

# The UfM Water Finance Series

This is the sixth publication developed under the UfM Water Finance Series. The objective of the UfM Water Finance series is to support policy reforms in the area of water finance and investment to support achievement of global, regional and national water goals. Its intended audience are senior officials working on water-related ministries in Mediterranean countries, as well as their partners in government, civil society, private sector and the development community.

The previous publications under the series are:

#1 UfM. 2019. The UfM Financial Strategy for Water. UfM: Barcelona.

#2 UfM. 2020. Public Private Partnerships and the Financial Sustainability of the Mediterranean Water Sector. UfM: Barcelona.

#3 UfM. 2022. Water, Investments and Finance - Improving Water Investment Policies In the Southern and Eastern Mediterranean. UfM: Barcelona.

#4 UfM. 2023. Water, Climate and Finance - Strengthening Water Finance and Investment Policies to Address the Climate Emergency in the Mediterranean Region. UfM: Barcelona.

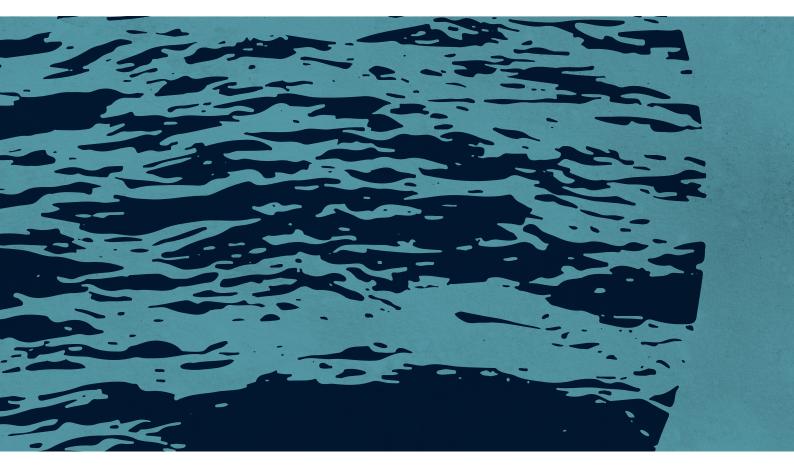
#5 UfM. 2024. Water, the WEFE Nexus, and Finance - Applying a Water-Energy-Food-Ecosystems Nexus Approach to Water Finance and Investments. UfM: Barcelona.

# About this publication

This publication describes a policy agenda for ensuring the financial sustainability of drinking water supply, sanitation and hygiene (WASH) services in the Euro-Mediterranean region. It presents the conclusions and recommendations of the 5th Conference on Water Finance and Investment co-organised on 14th-15th October 2024 in Cairo (Egypt) by the Union for the Mediterranean (UfM), the European

Union (EU) Delegation in Egypt, and the African Development Bank (AfDB), in partnership with the Egyptian Ministry of Water Resources, and with financial support from Sweden.

The first Conference on Water Finance and Investment took place in Rome (Italy) in December 2019. After a pause due to the impact of the Covid-19



pandemic, subsequent conferences have taken place annually since 2021 in Cairo (Egypt) in the framework of Cairo Water Week.

This publication has been developed by Roberto Martín Hurtado (Independent Expert and Senior Water Economics Advisor, UfM) under the guidance of Frederic de Dinechin (Senior Policy Ad-

visor, UfM) and Stephen Borg (Deputy Secretary General in charge of Water, Environment and Blue Economy, UfM). The UfM would like to thank the moderators and panelists at the 5th Conference on Water Finance and Investment for their time and insights, as well as all the persons (too numerous to acknowledge individually) that supported the organisation of the Conference.

### 1. Adopting a strategic approach to WASH finance

WASH finance is a strategic policy domain, not a technical one. Universal access to water supply, sanitation and health (WASH) services is a human right and a common goal of all countries around the Mediterranean basin. While each country has its specific WASH investment needs, they are generally increasing due to the impact of population growth, urbanization, conflicts, health crises, and climate change. These investment needs cannot be fully met due a finance gap: current WASH sector revenues are not enough to cover WASH sector spending needs. How to close the finance gap (by reducing spending needs and increasing revenues) and how to bridge the finance gap (by mobilising repayable finance through loans, bonds and other financial instruments) are strategic policy issues that impact the performance of the whole WASH sector.

More attention needs to be paid to the spending side of WASH finance. The provision of WASH ser-

vices has costs. It requires consistent investment in infrastructure, operation and maintenance (O&M), and governance. Financial sustainability of WASH services demands a strong focus on reducing the cost of providing the desired level of WASH services – for example by reducing water demand, reducing network leakage, increasing energy efficiency, or carefully evaluating the lifetime costs of technology choices. These improvements would reduce the need to increase WASH sector revenues and would include the bankability of WASH projects. In addition, better investment planning would help to avoid duplication, ensure value-for-money, and avoid geographical gaps.

On the revenue side, it is critical to define a national model of WASH funding. WASH services are funded by a combination of user contributions (through WASH tariffs or self-supply), government subsidies (funded by general taxation), and external transfers (such as grants from development part-

ners). Not all sources of funding are equal: internally generated revenues from WASH tariffs are the most stable and represent the cornerstone of a financially sustainable WASH sector, government subsidies can be used to fill gaps and correct geographical and social inequities according to public policy objectives, while external transfer are the most volatile (and generally small in comparison with the overall funding needs) and should be used strategically to leverage other sources of finance.

WASH finance is closely linked to WASH sector governance. The sector governance set up influences the cost structure of the sector and the ability to reap economies of scale - North Macedonia has 77 service providers for a total of 1.8 million people, while the Madrid region in Spain has 1 service provider for 6.8 million people. Improved sector governance, including through financial tracking, is required to make the most of existing financial resources and help attract additional financial resources. Strategic discussion about WASH finance help to identify critical governance reforms. Successful governance reforms require the exercise of sector leadership by the government and it benefits from targeted financial support from partners – as illustrated by Egypt´s experience in sector consolidation under the Holding Company for Water and Wastewater (HCWW).

# 2. Investing in WASH

Investing more and investing better. To achieve global WASH targets, annual investments need to increase several-fold. Grater investment in WASH would generate multiple benefits in terms of health, education, economic development, environmental sustainability, social equity, resilience, and adaptation to climate change. But investment in WASH needs to be guided by policy objectives, minimizing future investment needs and harnessing the opportunities offered by digitalisation. Strategic investment planning is a key tool that can be strengthened across the region. This includes budgetary planning for emergency investments to respond to the impacts of natural catastrophes and conflicts.

Investing in WASH sector governance and policy reforms. These are investments that are more difficult to execute that investments in physical infrastructure, but that, if successful, provide high rates of return. They include investing in reforms that will support reducing the cost of WASH service provision (such as clustering small WASH service providers), improving the performance of WASH service providers (such as enhancing the economic regulation of WASH services, and developing performance improvement pathways for utilities), and enhancing the performance of the WASH sector as a whole (such as improvements in sector planning and accountability). Individual governance and policy reforms are mutually supporting and would benefit from an integrated approach.

Investing in enhancing the operational efficiency of WASH service providers. These are investments at the WASH service provider level. They include those that will reduce the long term cost of service provision (such as through improved asset management), as well as investments that will increase internal revenue generation (such as through increased bill collection). They help to ensure that WASH utilities are focused on service

provision (rather than on infrastructure) and are customer-oriented. Investing in the digitalisation of WASH services presents a great opportunity and a challenge – for example, digitalisation of bill collection in Egypt involves agreeing protocols with banks and e-collection companies, with other ministries to improve information sharing and private, and soft investments in cybersecurity and training of employees. On case by case basis, public-private partnerships (PPPs) may be useful mechanisms to support performance improvements.

Investing in WASH infrastructure under a WEFE approach. Increasing water scarcity and competition for water resources, partly driven by climate change, has made adoption of a water-energy-food-ecosystem (WEFE) nexus approach critical in the provision of WASH services in the Mediterranean region. The WASH sector needs to plan new infrastructure investments under a vision that responds to constrained access to traditional water sources. And it needs to invest in water resilience including through infrastructure to support demand management (such as meters and apps), leak reduction (water losses in Madrid region have been reduced to 4%, while in North Macedonia non-revenue water is 63%), source diversification (combining conventional and non-conventional water resources such as water reuse and desalination), and preservation of ecosystems.

3. Generating internal financial resources: WASH tariffs and affordability

WASH tariffs need to be carefully designed to achieve their multiple objectives. WASH tariffs can be designed to ensure cost recovery (economic objective), ensure affordability of WASH services (social objective), and provide incentives for reducing water consumption (environmental objective). Given the trade-offs between those objectives, simple tariff designs cannot support all of them. Keeping WASH tariffs low for all customers undermines the three objectives, since the poor suffer the most from the failure of cash-strapped WASH utilities to provide universal service. Increasing block tariffs (IBTs), social tariffs, and surcharges can be used to better achieve those different objectives - for example, in 2003 a summer surcharge helped the Madrid region to achieve a 20% reduction in water consumption.

WASH tariffs need to recover multiple and increasing costs. Traditionally, WASH tariffs were intended to cover the cost of supplying drinking water. But over time WASH service providers have needed to cover additional costs: to provide sanitation services, to treat wastewater, or to diversify their supply sources. Each one of those cost elements is increasing due to the impacts of climate change, increasing demand for water resources, and raising environmental standards. As a result full cost recovery is rarely achieved -- including in Europe, where there is an increasing finance gap. In Egypt, the use of desalinated water at surface water prices is crippling some utilities. Across the Euro-Mediterranean region there is a need to more fully apply the user pays and polluter pays principles, and the overall WASH bill needs to increase to cover those costs. Where tariffs are very low, countries should develop and implement a plan for progressive tariff increases.

It is possible to increase cost recovery from WASH tariffs while ensuring affordability. It is useful to set affordability thresholds (maximum re-

commended spending in WASH services as a share of total household expenditures) and carry out studies to understand the extent of the problem. For example, Türkiye has set an affordability threshold of 5% at average national level while Portugal has set an affordability threshold of 1% at household level. ERSAR, the economic regulator of WASH services in Portugal, has identified that the average bill for drinking water and sanitation services represents only 0.65% of total household expenditures, which means there is scope for increasing tariffs but that the poorest households will need to be protected. The 2022 UNECE/WHO publication Making Water Affordable for All provides examples of different WASH policy and social protection policy mechanisms that can be used to ensure affordability of WASH services.

More efficient billing and collection systems would increase revenue from existing WASH tariffs. WASH service providers should issue clear, transparent and timely invoices. They should offer automated billing, multiple payment options, and flexible payment plans. They should develop and implement proactive bill collection strategies. And to support all that, they need to allocate resources to billing and collection.

Stronger economic regulation of WASH services is required to ensure the financial sustainability of WASH services. The WASH sector has traditionally been managed at local level, and in many cases suffered from populist decisions regarding tariffs. Stronger economic regulation of WASH services would help to reduce the cost of service provisions, and to ensure that tariff-setting outcomes reflects the true costs of service provision. While there are different regulatory models across the region, there is an increasing call for making the economic regulation of WASH services a national issue, and for increasing the independence of regulators.

4. Developing WASH finance strategies and the role of public finance

UfM member states would benefit from developing WASH finance strategies. A WASH finance strategy is a strategic document and process that helps to guide sector decisions to ensure the long-term financial sustainability of the WASH sector. WASH finance strategies can be developed at national, sub-national (province, governorate), or city level. A WASH finance strategy estimates the WASH finance gap, models how different policy options (both to reduce the cost of service provision, and to increase sector revenues) would contribute to close that gap, and identifies options to bridge the finance gap through different financing mechanisms. The process of developing a WASH finance

strategy requires engagement of the major WASH sector stakeholders, and contributes to improved WASH sector governance (such as stronger engagement of ministry of finance and national public development banks). The 2022 UNICEF publication **Developing WASH Finance Strategies** provides examples and guidance. WASH finance strategies could support the adoption of a WEFE approach by looking beyond drinking water supply and sanitation and including as well wastewater management, water resources management, or flood protection.

Reducing corruption and mismanagement will help to close the finance gap. The IMF estimates

that 30-50% of financial resources in the infrastructure sectors are lost corruption and mismanagement. Those losses can be substantially reduced by building a culture of integrity, enabling stakeholder engagement, and strengthening public financial management (PFM). Investing in integrity improvement programmes has a low cost and a high return on investment. Elements of such programmes could include the introduction of open contracting and e-procurement, effective blacklisting systems, use of bid data analytics to detect corruption, strengthened partnerships with Supreme Audit Institutions, the development of integrity safeguards for disaster management, and the adoption of results-based financing. The 2024 WIN publication Water Integrity Global Outlook 3: Improving Integrity in Water and Sanitation Finance provides further guidance.

Public budgetary resources are limited and should be used strategically. Public budgetary resources by themselves can 't close the finance gap in the WASH sector, since they are limited and the WASH sector is competing for them with other sectors. Rather, public budgetary resources should be used strategically to complement user contributions, which are the cornerstone of WASH finance. Public budgetary resources in the WASH sector can be used to leverage concessional (eg climate) and private finance, to provide guarantees when there are no other guarantors, and to provide income-tested social subsidies.

National Public Development Banks (NPDBs) are a largely untapped source of public financing for WASH. NPDBs are government-owned or controlled financial institutions with a public policy mandate to support national development goals through lending and other financial services. They play a crucial role in financing infrastructure, supporting small and medium-sized enterprises (SMEs), and promoting sustainable development initiatives. The Water Finance Coalition, which gathers national and international public development banks (PDBs) aiming to improve the financing of the water and sanitation sector, estimates that less than 10% of PDB financing supports water and sanitation sector goals. To increase this share, the WASH sector could engage with NPDBs and lobby governments to include water and sanitation in the mandate of NPDBs.

More public finance for climate could support WASH goals. For example, the Green Climate Fund (GCF) has a water strategy that enables support for projects that generate climate mitigation or adaption benefits. And the GCF experience shows that there is a clear interest from asset managers in investing in the water sector if projects are well structured. But many water project proposals are not funded because they miss a clear climate rationale.

# 5. Engaging the private sector in WASH finance and investment

Private sector engagement in WASH can take place through private operation, private investment, and private financing. Private sector engagement in WASH is low compared to other sectors. Private sector engagement in WASH takes place mostly through long term operation and management (O&M) contracts. Private sector operators do not generally bring their own financial resources, but they can mobilise financing (for example from banks) to undertake certain investments (for example for improving billing and collection systems or for maintaining existing assets). Private investors are mostly interested in well-defined investment projects in desalination and wastewater reuse, but also in energy efficiency and use of renewable energy in WASH.

Private sector actors face common challenges for engaging in WASH. Some are related to the technical aspects of the projects (such as lack of clear information, projects that are hard to evaluate, or absence of a clear O&M classification). While others are related to the financial sustainability of the projects (such as uncertainty created by the

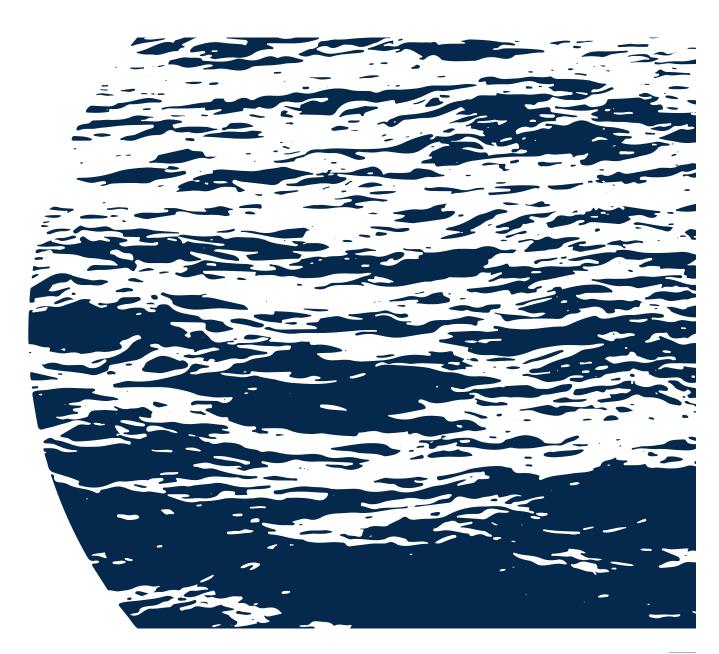
regulatory framework, limited understanding of financial models among public employees, or the impact of changes in energy tariffs). Overcoming those challenges will require improved information, increased financial stability, capacity development for public employees, and an improved water-energy framework.

Private sector engagement requires public sector leadership. In Egypt, the Public Private Partnerships (PPP) Unit in the Ministry of Finance tenders and structures all projects than could be developed as PPPs. In the WASH sector, they include water purification, desalination, wastewater reuse, industrial use, sludge treatment and, network management (leakage control). The government acts a sole customer, under off-take agreements. The contracts clearly state the obligations of the government and the private actors. Blended finance is mobilised for high capital expenditure projects. And different financial models are used for different projects - for example, in leakage control projects the revenue of the private actor is a percentage of the value of the water saved.

Private sector engagement requires a strong enabling environment. The OECD identifies four elements and has developed a scorecard tool to assess them. First, strengthening the policy framework (by ensuring predictable revenues, targeting subsidies, incorporating the cost of water in energy and agricultural sectors, and increasing tariffs while addressing affordability concerns). Second, ensuring availability of project preparation and development funds. Third, scaling up risk mitigation instruments (such as guarantees, and blended finance funds for water at regional/global level). Fourth, diversifying financial sources and instruments (by leveraging domestic finance, engaging national public development banks, and developing innovative finance arrangements).

While they face particular challenges, commercial banks can also be engaged in finan-

cing WASH. Most commercial banks have limited experience in financing infrastructure. And many WASH projects are characterized by a need for longer-term financing and higher regulatory constraints and risks than those of the traditional customers of commercial banks. Nevertheless, the Union of Arab Banks considers that its members have a unique opportunity to engage in WASH finance, contributing to regional development and to their own sustainability goals. The challenges that they face, such as regulatory issues and risk perception, can be mitigated through strategic partnerships (including with international financial institutions), risk-sharing mechanisms (including through blended finance arrangements), and the development of water-related expertise in commercial banks. They could engage in WASH finance as social responsibility, and work within PPP frameworks.



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This publication has been developed building on the contributions of over 40 highly-qualified moderators and speakers of the 5th Conference on Water Finance and Investment.

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## **WASH Finance**

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