region is patchy, for example only Georgia reported on the proportion of water with good ambient quality (SDG 6.3.2) – above 80% overall (UN Water, 2024). Almost half of rivers are exposed to phosphate pollution high enough to cause algal blooms. (European Union, 2020[2])

21. In the region, the challenge of water stress³ varies considerably, reflecting the diverse climatic and hydrological conditions across Eastern Partnership countries. Armenia faces considerable water stress, attributed to its arid conditions and the intense demand from various sectors; it is classified as a high-water stress country by the World Resource Institute's Aqueduct database. In Azerbaijan, water stress ranges from moderate to high. Georgia enjoys relative water abundance but is not immune to seasonal stress. Moldova's water stress level is moderate, with dependence on key rivers for its water supply. Lastly, Ukraine exhibits regional variation in water stress, with the southern and eastern areas heavily impacted by Russia's invasion, resulting in damaged and destroyed water infrastructure, including major reservoirs. Both Georgia and Moldova fall into the low to medium water stress category, while Ukraine's classification varies regionally, mirroring its diverse climatic zones (World Resource Institute, 2024_[5]).

Overview of the scorecard for assessing the enabling environment for investment in water security

22. The Scorecard, developed by the OECD, assesses the enabling conditions for investment in water security at the national level. An initial version of the Scorecard tool was pilot tested in Asian countries in collaboration with the Asian Development Bank in 2022. A revised version of the Scorecard tool has now been piloted in the EU Eastern Partners countries of Armenia, Azerbaijan, Georgia, Moldova and Ukraine.

23. This tool identifies existing barriers to investment in water security, to inform the design of policy reforms aimed at addressing them. The tool's analysis pinpoints issues that hamper water security-related investments from public and private investors. By looking at water security through different water related lenses, it collects in one place an evidence base to inform decision makers from the whole of government on the barriers to investing in water security

24. The Scorecard is primarily tailored to meet the needs of policy makers, donors and investors who want to improve the enabling environment for water security and reduce the transaction costs of investing in water security in a country. This includes, but is not limited to, ministries and other government agencies overseeing water services and water resources management, Ministries of Finance, Domestic Commercial Banks, National Development Banks and other entities capable of investing in water security. Furthermore, the tool is also relevant for international stakeholders (i.e. International Financial Institutions (IFIs), development agencies, and bilateral donors) that are looking to invest in water security.

25. In essence, this tool can serve as an initial platform and component for fostering national dialogues among various entities responsible for creating the enabling conditions, especially those focusing on investments in water security.

26. Enabling conditions for investment in water security are categorised into four dimensions, include the country's policy framework for investment (dimension 1), the water policy framework for investment

³ Water stress is the ratio of withdrawals to total renewable supply of a given area, region, or country for a defined period of time.

(dimension 2), the framework to make projects bankable and sustainable (dimension 3), and the contribution of other economic sectors to water security (dimension 4) (see Figure 1.2).





Source: Authors

27. The Investment Policy Framework (dimension 1) focuses on the investment framework in the country. It aims to assess if the country is attractive for investors in general. Numerous organisations identify features of a strong investment environment (see the OECD Policy Framework for Investment, G20 Infrastructure Hub, OECD report on Financing a Water Secure Future (OECD, 2022_[6]) and the World Bank). Many of them focus on investment policy, including promotion and facilitation, trade, corporate and public governance, public procurement and business conduct, institutional arrangements, including independent oversight, decentralisation and accountability (OECD, 2022_[7]). The tool uses the OECD Policy Framework for Investment (PFI) as the basis to assess a country's overall attractiveness for investment. However, substantial modifications were necessary due to the tool's specific focus on water such as decentralisation effectiveness and the need to rely on consistently available public data.

28. The Water Policy Framework (dimension 2) focus on how water related policies can create the conditions for water projects to generate value and attract investment. Water investments operate in a competitive environment, as investors explore opportunities in other domains (energy, transport, health, etc.). However, the main motivations of investors may be different. Some investors may seek investment opportunities for multiple reasons, including social or environmental impacts (OECD, 2022_[7]). National water sectors must either be competitive with other sectors or have clear guidelines and incentives to attract investment. This dimension is organised around cross-cutting water issues. It evaluates the water sector's policy framework, identifying market conditions, policy barriers, and regulatory shortcomings that might hinder successful water security investments, with an aim to ensure returns comparable to investments in other sectors. As these conditions vary from one sub-sector to another (water supply and sanitation, irrigation, water resources management), further disaggregation has been introduced for the purpose of the assessment in the Eastern Partnership countries.

29. Water Project (dimension 3) assesses whether the water-related institutional structures, mandates, policies, and regulations are conducive to bankable and sustainable water projects. For

example, this considers business models, economic and financial viability, and their broader societal and environmental impacts. While financiers typically focus on the availability of a pipeline of bankable projects, government authorities and project developers should also build project pipelines as part of broader strategic investment pathways to ensure they are resilient and contribute to water security and sustainable growth over the long term and preferably at the least cost (OECD, 2022_[6]).

30. Other economic sectors (dimension 4) focus on economic sectors' impact on water security. Investments in agriculture and food, energy and climate resilience, urban development and other domains can have significant unintended consequences on water availability and exposure and vulnerability to water risks. This dimension aims to assess how other sectors consider their impacts on - and vulnerability to - water resources. It covers the main economic sectors that have an impact on water resources. It assesses physical risks (such as water availability) as well as transitional risks (i.e. changes in regulation) that economic actors can suffer, as well as the impact they have on water security.

31. The four dimensions are interlinked. However, the nature of the linkages between dimensions can differ among countries and regions. The tool explores these four dimensions by identifying key indicators to aid governments and relevant partners in removing investment barriers. These indicators are divided into sub-indicators, covering major risks and financial, environmental, and social returns for both public and private investors. Each indicator is assigned an equal weight within the dimension to capture the broad spectrum of county specific enabling conditions for investment in water security.

32. Each dimension's score is the result of the sum of the sub-questions score, on a basis of 5. Each sub-indicator has a basis of 1. These are not rounded. Responses are only considered if a proof of official document or report is attached to the response. The scoring is automatically calculated based on the results from indicators in the databases and the sum of positive binary/multiple choices questions. This makes the results more robust, limiting the "expert subjective assessment", but adds a layer of complexity for the assessment.

33. Neither 'no responses' nor 'not applicable' responses are counted as zero; therefore, the average is not impacted by missing values. For multiple-choice questions, if over half of the categories lack a 'yes' or 'no' response, the answer is deemed 'no response". For a detailed breakdown of the scoring for each indicator, please refer to the full methodology report.

34. For detailed information on the specific conditions and indicators under each dimension, as well as the methodology please refer to 3Annex A.

Assessment methodology

35. A scorecard methodology is at the heart of the OECD's approach to assessing the enabling environment for financing water security. It provides a holistic framework to assess how countries are enabling finance in water security, including domestic finance mobilisation, policies and planning related to water, and the country's attractiveness to potential investors.

36. An assessment based on the Scorecard has already yielded benefits in Eastern Partnership countries. Early application of this assessment tool in Armenia allowed providing evidence on the barriers to finance in the water sector to the office of the Prime Minister in a concise and structured manner. An OECD recommendation, developed with cross-ministerial consultation and support from Armenian authorities led to the launch of a project to develop a national "Comprehensive Water Security Strategy" to guide government, donor, and private investments in water security.

37. The Scorecard categorises the enabling conditions for financing water security into four dimensions that include:

• the country's policy framework for investment (dimension 1),

- the water policy framework for investment (dimension 2),
- whether there is a pipeline of projects that are both bankable and sustainable (dimension 3), and
- the contribution of other economic sectors to water security (dimension 4).

38. The assessment is based on both external data sources (for Dimension 1 and several indicators in Dimensions 2 and 3) as well as data gathered at the national level by experts based on consultation with government officials. Whenever possible, the Scorecard utilises publicly available data sources. Nonetheless, data for many indicators, such as economic instruments, contract arrangements, and access to finance for service providers, remains challenging to access without engaging with government. Consequently, a survey is employed to collect primary data, aiming to bridge data gaps and to promote enhanced data availability from both public and private sectors for investments related to water security.

39. The tool aids in exploring these four dimensions by identifying key indicators that help governments and relevant stakeholders address investment barriers. These indicators are divided into sub-indicators that assess major risks and financial returns, along with social and environmental impacts for both public and private investors. At this stage in the tool's development, each dimension and indicator has been given equal weight.

2 Assessing the enabling environment for investment in water security in Eastern Partner Countries

40. This section presents the initial findings from the regional analysis for the enabling environment for investment in water security in Armenia, Azerbaijan, Georgia, Moldova and Ukraine. Further research and reviews are planned to finalise the assessment.

Uneven public investment frameworks across the countries

41. The public investment framework across the five Eastern Partner countries displays considerable variation, highlighting distinct governance and economic profiles. There is a common trend where some countries excel in areas like access to infrastructure and accountability mechanisms, while others face challenges in macro-economic stability and corporate governance. As Figure 2.1 below demonstrates, the countries are fairly weak in most of the macro-economic sectors, however, corporate regulation and governance is a common area of strength, particularly Georgia, as detailed below.



Figure 2.1. Eastern Partner Countries's Public Investment Framework

Note: Data is until 2022. Ukraine's assessment reflects the situation prior to February 2022. Source: Authors' analysis based on official sources collected by national consultants in consultation with government officials

42. Over the last three years, inflation has spiked across Eastern Partnership countries, as well as in the European Union, driven by supply chain disruption and energy price instability caused by COVID and the Russian war of aggression against Ukraine. While the EU has averaged around 4-6% inflation, the Eastern Partnership countries have experienced much higher inflation, reaching up to over 28% in Moldova. Inflation in 2024 continues to moderate from the recent highs. However, central banks have intervened by increasing interest rates, raising borrowing costs.

Table 2.1. Inflation in Eastern Partnership countries

Inflation rate, average consumer prices (Annual percent change)		2021	2022	2023
Armenia	1.2	7.2	8.6	3.5
Azerbaijan	2.8	6.7	13.9	10.3
Georgia	5.2	9.6	11.9	2.4
Moldova	3.8	5.1	28.6	13.3
Ukraine	2.7	9.4	20.2	17.7
European Union	0.7	2.9	9.3	6.5

Source: IMF World Economic Outlook imf.org/external/datamapper/PCPIPCH@WEO/ARM/AZE/GEO/MDA/UKR/EU?year=2023

43. Over the last 10 years, the Eastern Partnership countries have generally struggled with inflation which at times has been at least twice as high as the EU⁴. The Eastern Partnership countries generally experience inflation spikes correlated with armed conflict, recently including Russia's war of aggression against Ukraine and conflict between Armenia and Azerbaijan, making analysis that focuses just on inflationary and currency factors difficult. These tensions, and intransigent political instability issues also

account for the countries chronically low "Non-commercial risk" scores. All five Eastern Partnership countries have scores of 2 or lower, with Ukraine having the lowest score of 1, impacted by Russia's war of aggression.

44. All five countries have seen improving **corporate governance** over the last decade as demonstrated in their Global Competitiveness Indices and regulatory quality indicators. Led by Georgia, noted for their protections for minority investors, strong macroeconomic stability, significant business environment reforms, and investments in infrastructure.

45. Prior to and even during Russia's war of aggression, Ukraine had embarked on an ambitious reform agenda to enhance its corporate governance practices. Reforms aimed at improving transparency, combating corruption, and enhancing regulatory oversight have bolstered Ukraine's Scores. The country has also shown improvements in governance indicators such as Voice and Accountability, Government Effectiveness, and Regulatory Quality, according to the World Governance Indicators. Reforms aimed at improving transparency, combating corruption, and enhancing regulatory oversight improved the investing environment. Nonetheless, systemic challenges related to the Rule of Law and Control of Corruption persist.

46. Eastern Partnership countries often face challenges with **decentralization**, which hampers their ability to finance and deliver services beyond major urban centres. Armenia, Azerbaijan, Georgia, and Moldova, despite their relatively small geographical sizes are governed very centrally. Their modest territorial extent can facilitate overcoming difficulties tied to highly centralized governance systems. In these four nations, subnational expenditure accounts for less than 9% of GDP, whilst the OECD average is about 15% (OECD-UCLG, 2024_[8]). Particularly, Armenia and Azerbaijan experience pronounced struggles with decentralization; their subnational governments generate little revenue and consequently have negligible expenditure as a percentage of GDP. This can partially be explained by the concentration of the population in a few cities in countries with a small geographic footprint. Countries prioritize investment in their biggest cities, which in most of the EaP countries is the capital city.

47. In recent years, the Eastern Partnership countries have advanced their **accountability mechanisms**, as evidenced by data from the World Justice Project's Rule of Law Index and Transparency International's Corruption Perception Index. Despite these improvements, all five countries continue to face significant challenges in enhancing accountability mechanisms, highlighting the need for ongoing reforms and international support to foster transparency, integrity, and the rule of law in the region.

48. Armenia has shown progress in regulatory enforcement, suggesting a strengthening of accountability mechanisms, although challenges with corruption perceptions remain, indicating persistent issues within government institutions. Azerbaijan has experienced mixed outcomes in enhancing the rule of law, with some progress in regulatory enforcement but continuous problems with corruption, as reflected by its consistently low CPI scores. In contrast, Georgia has made notable advances in both regulatory enforcement and anti-corruption efforts. Moldova still encounters considerable obstacles in regulatory enforcement and suffers from high levels of perceived corruption, underscoring the urgent need for comprehensive reforms to strengthen accountability mechanisms. Meanwhile, Ukraine has progressed in regulatory enforcement and has stepped up its efforts to combat corruption, which has led to improvements in its corruption perceptions.

An uneven water policy framework between sectors and rural and urban areas

49. The Water Policy Framework (Dimension 2, D2) assesses the policy frameworks for water resources management, drinking water (both rural and urban) and sanitation (both rural and urban). Irrigation will be covered in the next version of the document.

50. D2 evaluates how attractive these water policy frameworks are for investment, highlighting variations among countries. These differences arise from the maturity of the sectors, water supply being the most advanced, and the implementation and enforcement of legislation. Additionally, there are disparities between urban areas, which typically have more advanced enabling environments, and rural areas. This assessment helps identify the strengths and weaknesses within national water policy frameworks, guiding improvements and fostering better investment in the region.

Water resource management: significant improvements in the legislation framework creating opportunities for potential water related investments

51. The evaluation of the water resource management policy framework in the Eastern Partnership countries reveals notable advancements in the management of data and the allocation of water resources. However, availability of up-to-date data for decision makers is a common challenge faced by countries. There is also a clear need to refine the application and effectiveness of economic instruments, indicating a potential for policy advancement and enforcement. The scores for conflict resolution mechanisms, which encompass both national and transboundary concerns, vary considerably, reflecting the complex geopolitical dynamics of the region. This suggests that while progress is evident in certain aspects of water management, there remains significant scope for strengthening the framework, especially in terms of economic incentives and conflict mitigation.



Figure 2.2. An uneven Water Resource Management Policy Framework

Note: This graph presents the range for scoring for the four main indicators under the Water Resource Management Policy framework for all countries included in the analysis (Armenia, Azerbaijan, Georgia, Moldova and Ukraine).

Source: Authors' analysis based on official sources collected by national consultants in consultation with government officials

52. Data accessibility varies between countries and is often fragmented across different government services and agencies. This fragmentation limits the potential use of this data for investment decisions by both public and private sector decision makers. However, in most countries relatively up-to-date data on water resources is available, covering water balance, river basins, and in some instances, flood risks. In Moldova and Ukraine, investors are required by law to consider water supply and demand as part of feasibility studies, especially for large infrastructure and irrigation projects.

53. Centralised water information systems (or environmental systems including water) exist at various levels in the region. However, Georgia alone provides full and freely available data. Other countries, such as Moldova, offer free but partial data, while Ukraine⁵ and Azerbaijan require payments for access. Data harmonization between countries could facilitate opportunities for regional water investments, particularly in transboundary basins such as those in Armenia, Azerbaijan, and Georgia. EU-funded projects are helping to partially overcome these challenges by developing water indicators using the methodology of the European Environment Agency (European Environment Agency, 2020_[4]).

54. Countries have made significant progress in adopting robust water resource management laws or equivalents, aiming to align with the European Union's directives on water, with different levels of success. However, most countries report the absence of effective mechanisms for monitoring and enforcement, with a need for clearer and more robust sanctions. Water quality is still a major challenge to be addressed despite the robust legal frameworks in place.

55. In all countries, the Water Code/Water Law is a key legislative pillar that sets clear water resource allocations, legal status of water resources, abstraction limits reflecting in situ requirements for sustainable use, management of exceptional circumstances, and regulations for new entrants and return flows. For example, Moldova has aligned its legislation with the Water Framework Directive and entered the second cycle of river basin management planning (European Commission, 2023_[9]). In 2023, Georgia adopted the new Law on Water Resources Management to transpose the EU Water Framework Directive and partially incorporate the Urban Wastewater Treatment Directive, achieving partial alignment with EU standards. This law is now pending entrance into force in September 2026 and implementation. (European Commission, 2023_[10]). In Ukraine, the Water Code was updated in 2023, and river basin districts have been established and the river basin management plans are under development (OECD, 2021_[1]).

Box 2.1. Georgia's Law on Water Resources Management

56. It covers the adoption of national legislation, the designation of competent authorities, and the establishment of monitoring programs and standards for water quality. Notably, Georgia has identified river basin districts, setting up administrative arrangements for international waters, and developed programs for monitoring water quality. The preparation of river basin management plans and the introduction of flood risk management plans are underway (Ministry of Environmental Protection and Agriculture of Georgia, 2024_[11]). However, water allocation is not currently established based on updated data. This creates uncertainty around the real resource available and therefore increases risks for potential investors. Also, the full implementation of water quality monitoring in compliance with the Water Framework Directive is anticipated by 2026. Similarly, the assessment of urban wastewater collection and treatment, as well as the identification of sensitive areas and preparation of technical and investment programs for urban wastewater management, have yet to be completed. While the law addresses the establishment of standards for drinking water and mechanisms for consumer information, some government resolutions and minister orders have not been drafted yet.

Source: (UNECE, 2024[12])

57. The structure and performance of River Basin Management Plans and Authorities vary significantly across the region. The development and implementation of these plans with solid investment plans could be a strong opportunity to direct investment towards water resources management in the region. This can include wastewater treatment plans which are currently not adequately covered in some countries in the region. For example, Moldova (OECD, 2021[1]) and EU Member States have used Programme of Measures linked to their River Basin Management Plans to upgrade wastewater plans. For example, most of the

⁵ For example, in Ukraine, payments are required for accessing primary data from the Hydrometeorological Service system and State Construction Norms.

Member States reported a total of 5 579 basic measures mapped against "Construction or upgrades of wastewater treatment plants" (KTM1) within the Programme of Measures in the second River Basin Management Plans (European Commission, 2019[13]).

58. Some of the Eastern Partnership countries have over a decade of experience with River Basin Management Plans, while others are in the initial stages of implementation or have not yet introduced them. Armenia and Moldova have the most developed River Basin Management Plans, legally established since 2016 and 2011, respectively and some of which are in the second cycle of implementation. Georgia has recently established such plans for its major river basins. Out of seven River Basin Districts identified by the new Water Law, three are completed and two others are planned for this year. Ukraine is completing the preparation of the Management Plans for all nine river basins in accordance with the Water Framework Directive, approval by the government is expected by the end of this 2024. Azerbaijan has started the preliminary stages of developing these plans, focusing on major basins like the Kura River basin. Armenia's, Georgia and Moldova's approach mirror the EU model through its Water Law, including the development of river basin management plans. For example, in Moldova, Article 19 (4), mandates that each planning cycle should last six years, as is the case in other EU Member States.

59. Progress has been made in implementing economic instruments for water management across different countries. However, the effectiveness of these instruments is currently limited in curbing overexploitation and pollution of water resources. Rates charged for use or pollution are too low and are too infrequently updated to have an impact on water security policy objectives. The absence of comprehensive, sector-wide approaches presents a barrier to investment and the effective allocation of public funding due to increasing uncertainty around resource quality and availability, as well as the additional costs of treating the pollution. For example, in Georgia, the Georgian National Energy and Water Supply Regulatory Commission is mandated to take actions to prevent violations of the law and non-compliance to the national standards, but its capacity is inadequate to perform these duties.

60. Water abstraction charges reflect resource scarcity but application is inconsistent across countries, with numerous examples of partially or fully exempted user groups. Water abstraction from surface and groundwater has increased in all countries, indicating the limited effect of abstraction charges to protect the resource and suggesting that rates are too low. The exception is Moldova, where abstraction has declined but due to the decline of the agriculture sector rather than the price of water. From 2000 to 2017, water abstraction from surface and groundwater sources increased by 32% in Armenia and by 10% in Azerbaijan. Georgia also saw a 20% rise in water abstraction since 2005. Despite the annual renewable freshwater resources per capita suggesting adequate water availability, Armenia and Azerbaijan are experiencing severe water scarcity issues due to excessive freshwater abstraction for agriculture and significant water losses (European Environment Agency, 2020_[4]).

61. Water quality remains a critical issue in the region, characterised by high levels of untreated or inadequately treated wastewater discharges and agricultural pollution. Water quality is an area where further action is required for all countries, being a major concern for potential investors and increasing costs for governments. Pollution charges are applied in all countries; however, they have been ineffective in significantly reducing water resource contamination. This ineffectiveness is due to the penalties for pollution being disproportionate to the charges, as well as a lack of monitoring and enforcement of sanctions. Observational data typically show a marked deterioration in river water quality downstream of urban areas. Concentration increases of pollutants are more pronounced near settlements. Concentration increases are more pronounced near settlements. As depicted in Figure 1.1, most countries have limited access to safely managed sanitation services at the national level. Ukraine exceeds 70% coverage, whereas Georgia and Armenia report 24% and 11%, respectively. Azerbaijan shows data solely for urban areas, showing 63% coverage. Additionally, nearly half of the Eastern Partnership River points of water quality data collection have phosphate levels high enough to induce eutrophication, and three-quarters of these sites have very high ammonium concentrations. A quarter of the river-monitoring sites report exceedingly high biological oxygen demand levels (European Environment Agency, 2020[4]).

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62. Mechanisms for solving conflicts between users effectively are uneven in the region. All countries have national guidelines providing clear procedures, however mechanism for monitoring and enforcements are only present in Moldova and Georgia. Transboundary agreements in the region vary significantly between countries, influenced by the geopolitical situation with neighbouring countries (UNECE, 2021_[14]). This variation increases uncertainty around water security in the region and is also perceived as a risk by potential investors.

An uneven water and wastewater investment framework, with promising results in some urban areas

63. There is significant variability in the water and wastewater investment framework across the region. The implementation of water and sanitation strategies, along with their corresponding investment plans, varies considerably among countries. Despite setting ambitious targets for service levels, the effectiveness of these initiatives is often compromised by inconsistent enforcement of standards and inadequate operational strategies. River basin management plans are recognised in the region as crucial for guiding investment planning; however, they are not sufficient on their own to address the gaps in service and investment needs, nor to ensure a comprehensive approach, requiring formal adoption and implementation, management structures and links to sustainable financing strategies.



Figure 2.3. An uneven water policy framework with regional low capacity for small service providers

Note: This graph presents the scoring for the nine main indicators under the Water and sanitation Policy framework in urban areas covering Armenia, Azerbaijan, Georgia, Moldova and Ukraine. No data was provided for service providers capacity levels. Source: Authors' analysis based on official sources collected by national consultants in consultation with government officials.

64. Water and sanitation strategies and investment plans provide a critical foundation for guiding national investments in water. However, the adoption and implementation of these strategies varies significantly across the region. Most countries have clear targets for water services but only Moldova has adopted them and has operational strategies for water and wastewater service in place. In Georgia, the 2023 Water Resource Management Law indicated that municipalities have the mandate to prepare

technical and investment programs and projects for water supply systems and urban wastewater collection and purification, but its implementation is pending. In Armenia, the government set clear targets for drinking water services in 2016 and set a contract arrangement favourable for private operation. However, no clear investment plan exists at national level. In Ukraine, while a water strategy was adopted in 2021, it does not provide clear guidance for investment in water and wastewater sectors.

65. Moldova has the 2023 Strategy supported by the 2020-2024 Action Plan, aiming at providing 80% of the population in urban areas and 75% in rural areas with safely and sustainably managed water and wastewater services infrastructure by 2025. Through this strategy, the country is also aligning with the Urban Wastewater Treatment Directive and developing an implementation plan for the directive. This includes improving the management by:

- developing guidance, norms, standards and respective trainings, improving water quality monitoring, metering water use and strengthening economic instruments to support national investment,
- developing 12 infrastructure projects, and investment plan (Master Plan) that covers both supply and sanitation in urban and rural areas and
- harmonising national legislation with community standards and international commitments by revising norms and standards (for example, for wastewater discharge) and designating agglomerations (OECD, 2021[1]).

66. River Basin Management plans can be a relevant tool to support national strategies and investment plans, however they cannot be a considered a substitute for such national strategies. This could be a potential risk for the long-term coherence and access to investment due to missing cross-basins opportunities and regional incoherences. Some countries, notably Georgia and Armenia, indicated that river basin management within their Programme of Measures have elements of investment plans. In the case of Moldova, it integrated the strategy's objectives into the management of river basin districts.

67. Countries exhibit notable disparities at the subnational level in the performance of service providers, with financially viable providers in major urban centres typically able to attract investment while those in smaller municipalities are struggling. However, the current financial climate in the region, characterised by high inflation (typically at least twice those of the EU) and national currency depreciation (see the Public Investment Framework, dimension 1), have significantly impacted even the high-performing providers. This situation has affected operational costs, including energy expenditures and component purchasing, as well as the reimbursement of existing loans.

68. The limited capacity of certain service providers frequently hampers investment in the region This group often struggle to provide data on key performance indicators and to meet financial and technical reporting requirements. For example, in Georgia, only three out of the nine licensed service providers were able to submit fully complete investment plans (Georgian National Energy and Water Supply Regulatory Commission, 2023_[15]). In Moldova, of the 44 water and wastewater licensees, 38 have submitted data on technological consumption and water losses in public supply systems for analysis and approval by the regulator (National Agency for Energy Regulation, 2021_[16]). In Armenia the operator for water supply and wastewater submits quarterly and annual reports on performance indicators, including on the water supply and sanitation balance, water losses, delivery and payment rates, addressing the complaints of the consumers, repair of outbreaks, interruptions of water supply. Also, short- term investment plans are being submitted to the regulator.

69. The limited capacity to develop investment plans by many service providers is a common barrier in the region. In all countries, licensed service providers need to present short- and/r long-term investment plans to regulatory authorities. This is also a requirement for the potential authorization of tariff revision by the regulator. Usually, regulatory authorities received only well-prepared investment plan for high

performing utilities (located in urban areas) and need to provide additional time for correction and submission of other service providers, leading many times to sanctions and lack of tariff updates.

70. Non-revenue water rates are extremely high in the region, see figure Figure 2.4, largely attributable to aging infrastructure and a lack of sufficient investment in maintaining it. This presents a significant challenge in attracting and sustaining investment. Utilities characterised by high non-revenue water performance are often perceived as high-risk investments due to the diminished returns on investment.

71. Non-revenue water generates financial losses for utilities, due to the incapacity to recover production, treatment, and distribution costs. Furthermore, high non-revenue water can cause supply interruptions, leading to customer dissatisfaction. In addition, investors often view high non-revenue water as an indicator that infrastructure may be nearing or passed the end of its lifecycle, which can necessitate increased borrowing or complicate funding acquisition. Such conditions also lead to deferred investments; resources that could otherwise fund system improvements such as energy efficiency or expansions are instead allocated to overdue maintenance and replacement. The region has experienced decades of underinvestment in national water infrastructure, leaving many countries struggling to meet the comprehensive technical requirements of the EU's Water Framework Directive (European Commission, 2010a).

72. Conversely, addressing non-revenue water issues offers an opportunity to secure financing from a diversity of funds or investors specifically interested in environmental protection and climate change, such as development banks, impact investors, and climate funds focusing on emissions reductions and environmental health. This approach conserves water resources and reduces energy use. For example, climate funds can be mobilized to address non-revenue water, leading to reduced carbon emissions per cubic metre delivered and the conservation of resources.



Figure 2.4. Non-revenue water in in EU's Eastern Partner Countries

Note: The lines represent the recommendations for non-revenue water. Above 20% of water loses it is considered very important losses, under 5% it is considered negligeable losses.

Non-revenue water: refers to the water that is produced and enters the distribution system but is not billed to customers. It can be the result of physical losses (like leaks, bursts, and overflows), commercial losses (like meter inaccuracies or theft), and unbilled authorized consumption (like water used for firefighting or public fountains). The acceptable level of non-revenue water varies by country and region, depending on various factors such as the age of the infrastructure, maintenance practices, metering accuracy, and the regulatory environment. Advanced infrastructures might have low levels of 5-10%. Levels above 20% are high, and over 40-50% indicate severe inefficiencies.

Data for Armenia and Georgia covers one utility and data for Moldova covers 44 utilities, the region refers to Eastern European Countries according to IBNET coding. For Moldova, non-revenue water disparities are very high between licensed service providers varying from 1.6% to 47.4% (National Agency for Energy Regulation, 2022_[17]). The regional average is calculated based automatically by Ibnet regional grouping of countries, covering more than the five countries of the study.

No data is available for Azerbaijan and Ukraine.

Source: Data from the "Veolia Djur" CJSC Financial Statements for 2021, UWSCG auditor's opinion report, IBNET database (2021) and authors' analysis based on official sources collected by national consultants in consultation with government officials.

73. Consolidation of service providers⁶ in urban areas has been a common trend in the region, except for Ukraine. This has attracted private operators in Armenia and Georgia. However, the results obtained through consolidation varied between countries and financial and operational problems of water and wastewater systems persist in urban areas. This is considered an area of future work with EaP countries to understand the pros and cons of consolidation and to learn from EU Member States such as Estonia and Lithuania who have recently completed analysis with support from the EU and OECD on this issue.

74. The relatively low number of service providers in urban areas (see table) reflects the consolidation process undergone in most countries in the region, with rural consolidation only occurring to a limited extent. This is similar to comparator countries such as Hungary, Romania, Slovakia, and Kosovo. In addition to implications for service provision, there are also implications for finance: some EU funds, notably Cohesion Funds, are conditional on the minimum size of the applying region, which promotes consolidation (Kruijf et al., 2009[18]).

	Number of service providers with licenses		Total population (millions)	
	Urban	Rural	Urban	Rural
Armenia	1 Covering 80% of the population		1.9	1.1
Azerbaijan	1	?	6.3	3.8
Moldova	38	5	1.5	1.1
Georgia	9 1 is a state-owned company, 5 are municipal companies and 3 are privately owned companies	30 - 40	2.3	1.4
Ukraine	150 (all public)	100 - 200	30	11

Table 2.2. Consolidation of service providers in urban areas: a common trend in most countries

Source: Authors' analysis based on official sources collected by national consultants in consultation with government officials

75. Policymakers tend to view consolidation reforms as a mean to achieve multiple objectives: economies of scale, enhanced performance, and increased professionalization, requirements request by the European Commission. However, consolidation of water utilities and wastewater services has not been

⁶ Consolidation of service providers is independent of asset ownership and the management model. The region displays a diversity of operational models, ranging from fully public in Azerbaijan, to public-private partnerships with a lease contract (affermage) in Armenia, and a combination of private, public, and mixed public-private partnerships in Georgia.

proven to cause economies of scale⁷. The enabling environment of the consolidation seems to be a determinant factor (World Bank, 2017_[19]) for its success. The type and design, the services covered (residential vs non-residential) as well as the size of the utility are key conditions that influence the success of the consolidation in terms of costs and performance measures, see box Box 2.2.

Box 2.2. The enabling environment for consolidating water and wastewater utilities

Enabling conditions for achieving economies of scale when consolidating water and wastewater service providers

The process and type of reform are key elements for successful consolidation. Small utilities do not consistently show more favorable results from aggregations than larger utilities (World Bank, 2017_[19]). Rather, achieving economies of scale requires certain conditions, such as an optimal ratio of connections per utility, volume of water produced, customer density, and regional grouping, potentially obtained through consolidation. However, economies of scale tend to decrease with utility size, eventually leading to diseconomies of scale (Klien and Michaud, 2019_[20]).

The largest economies of scale are typically attainable in closely networked systems that can be physically connected, being the case in urban areas. The results can vary depending on the cost components included (capital, labor, materials, energy, and outsourced services) (World Bank, 2017^[19]). Factors such as the initial size of the utility, potential for physical network connections, and operational efficiencies (billing efficiency, purchasing power for components, bundled inventory management, financing, etc.) are significant drivers of economies of scale.

Considerations for policymakers when planning water and wastewater service providers consolidation

Consolidation can impair cost efficiency, particularly when integrating systems in low-density areas. This is especially problematic when urban utilities are required to expand into rural areas, thereby losing economies of density. This issue is a major concern for private operators when considering service area expansions or potential operation of a system.

From a regulatory perspective, the consolidation of water and wastewater utilities offers advantages by reducing the number of entities to oversee. However, having too few utilities can complicate performance comparisons and weaken the balance of power between regulators and service providers.

In cases of small municipal consolidation, elevating service provision to a regional level can be a source of political tension due to undermining political accountability and having fiscal implications. It can be perceived as conflicting with the ongoing decentralization of public services and democratization enforcement at local level.

Source: Authors

76. Countries have significantly advanced their regulatory frameworks, establishing independent institutions with the authority to oversee the sectors and enforce corrective measures against underperforming service providers. These institutions conduct annual performance reviews using key performance indicators to assess service providers systematically. Despite these advancements, the extent and type of data made public varies significantly amongst countries. Generally, the public data is

⁷ Numerous publications from the European Commission, the OECD and the World Bank do address the relationship between consolidation of water utilities and achieving economies of scale. These organisations agreed that consolidation helps in reducing costs through economies of scales. However, none of these organisations' publication has yet proven the correlation or the causality (World Bank, 2017_[20]), (OECD, 2020_[30]).

limited, and the key performance indicators reported annually do not comprehensively cover all crucial objectives⁸. For example, only two of the countries studied had publicly updated data on key indicators used to measure financial sustainability.

77. Some regulators face challenges in enhancing the performance of small licensee operators, primarily due to ineffective contract arrangements and/or a lack of adapted tools. Tools can vary such as updated and relevant standards, performance monitoring, compliance enforcement, and transparency, which includes the full publication of results and limited public engagement. Regarding contract arrangements, in some instances, operators have a clear mandate to invest in the rehabilitation of the network, whereas in others, the service authorities bear most of the costs and risks associated with the sustainability of service delivery. In some countries, clear guidelines for service delegation have been developed by national authorities, while others lack these. Georgia has implemented performance-based contracts for private operators, in major cities. The results obtained in terms of sustainability of service delivery varies between countries and cities.

78. Contract arrangements between service authorities and service providers are key conditions to ensure investment in water related sectors and the sustainability of services. In addition, depending on the contracts conditions private operators can be interested in water and wastewater service delivery. However, regardless of the model, key elements need to be included in the contract to ensure the continuity of investment in maintenance and rehabilitation of the network, guided by national strategies, quality and affordability of the services as well as ensuring environmental protection.

79. Limited standards for wastewater effluent or inadequate oversight significantly may impede the optimisation of current investments in wastewater treatment facilities in the region. For example, 72% of expenditures in EU-backed River Basin Management plans across eight river basins are allocated to sanitation, averaging EUR 110 per inhabitant. Major investments are concentrated in wastewater plants (EU4Environment, 2023_[21]).

80. In Moldova, despite existing regulations, control over wastewater effluent discharges is inadequate due to the limited implementation and enforcement of the permitting system for water use and wastewater discharge (OECD, 2021_[1]). This inefficacy can diminish the impact of current grants and technical assistance such as the EU's Neighbourhood Investment Facility, the European Bank for Reconstruction and Development, and the European Investment Bank to water and wastewater utilities. Similarly, Georgia has legislation that prohibits the discharge of unprocessed wastewater into surface water. However, only 36% of the population is connected to a wastewater treatment plant, whereas 50% is connected to sewage systems. This indicates a low level of enforcement of treatment standards (UNECE, 2022_[22]). Conversely, in Armenia, there are no nationally adopted guidelines for wastewater treatment. Under the current contract, the wastewater operator is only mandated to monitor effluent discharges and not to treat them, placing the sole responsibility for water quality on the government.

81. All countries in the region have established clear processes for setting tariffs, which are overseen by national regulators. These tariffs are fixed for a set number of years, providing certainty in terms of revenue generation. According to legislation, tariffs should enable full cost recovery; however, this objective is not being met. Although tariffs generally cover operation and minor maintenance costs, the financial challenges facing the water and wastewater sector are evident from the high levels of non-revenue water (Figure 2.4), significant debt service ratios and the difficulty for service providers to report to regulators across the region. In addition, following to the decentralisation process in the region, tariff

⁸ According to best international practices, the main objectives of water and wastewater utilities are accessibility, safety, sufficiency, reliability, convenience, cost -effectiveness, financial sustainability, affordability, responsiveness, and transparency (World Bank, 2018_[31]). Key performance indicators for utilities are developed around these key objectives. For example, accessibility is measured through coverage (population with sewerage service/population service area) and reliability (average hours of service per day).

revisions must be approved (or set in the case of Ukraine) by the municipal council. This can, in certain cases, lead to political interference and a failure to update tariffs to cover costs.

Challenges in rural water and wastewater services: similar challenges to urban areas and additional barriers

82. Limited data availability in rural areas is a major barrier for public and private investment in the region. Owing to the scarcity of data for rural regions, a quantitative analysis cannot be conducted at present. Nonetheless, the data suggests that the previously identified barriers are applicable to rural areas and are notably more pronounced due to a significant gap in services access (Figure 2.5), a higher degree of service provider fragmentation (Table 2.2), and diminished financial and human resources.





Note: No data was available for Armenia and the Republic of Moldova. No data for sanitation was available for Azerbaijan and the Republic of Ukraine.

Source: WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP)- <u>https://washdata.org/data/household#!/</u>, 2024

83. Sectoral targets for water and wastewater service levels in rural areas are limited, limiting the development of tailored investment plans, which in turn could enhance investment and optimise the use of existing funds. The absence of clear objectives results in uneven public investment, heavily reliant on donor-funded projects. Although some countries have established targets for rural services, progress remains slow due to significant gaps in these areas. For instance, Moldova's targets are integrated within the national strategy and its action plans, which are executed through River Basin Management Plans (OECD, 2021_[1]). In Georgia, the National Strategy for the Development of Villages (2021-2027) and its corresponding action plan include provisions for water supply and water treatment services (UNECE, 2022_[22]). In Ukraine, the State regional development strategy (2021-2027) includes the provision of sustainable water supply and drainage in rural settlements.

84. Eastern Partner countries have an opportunity to tailor their sectoral and investment plans by learning from the challenges faced by EU Member States in implementing the Urban Wastewater Treatment Directive, particularly in rural areas. For instance, Member States have adopted individual and

other appropriate systems (such as on-site sanitation) over centralized collection systems where no centralized network or wastewater treatment plan exists in small settlements. When properly developed and implemented, these systems can ensure that wastewater is collected and treated before discharge, achieving the required environmental protection standards while significantly reducing both investment costs and expenses for the operation and maintenance of centralized wastewater treatment facilities. Additionally, improving service levels in rural areas necessitates the development of adequate social support and protection mechanisms, as well as subsidies to ensure affordability, given the substantial proportion of low-income households in these regions (World Bank, 2021_[23]).

85. An important part of the rural population receives services from unlicensed operators, limiting the possibility of attracting investment. The absence of comprehensive data in the countries limits the possibility to setting a strategy to formalise the service delivery for this population. For example, in Moldova the National Agency for Energy Regulation regulates and licenses the larger water and wastewater service providers in urban and municipal areas and, where applicable at the village/commune level equipped with centralised water supply, sewerage and wastewater treatment plants, according to the Law on Water Supply and Sewerage Services (Law 303/2013, art. 7 (2)). However, the smaller, local operators providing services in rural areas are not directly monitored or licensed by the regulator, because of lacking centralised systems (National Agency for Energy Regulation, 2022[17]).

Advances in project sustainability frameworks, yet significant efforts needed to enhance the frameworks for project bankability

86. Countries have made successful advancements to set frameworks that ensure the environmental and social sustainability of projects. However, major efforts are still required to ensure a conducive framework for bankable projects and public investment management for projects. The region has an important dependence on donors funding for developing bankable projects, with no national units dedicated to supporting and pooling projects in the countries.



Figure 2.6. Limited frameworks ensuring project bankability and financial viability

This graph presents the scoring for the four main indicators under the project sustainability and bankability covering Armenia, Azerbaijan, Georgia, Moldova and Ukraine.

Source: Authors' analysis based on official sources collected by national consultants in consultation with government officials

87. All the countries have made efforts to ensure the social and environmental sustainability of water related projects, though the level of legislatively established mechanisms to ensure community involvement varies widely. Only two countries have a formalized feedback mechanism for communities.

88. Most countries have in place a standard methodology for assessing the social and environmental value and impact of projects which inform investment decisions, in particular for large projects from donors. The methodology includes national guidelines for social and environmental guidelines, except for Ukraine. However, only in two countries, water security and water related risks do figure in the methodology. In addition, there is a lack of a direct mechanism to measure a water project's broader impact, even though current assessments capture potential risks within project boundaries.

89. In most of the region, cost benefit analysis is carried out to ensure impartiality. Some countries such as Georgia, Moldova and Ukraine have official methodologies for cost benefit analysis used for all sizes and types of projects. In the case of Armenia, the absence of a standardized cost-benefit analysis methodology does not incentivize data collection for water projects. Although costs and benefits are computed for most projects, the lack of an official approach means reliance on methodologies provided by International Financial Institutions.

90. The region continues to face limited capacity in developing bankable projects and relies on donor funding for investments in water security. However, across the region countries suffer from limited absorption of available funds from donors. Currently, no country has a national independent unit dedicated to supporting project development and pooling projects. Where present, project development units are typically located at the municipal level, with varying capacities to develop and implement bankable projects, including those related to water. Ideally, a national independent unit should provide support to the municipal units.

91. National independent units are designed to serve as comprehensive resources for training, managing procedures, overseeing all external funding, and optimising existing assets to prevent excessive debt and neglect of maintenance. Pooling platforms recognise that individual investors may lack the resources or risk appetite for direct infrastructure investments. Pooling can mitigate risks, reduce transaction costs, and achieve investment scale, which is particularly beneficial for smaller service providers and municipalities (OECD, 2022_[6]). However, this requires a unit with the necessary capacities to oversee a diversity of projects in terms of size, objectives, timeline, risks, and revenue models, as well as traditional infrastructure and more innovative models such as nature-based solutions. River Basin Authorities, when operational, through their Programme of Measures, are attempting to adopt this approach at basin scales. Nonetheless, a national unit could facilitate greater synergies with other sectors such as energy and industry.

92. When national units exist, they depend on donor funding, such as the Project Preparation Facility project in Moldova, which supports the Moldovan government in identifying and preparing projects linked to the implementation of the Association Agreement (Ministry of Finance, 2024_[24]). However, a significant risk with these project-linked units is their sustainability post-completion. For example, Armenia faced challenges continuing operations without financial and human resources after the completion of a central unit developed with World Bank support.

93. A limited regulatory framework for public investment management and the lack of guidelines to support the development of bankable and financially viable projects are common barriers in the region. These barriers limit the efficiency of current public spending in infrastructure development which can lead to significant savings as well as unlocking additional funding. For example, aside from Moldova none of the countries have clear guidelines in place.

94. When guidelines are in place, they are often developed with donor support to access specific funding, such as Project Preparation Facilities by the European Bank for Reconstruction and Development. In Moldova, for example, the Ministry of Finance approved a national procedure for the design and appraisal of public investment projects (Regulation No. 684/29, 2022), which includes guidelines for the public investment planning process. This process covers project identification and formulation, capital project eligibility, project pipeline, and project selection (Ministry of Finance, 2024_[24]).

95. Access to centralised data, guidelines, and online procedures are barriers for investment. Some countries have started to address it. For example, Georgia has the Water Information System, however there is not a clear methodology for collecting data, neither is the data shared with the public. In 2023, Moldova developed an Aid Management Platform that allows central public authorities to manage data related to external assistance. This includes online project submissions by central public authorities and project review by the dedicated Working Group of the Ministry of Finance (Ministry of Finance, 2024_[24]). In the case of Ukraine, data is collected and available online only for projects funded by international donors.

A long path to ensuring water security through economic sectors

96. The Eastern Partner countries need to strengthen their efforts to ensure that economic sectors contribute to water security. Countries recognise the vital role of water resources for economic

development, however effective instruments and incentives need to be introduced to provide clear signals. Countries in the region have put forth environmental programmes and protocols, yet these do not provide a comprehensive approach to water security, lacking influence over sectoral policies or economic investment directions. Most countries acknowledge the integration of water security into their economic and environmental planning, there is a marked absence of stringent regulatory frameworks and fiscal incentives to address water-related risks effectively.



Figure 2.7. Uneven frameworks to ensure economic sectors support to water security

This graph presents the scoring for the six main indicators under the economic sectors contribution to water security covering Armenia, Azerbaijan, Georgia, Moldova and Ukraine.

Source: Authors' analysis based on official sources collected by national consultants in consultation with government officials

97. Only one country has formulated a comprehensive water security strategy, with Ukraine pioneering a National Water Strategy 2050. Approved in 2022 alongside its operational plan for 2022-2024, the strategy delineates five pivotal goals: guaranteeing the provision of high-quality services, augmenting ecological conditions with a pronounced focus on quality, diminishing risks pertaining to water scarcity and surpluses, and fostering integrated management (Cabinet of Ministers of Ukraine, 2022_[25]). While some

countries have indicated the Protocol on Water and Health (Moldova) as well as National Environmental Action Programme (Georgia) which is a cross-sectoral programme focus on the overall environment as a comprehensive strategy for water, these initiatives do not sufficiently serve as a guiding framework to change the incentives within other sectors or guiding investments in other economic areas. Concurrently, Armenia is now actively working towards establishing a 'Comprehensive Water Security Strategy', supported by the policy dialogue undertaken in the country to pilot test the tool.

98. There is a growing recognition among countries of the imperative to orchestrate water security strategies that interlace with broader sectoral plans. These strategies are integral to embedding water security within the realms of climate change response, agricultural configuration, economic proliferation, and the shift towards sustainable energy sources. Notably, Armenia, Georgia, and Moldova emphasise the management of water resources within their Nationally Determined Contributions to the Paris Agreement (European Union, 2020[2]). Most countries do integrate water risks in their economic plans at national and sub-national level. However, impact on water resources is predominantly tackled through project-specific environmental assessments rather than guiding principles such as implementation of the Polluter Pays Principle within other economic sectors' frameworks.

99. The detail on current subsidies that may produce adverse effects on water resources remains limited and work is ongoing under EU4Environment Water and Data to shine a light on some of these subsidies and identify roadmaps for reform. Nonetheless, given the prevailing challenges regarding water quality and availability, it is postulated that such subsidies could induce unintended detrimental impacts, as observed within European Member States.

100. Regionally, the adoption of robust strategies to mitigate water risks—crucial for addressing drought, floods, and pollution—is not widespread. However, Georgia has implemented through the National Environmental Action Programme a comprehensive water risk reduction programme.

101. Insurance schemes and fiscal incentives seem not to be common tools used to mitigate water related risks, particularly for the private sector. Some regulatory measures have been put in place in countries, banning areas for land development being the most common in the region. Other regulatory measures include the preservation of natural floodplains, reporting of volumetric performance by companies, and disclosure of water intensity in production processes.

102. In terms of public procurement, the region has not yet capitalised on its potential to promote water security. Guidelines that support water conservation, pollution abatement, and the safeguarding of natural and soil resources are yet to be implemented with the support of specific indicators to ensure accountability. Disclosure standards, whether mandatory or voluntary, remain absent, underscoring the need for their introduction to underscore the importance of water security within financial and corporate realms.

3 Recommendations to strengthen the enabling environment for investment in the near term

103. Countries have made progress in relation to the water investment framework and the social and environmental sustainability of projects. The relationship with the EU, including the accession process where applicable, and funding, has been a major catalyst in the region, supporting systemic reforms that strengthen the enabling environment. This process will continue to reinforce the enabling conditions for the Public Investment Framework, as well as conditions supported by the EU water-related acquis, such as Water Investment Framework and environmental protection. However, other barriers still need to be addressed to ensure an even enabling environment, to optimise the use of existing funding and to establish a foundation that can attract additional sources of finance. The following recommendations have been selected because they can be applied within a short-term frame (less than three years) and align with current plans in place in the countries, building on existing work, cooperation, and funding in the region.

Recommendations for policymakers

104. **Develop national strategies and investment plans to enhance service levels in rural areas,** focusing on the necessary goals and conditions for success, rather than exclusively on the mechanisms employed. For instance, attracting private investment or ensuring the management of services by private operators should not be the end goal, nor should the consolidation of service providers. Experience from OECD member countries that have undergone similar reforms shows that the conditions of the process are more crucial for its success than the model selected. For example, achieving full-service coverage in rural areas to meet EU Directives standards will be costly and complex (OECD, 2020_[26]); therefore, considering scenarios with different service delivery models and technology types, tailored to specific geographic needs, is essential. Additionally, while consolidation has been effective in urban areas, its application in rural settings presents more challenges. Therefore, strategies should consider consolidating service providers through various models and scales, as well as combining this with the formalization of unlicensed service providers to create a more cohesive and integrated approach.

105. Maximise donor funding to strengthen the regulatory framework for wastewater and enhance the efficiency of economic instruments. Although countries are increasing access to wastewater services through major investments in infrastructure, the sustainability and effectiveness of these investments depend on robust long-term revenue models and the development and enforcement of wastewater standards. Countries are at different stages, ranging from the absence of wastewater standards to having standards in place but with limited enforcement. It is essential for each country to advance to the next stage in this process to ensure the effectiveness of wastewater infrastructure investments.

106. Enhance the effectiveness of economic instruments using existing donor funding. While all countries in the region have economic instruments intended to support cost recovery of infrastructure and

protect water resources, they often fail to fully recover costs—including operation and maintenance—or prevent water resource damage due to weak enforcement and low fee levels. Despite strong ambitions for water security, as evidenced by numerous implemented and planned reforms, there is a critical need to increase the effectiveness of economic instruments, setting them to levels that discourage over abstraction and pollution, combined with penalties and enforcement, as well as cost recovery implementation. **Donor funding should be utilised not only to establish essential infrastructure but also to advance reforms that ensure the sustainability of assets, service provision, and resource protection.** This includes implementing robust systems for collecting, monitoring, and enforcing economic instruments and penalties associated with service delivery and infringements. Over time, these services can be funded (or at least partially) through revenue collected, depending on the fiscal model. When revenue generation results are presented to Ministries of Finance, this provides additional justification for increasing funding to waterrelated sectors. Government efforts must also focus on making misuse and pollution more costly, enhancing resources for monitoring and enforcing payments, restructuring subsidies that undermine water security, and boosting public awareness, especially during periods of water scarcity.

107. Leverage donor funding for capacity building to establish and strengthen existing government project implementation units, ensuring long-term sustainability and independence from donors. Historically, donors have established project implementation units within countries to increase the effectiveness of investments and provide capacity building, as the development of bankable projects poses a significant challenge for small service authorities. However, the diversity and specificity of donor programs in the region, along with changes in these programs over time, complicate the transfer and retention of knowledge within governments. Therefore, it is essential for governments to create dedicated units within their structures to channel donor investments and support. For example, centralised units could be established to assist service providers, particularly in investment planning, project identification, development, and implementation, with a focus on project bankability. This unit should initially map sources of funding and establish clear guidelines around project application procedures, which may require policy reforms.

108. Project implementation units should not be tied to any specific donor model but should operate based on a well-designed finance strategy that gradually ensures their independence from donors and their ability to cover multiple donors. Depending on the country's model, these units could be water sector-specific or more generalized. Experience from OECD member countries shows that while there is diversity in the models employed, the success over time depends less on the specific model chosen and more on the key elements surrounding it. In addition, having a multi-sector unit allow to identify potential synergies between sector investments as well as learning from successful reforms and process which could be applied to water related sectors. Poland's National Fund for Environmental Protection and Water Management can be a source of inspiration for the region. By centralising funding and establishing dedicated project units, the Fund has significantly enhanced the efficiency of investment and project development within the environmental sector. It achieves this through funding allocation and management, centralised project evaluation and selection, and the provision of technical and financial expertise. Additionally, the Fund provides monitoring and reporting for donors, while also effectively leveraging additional funding from various donor streams.

Recommendations for donors working in the region

109. Strengthen the connection and synergies between support provided to national policies related to Policy Investment Framework and the Water Investment Framework. The European Commission and other donors have numerous programmes in the region that enhance the stability of domestic finance, and improve public and corporate governance mechanisms, including regulatory permits and approvals, accountability, and the management of non-commercial risks. These conditions are essential for ensuring water security through the Water Investment Framework. Stakeholders focusing on

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water-related sectors should build on these existing initiatives, linking them to provide practical applications to more general country reform and rise challenges associated with the consequences and effectiveness of these reforms.

110. Explore opportunities for climate-related funding to diversify sources of finance to address the major challenge of non-revenue water for service providers in the region. Addressing non-revenue water represents an opportunity for funds to reduce emissions and natural resource consumption while improving vital service delivery for the population, as well as an opportunity for energy transition, leading to operation cost reductions over time.

111. Strengthen the learning and exchange with EU member states to minimise potential challenges encountered during the implementation of policy and regulatory reforms. This provides a unique opportunity to learn from the experiences of countries such as Estonia, Latvia, and Lithuania as well as from neighbouring countries like Bulgaria and Romania. Understanding the challenges they faced—and continue to face—during alignment with EU water-related acquis, how they overcame these barriers offers valuable insights for policymakers, as well as the time and resources required to mobilise the political support required. Leveraging government counterparts' recommendations can effectively build on decades of European Commission work, particularly in improving service delivery in rural areas.

Annex A. Scorecard's underlying questions across the four dimensions

Figure A A.1. Scorecard's underlying questions across the four dimensions

Dimension 1. Assessment of the policy framework for investment: is the country attractive for investors?
Are macro-economic indicators conducive to sound investment?
What is the strength of the domestic financial sector?
Is domestic finance available?
How strong are public governance mechanisms?
How strong are corporate governance mechanisms?
What level of regulatory permits and approvals are required for investment and are they streamlined?
What accountability mechanisms are in place to ensure responsible business conduct?
What is the level of non-commercial risks for investors?
How effective and practical is decentralization for policy and investment?
Are infrastructures sufficient to attract investments?
Dimension 2. Assessment of the water policy framework for investment: are water sectors as attractive as other economic sectors?
Water resource management
Is data on current and future water resources availability, demand and supply forecast and water risks available?
Do water resource allocation mechanisms support water security investment?
Are economic instruments coherent between sectors?
Are mechanisms to solve conflicts between water users effective?
Water supply for domestic use: urban and rural / Sanitation: urban and rural/ Irrigation big schemes
Is a strategic investment plan in place including water security?
Is there independent and transparent regulation of the sector?
Are contracts arrangements for service providers attractive for investment?
Does the regulatory environment support private investment?
Does economic regulation sustain and attract investment?
Is the legal status of stakeholders participating in the investment clear?
Are service providers allowed and able to access finance?
What are service authorities' capacity levels?
What are service providers' capacity levels?
Dimension 3. A pipeline of good projects: to what extent are water projects bankable and sustainable?
To what extent are the community, stakeholders, third parties, engaged in projects?
Is there a standard methodology for assessing the social and environmental value and impact of investment?
How is cost benefits methodology carried out to ensure impartiality?
Are data, process and methods for projects collected and published? How is the data used for future decisions-making?
Can projects be grouped to overcome high credit risks and transaction costs?
Are they guidelines on how to support projects to be bankable and financially viable?
Dimension 4. An economy-wide water lens: are economic sectors contributing to a water secure future?
Does a national strategy guide water security in the country?
_ Do national strategies for climate change mitigation, adaptation, agriculture, economy, development, and energy transition address water security?
Is a water risks mitigation strategy in place?
Are economic incentives designed to support water security?
Is water security embedded in public policy measures?
Do mandatory and voluntary disclosure standards consider water?

Source: Authors