

4 Mobilising additional sources of funding and finance

This chapter presents a range of options to mobilise additional sources of funding and financing for water-related investment, by generating revenue streams, reducing investment risks, effectively using intermediaries and making use of blended finance where appropriate. The chapter documents a wide range of financing approaches and specific practical examples to illustrate how they have been applied in distinct contexts. Finally, the chapter reflects on opportunities for adapting and scaling up to new contexts.

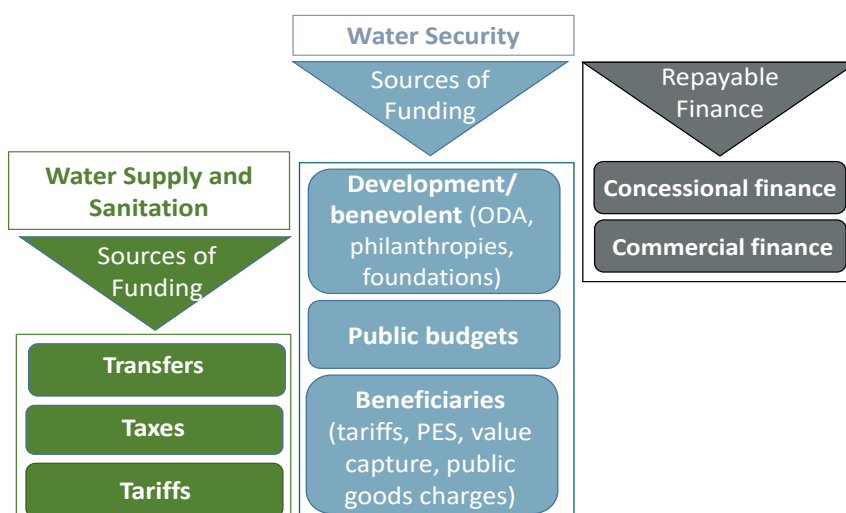
There are a range of options to mobilise additional funding and financing for water-related investments. Governments can employ a variety of economic and financial policy instruments to influence the behaviour of individuals, communities and organisations to help achieve water policy goals. These instruments can also help to generate revenues for water management and the delivery of water and sanitation services (discussed in Chapter 3 on the enabling environment). In addition, a broader range of sources of capital can be mobilised.

Public finance is likely to continue to play a central role in financing water-related investments, with concessional finance playing an important role particularly in developing countries. Yet, in light of the constraints on public finance and substantial investment needs, crowding in contributions from a wider range of financiers can help to scale up investment in contexts where there is an attractive risk-return profile.

Encouraging access to commercial finance can strengthen financial discipline of water service providers and promote the development of domestic capital and credit markets. Commercial finance includes public finance (such as sovereign wealth funds or public pension funds) as well as private finance, which seeks market rate returns (OECD, 2019^[11]). In the water sector, it ranges from microfinance loans, to larger, long tenor loans to bonds, which can be offered to service providers, local governments, individual users or communities (World Bank, 2017^[2]; OECD, 2015^[3]). Commercial capital brings with it greater requirements for accountability, reporting and transparency to fulfil due diligence requirements of commercial actors. Private financiers are increasingly interested in investment opportunities with Environmental, Social and Governance (ESG) attributes. Further, mobilising commercial capital can free up public funding that can be reallocated to other uses (World Bank Group, 2016^[4]).

In distinction to other sources of funding, commercial finance needs to be repaid. It requires compensation such as repayment at a future date plus remuneration in the form of interest or dividends. While other sources of revenue can close the financing gap, commercial finance can only bridge this gap. (OECD, 2010^[5]) Figure 4.1 gives an overview of potential sources of revenue streams for water security, distinguishing between repayable finance and revenues for WSS and water security in broader terms. Repayable finance is broken down between concessional finance (provided by public actors and including a grant element) and commercial finance.

Figure 4.1. Potential sources of revenue streams for water security

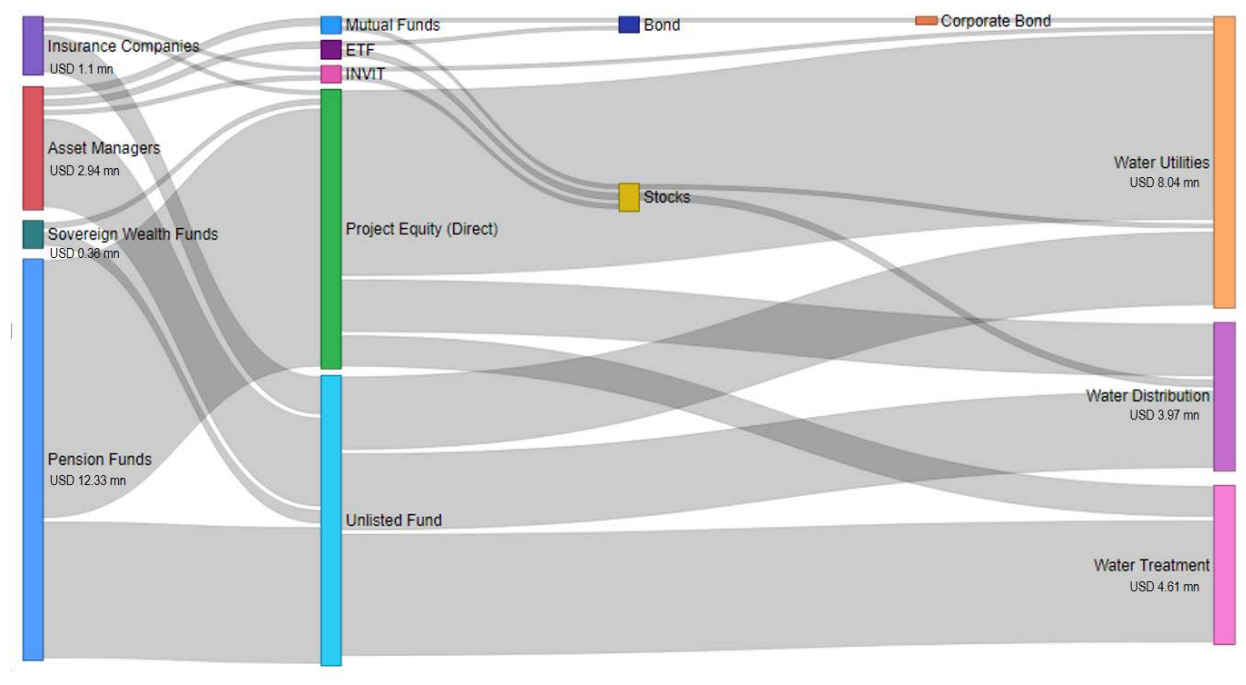


Source: Adapted from (OECD, 2010^[5])

To date, commercial finance for the water sector has not reached the scale commensurate with the challenge of bridging the investment gap. In Europe, commercial finance covers only 6% of the total expenditure on WSS (OECD, 2020^[6]) and a very minor share of all funding on watersheds investments (Bennett, Leonardi and Ruef, 2017^[7]).

Recent OECD analysis (2020^[8]) of institutional investment holdings in “green” infrastructure underscore the limited role commercial finance plays in the water sector. The analysis shows that institutional investment in water supply infrastructure accounts for a mere 1.6% of all investment holdings mapped in the analysis (excluding listed stocks). Only USD 17 billion is currently invested in water supply-related assets. As shown in Figure 4.2, the majority of investments are held by pension funds (USD 12 billion). The investment landscape of the sector is also much less diverse in terms of instruments and vehicles used to channel private capital to other infrastructure sectors.

Figure 4.2. Institutional investment in water supply infrastructure (excl. direct investment in stocks) – USD 16.73 million



Notes: Holdings of institutional investors domiciled in OECD and G20 countries (as on February 2020). The figure excludes direct stock holdings. Further, while some nodes appear to have unequal left and right sides, this is just a visual effect and they are always balanced.

Source: (OECD, 2020^[8])

As discussed in Chapter 2, the distinct characteristics of the water sector pose challenges for the mobilisation of commercial finance. Generally, the engagement of private investors and commercial lenders is determined by the attractiveness of the risk-return profile of investments which depends on two factors: i) a stable revenue stream; and ii) how the range of risks related to water security investments are shared between public and private actors. Investors often perceive the water sector as a ‘high risk / low return’ sector (OECD, 2018^[9]; OECD, 2010^[5]; Alaerts, 2019^[10]).

Strengthening the enabling environment for investment is fundamental to providing the conditions that can attract commercial finance. In addition, a variety of instruments and approaches can help to address various barriers by securing stable revenue flows from water-related investments and attenuating the different types of risks and unfavourable attributes. Strategically deploying public and development funding

along with risk mitigation instruments, such as via blended finance, can help to overcome the hurdles for commercial investment and play a critical role in mobilising additional commercial finance (OECD, 2019^[11]).

4.1. Generating revenue streams

Revenue streams fulfil several functions: they (1) cover the costs of service provision, (2) can be a source of capital needed to maintain or enhance asset quality, and (3) provide a means to leverage repayable (commercial) finance. Stable revenues are the main driver of financial sustainability and essential to attain creditworthiness. From the investors' point of view, one main determinant is the creditworthiness of the borrower, which depends on the ability to recover costs and to service their debt obligations. It is therefore essential to create and clearly define predictable revenue flows from water-related investments and to invest in the enhancement of borrowers' creditworthiness. Public funds can be used for investment or technical assistance to improve functionality and performance of service providers, positively affecting their creditworthiness (OECD, 2019^[11]). It can also be used to lower the average cost of capital, thereby creating the conditions for financially bankable projects.

The Beneficiary Pays Principle can be applied through raising revenue from actors (water utilities, corporates, property developers, etc.) who benefit from water security investments in their local area. For example, benefits from improved catchment management can be generated for actors operating in the area, through higher turnover, lower expenditures for water treatment or improved quality of their products. By strategically linking these returns to an investment, local actors may have the incentive to provide non-repayable capital in improvements in water resources management that spur such operational benefits. The brewery Heineken, for instance, invests in the Monterrey Metropolitan Water Fund in Mexico and the mineral water companies Vittel-Nestlé and Volvic support farmers with cash or in-kind payments to adopt eco-friendly farming practices (Trémolet, S. et al., 2019^[11]; OECD, 2020^[6]). Box 4.1 provides further insights into the Water Fund model and other selected country examples.

The Polluter Pays principle can be applied through property rights or marketable permits and thus providing the conditions to mobilise additional revenue flows. One example are environmental offset markets where actors with negative impacts on water resources or ecosystems can buy certificates that provide funding for restoration projects to compensate. The American private investment firm Ecosystem Investment Partners (EIP), for instance, manages investments in large-scale ecosystem restoration and conservation. With committed capital from institutional investors, such as pension funds, they launch projects for flood protection, improving water system operations, etc., which generate credits that can be sold on the environmental offset market. In 2019, EIP had USD 885 million in assets under management and has restored 180 square km of wetlands and over 280 km of streams (EIP, 2020^[12]). In Europe, the European Commission is currently elaborating approaches to implement the Polluter Pays Principle, particularly in the context of an extended producer responsibility. As one example, this could translate into chemical companies having to pay for more stringent water treatment.

Whether it is appropriate to apply the Beneficiary Pays Principle vs. the Polluter Pays Principle depends on the particular contextual circumstances and what is considered as the "duty of care" by the relevant actors. The Beneficiary Pays Principle is typically employed when providing an incentive for actors to generate benefits on a voluntary basis additional to what is required by the current regulatory regime. The Polluter Pays Principle is typically applied via a dedicated policy instrument (e.g. an environmental tax) as part of the regulatory regime.

Box 4.1. Payments for freshwater ecosystem services

The Water Fund Model

Water Funds are collective investment vehicles, developed by The Nature Conservancy and the Inter-American Development Bank's (IADB) Latin Water Funds Partnership. They pool grant funding from donors, local communities and commercial actors within the spatial area and basin to finance investments in water security through nature-based solutions. Activities include payments for environmental services, including watershed management and biodiversity conservation, water resource management and adaptation measures to mitigate negative impacts on water resources due to climate change. Water funds offer no direct financial return on investment; instead, the profitability of the capital provision arises from the positive impacts on local actors reliant on water resources. The brewery Heineken, for instance, invests in the Monterrey Metropolitan Water Fund (FAMM) in Mexico, which, to date, has leveraged USD 9.1 million with an implementation area of 1 387 ha. Since the establishment of a first Water Fund in 2000, another 35 funds have been set up in South and North America, Kenya and South Africa. Water Funds are an effective tool to tackle governance failures in multi-stakeholder settings and can mobilise multiple types of funding sources. Yet, development finance remains essential to support the setup of these complex structures that bring together the needs of the various commercial actors as well as the different sources and expectations regarding returns.

Source : (Trémolet, S. et al., 2019^[11]; OECD, 2019^[11]; Latin American Water Funds Partnership, 2020^[13])

Payments for Ecosystem services in France

France launched its Biodiversity Plan in 2018 with a dedicated objective to put in place payments for ecosystem services to protect biodiversity and water quality. With a budget of EUR 150 million over three years, the government undertook a public tender for payments for ecosystem services (PES) pilot projects, which are tested in over 120 regions. The most successful projects will be implemented with a 5-year contract between farmers and beneficiaries such as local communities, associations, national parks, etc. Giving a value to soil conservation practices, water quality and biodiversity restoration can be accompanied with further requirements to limit or stop the use of herbicides, such as glyphosate. These payments schemes are hence a mechanism to recognise farmers' contributions to the creation of direct environmental benefits, which exceed mandatory standards. In addition, French water agencies increased their financial support dedicated to the transition towards an ecological agriculture by EUR 50 million per year starting in 2020.

Source : (Ministère de la transition écologique et solidaire, 2019^[14]) (Ministère de la transition écologique et solidaire, 2018^[15])

Eco-Compensation Schemes in the People's Republic of China

In 2008, the government of the People's Republic of China (hereafter 'China') has launched an Eco-Compensation pilot for watersheds, in which upstream stakeholders compensate downstream stakeholders for ecological damage and water pollution. The payment for watershed services (PWS) programmes focus on the creation of development zones, emissions trading schemes, water use right trading programs, trans-boundary water pollution programs and water resources conservation zones. The first cross-province PWS pilot program was implemented in the Xin'anjiang River watershed between Anhui and Zhejiang provinces in 2011. Between 2008 and 2016, ecological transfer payments to Key Ecological Function Zones have risen from CNY 6 billion across 230 counties to CNY 80 billion across 700 counties, nationally. While inspired by market-based approaches, the Chinese Eco-Compensation scheme does not entirely match the definition associated with purely market-based PWS projects. Stakeholders are upstream and downstream local governments (rather than private actors) and the schemes are subject to governmental command-and-control-measures.

Source: (Lu et al., 2018^[16]; Zhang and Bennett, 2011^[17]; Cardascia, 2019^[18])

4.1.1. Reducing investment risks and sharing risks among stakeholders

Commercial investors are cautious about uncertainty regarding any of the risks related to an investment opportunity. As discussed in Chapter 2, investors are confronted with a range of risks, including business risks (e.g. credit risks), macroeconomic risks (e.g. currency risk), regulatory and political risks (e.g. changing regulations or political unrests), commercial and technical risks (e.g. performance risks for innovative approaches such as NbS). A lack of analytical tools aggravates the challenge to assess and address these risks, lowering the attractiveness of the risk-return profile of water-related investments. Concerns around small ticket sizes and high transaction costs further dampen financiers' appetite to invest in the water sector. Adequate contractual arrangements or blended instruments and mechanisms can mitigate a variety of these risks, share the remainder with the public sector or commercial co-investors, or take a certain level of risk off the financier's own book.

Credit enhancement, including guarantees

Credit enhancements improve the credit profile of structured financial products or transactions. For example, they can be employed to allow existing revenue streams to be used as collateral (OECD, 2019^[1]). Traditional loan securitisation or political risk insurance are other instruments making use of public finance to improve the risk-return profile of water-related projects thus unlocking additional sources of finance. (OECD, 2020^[6]; World Bank, 2017^[2])

Public guarantees are an effective tool to reduce credit risk for commercial investors against non-payment. Public funds can be used strategically to mitigate for financial risks, resulting in lower cost of capital. Structured funds, for example, allow donor governments to use concessional finance in a first loss position to provide a risk cushion for commercial investors. Guarantees can also be applied for political, regulatory, contractual or currency risks. (World Bank Group, 2016^[4]; OECD, 2019^[1])

The use of guarantees should be carefully assessed in order to ensure that governments and donors do not take on excessive risk in terms of contingent liabilities. Guarantees should also be designed to avoid crowding out private finance. While designing guarantee schemes, donors should pay particular attention to ensuring their financial sustainability. Guarantees should ideally be time-bound, with credible expectations that they will be phased out over time. (Garbacz, Vilalta and Moller, 2021^[19])

Pooled financing

Pooled approaches can help overcome the high credit risks and transaction costs of individual small projects by grouping them together. Pooling can bundle multiple water service providers and diversify borrower risk, allowing to tailor different risk and return profiles for individual investors (OECD, 2019^[1]). Transaction costs can be shared among participants, enhancing the efficiency of the transaction. Pooling can help to attain scale of investment and thus facilitate access to capital markets or institutional investments (since most institutional investors require significant minimum investment sizes) (Streeter, 2017^[20]; OECD, 2010^[5]). The collective approach enables the pooled facility to issue bonds and on-lend to service providers, which is particularly relevant for small service providers and decentralised municipalities (World Bank Group, 2016^[4]).

Increasing transparency by using performance benchmarking and credit ratings

Credit ratings can raise transparency by providing independent assessment of the financial health of service providers, allowing investors to better assess potential investment risks. Sovereign credit ratings can give investors insights into the level of risk associated with investing in the debt of a particular country, including political risk. Moreover, water-related risks are increasingly recognised as a material factor for credit ratings of corporates. Systematically adjusting future cash flow expectations and valuations of companies for ESG factors, of which water is one, is one way for investors to identify how these water

risks may affect company valuations. The recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD) are an important initial development in this regard (OECD, 2018^[21]).

In light of growing demand, the finance industry is creating more products and services related to ESG ratings, indices, and funds. The number of firms providing ESG ratings have proliferated along with the number of ESG indexes and funds. While ESG methodologies are improving and becoming more transparent, scoring remains in a state of transition. ESG ratings can vary greatly from one ESG provider to another and the different methodologies used to translate raw data into a more sophisticated rating are subject to criticism because of the wide variance in the results. (Boffo and Patalano, 2020^[22])

Benchmarking is another important tool to measure and report technical and financial health of operators. For instance, the International Benchmarking Network for Water and Sanitation Utilities (IBNet) provides access to comparative information on core cost and performance indicators of water and sanitation utilities worldwide (IBNet, 2020^[23]). Practical examples of the implementation of these instruments are given in the section on the role of blended finance below.

4.1.2. Matching supply and demand for finance: The role of intermediaries

One critical limiting factor for commercial investments is a lack of well-prepared, bankable projects. On the demand side of finance, project developers often lack the skills necessary to support their funding applications with adequate documentation. On the supply side, financiers have limited knowledge of the water sector and there is a lack of financial instruments, which fit the needs of the sector. Public investment in capacity building and technical assistance could increase project developers' ability to design sound business cases, support project preparation and provide guidance on project implementation models or on documentation, including cost-benefit analyses and financial statements.

Intermediary institutions can be set up to better link the interests and capabilities of the water and financing industries (Trémolet, S. et al., 2019^[11]; Alaerts, 2019^[10]). Grant finance can be channelled through project preparation facilities to support project identification, appraisal and due diligence and piloting (OECD, 2010^[5]). Upfront preparation costs traditionally represent 3% of total project costs, but can run as high as 10% (World Bank Group, 2016^[4]) and could thus be covered via public funds. Intermediary institutions provide specialised knowledge and expertise and contribute to increasing the number of bankable projects (Cooper and Matthews, 2020^[24]; Trémolet, S. et al., 2019^[11]). The Dutch-seed funded Water Finance Facility, for instance, initiated the first country facility, the 'Kenya Pooled Water Fund', which was launched in 2018 (van Oppenraaij et al., 2022^[25]). Other examples are dedicated, so called 'water banks', such as the Netherlands Water Boards Banks or Natural Capital Finance Facilities (see discussion below).

A recent analysis of the role of intermediaries to facilitate finance for water-related investments documented the wide range of organisations playing various roles at the interface between demand for finance (e.g. water agencies, utilities or other service providers) and supply of finance (e.g. financing institutions) (Lardoux de Pazzis and Muret, 2021^[26]). These entities, referred to in the analysis as "intermediaries", include those working upstream on the enabling environment for finance facilitation; transaction advisory supporting partnership development (of which financing is one component), private sector lending windows of donors and international financial institutions, and dedicated financing facilities. These intermediaries play multiple roles along the investment value chain, in various geographies and at various scales (international, national, regional, local).

The analysis identifies and analyses a diverse sample of 52 intermediaries active in deploying one or more key functions across the investment value chain for three specific sub-sectors: utilities, small scale water and sanitation service providers and nature-based solutions. The analysis assesses the extent to which the activities of these intermediaries is aligned with the critical functions needed to mobilise finance across the sub-sectors. It identifies gaps, redundancies and misalignments and calls for a shift from the current

opportunistic approach to a more strategic approach in the design and activities of intermediaries, supported by governments and financial institutions. Key findings are summarised below¹.

A constellation of intermediaries playing various roles along the water investment value chain constitutes a striking feature of the water sector

The water sector is characterised by an abundance of players and intermediaries performing a diversity of functions. Understanding the roles and responsibilities of actors within the sector is made difficult by this extraordinary diversity of entities. This has clearly been to the sector's disadvantage when it comes to attracting investors who need to be provided with clarity and perspective, as well as certainty about the alliances needed to set up and manage bankable projects.

The sole provision of financial mechanisms is not sufficient to attract and facilitate water-related investments

The analysis of intermediaries shows that there is an abundance of organisations focused on providing financial mechanisms (e.g. grants, loans, equity, guarantees, collective investment vehicles, etc.) for water-related investments, revealing a strong concentration of activity at the transaction level. At the same time, there is a lack of bankable projects in the sector that can benefit from these financial mechanisms. The strong focus on the transaction level paradoxically leaves both the demand side (e.g. water agencies and service providers) and the supply side (e.g. financiers) underserved.

From the service providers' perspective, this can appear to be a highly fragmented market, resulting in significant transaction costs to identify the relevant intermediaries worth approaching. Moreover, most of the available financing mechanisms do not create incentives towards operational efficiency and improvement for service providers. Such incentives would support efforts to improve the creditworthiness of service providers and their capacity to access finance. Rather, interventions focus on providing viability gap funding and employing de-risking instruments at the transaction level but do not encourage the service providers to achieve higher operational standards. The proliferation of actors focused on providing financing mechanisms at the transaction level also increases competition to facilitate financing, in a context where the number of viable bankable projects remains limited.

A better alignment between the challenges specific to each water sub-sector and the key functions performed by intermediaries is needed

The design and implementation of public policies, investment preparation, and the development of human capital rank amongst priority functions needed to mobilise finance across all water sub-sectors covered in the analysis (e.g. utilities, small scale service providers, and NbS). However, each sub-sector differs in terms of the critical functions needed to facilitate financing due to their distinctive risk-return profiles and the relative maturity in terms of a dedicated track record to access finance. Water utilities are the most mature sub-sector in terms of access to finance, but still face deeply-rooted misperceptions that deter investors, and require strong efforts of business promotion. In contrast, small-scale service providers, and nature-based solutions require a different kind of support from the intermediaries: notably, ensuring that conducive policies and regulation are in place and supporting the coordination amongst multiple local stakeholders and new types of innovative partnerships.

By mapping the functions of intermediaries against the priority activities for each sub-sector, one can clearly observe that many activities identified as critical for a given sub-sector are among those which are rather neglected by the intermediaries reviewed. This observation, combined with the considerable focus of intermediaries on the provision of financing mechanisms, further reinforces the finding that the focus on the transaction level is not well-aligned with the critical need to foster a more conducive business and policy environment to enable water-related investments.

Anchoring the role of intermediaries at the relevant geographic scale is a prerequisite to optimise their intervention

Several examples of intermediaries reviewed in this analysis illustrate how the articulation of functions performed and the geographical scale of intervention can reinforce the relevance of their intervention (for example, in the case of the Cities Development Initiative for Asia (CDIA) and WWF Bankable Water Solutions). A key consideration is the importance of proximity to the local level to provide credibility to the actions of intermediaries who can thus offer solutions better adapted to the needs of the local players and to the characteristics of the local markets. Knowledge of specific local conditions and access to key decision makers is highly valued by investors and financiers.

Intervention at the regional level has the potential to foster economies of scale, while maintaining proximity to activities on the ground. The analysis highlights that greater attention could be placed on interventions at the regional level, which only a small share of the intermediaries reviewed in this sample currently focus on.

Gaps and redundancies in the activities of intermediaries call for a shift to a more strategic approach

Intermediaries' activities are often driven by an opportunistic approach and political agendas, or are simply reflected by the dynamism of water entrepreneurs. There is a need to shift to a more strategic approach in order for intermediaries to address the full range of service providers' and financiers' needs along the investment value chain. The strikingly strong role played by the abundance of non-profit organisations raises the question of how to promote coordinated action in a sector with a highly diversified landscape of actors.

Consideration also needs to be given to ways to enhance the complementarity of intermediaries, the consistency of their interventions and their collective effectiveness to attract domestic and/or foreign finance. In some cases, integration with other intermediaries either horizontally or vertically may be considered. Identifying the missing links and overlaps of the value chain in the local and regional ecosystems is essential. Gaps may be more of a concern than redundancies and initiatives to fill those gaps should be encouraged.

Governments and financial institutions have a role to play

The results of this analysis imply a need to shift from the current opportunistic approach to a more strategic approach, under the direction of governments and in partnership with financial institutions, with primary efforts on transformative changes through strengthening the enabling environment for investment rather than transactional activities.

Key actions include:

- Strengthening the policy, regulatory and institutional frameworks of the sector
- Generating demand for quality services
- Supporting initiatives to fill gaps in the investment value chain currently underserved by intermediaries
- Showcasing the water sector as an opportunity for the private sector to grow business
- Supporting and facilitating transactions with a focus on improving business fundamentals and innovative partnerships.

4.1.3. Growing interest to align finance with environmental objectives

Sustainable finance is gaining increasing attention from investors, financial institutions and governments and there is an opportunity for water-related investments to attract financing seeking environmental and social impact. Water-related investments contribute to climate action, notably climate adaptation and resilience, by better managing increasing risks of floods, droughts, water stress and water quality degradation. Further, the water sector can contribute to mitigation efforts, with water-related activities potentially causing over 10% of anthropogenic greenhouse gas emissions (Kerres et al., 2020^[27]). Water and wastewater utilities, for example, contribute to 30% to 40% of a municipality's energy use (WaCCliM, 2020^[28]). In the United Kingdom, water companies produce almost one third of the country's industrial and waste process emissions (Water UK, 2020^[29]). Investments in energy efficiency could therefore be a valuable contribution to CO₂ emission reduction efforts.

In order to tap into the growing demand from investors for sustainable projects, water investments should make visible the range of benefits they deliver, for climate action, biodiversity and the environment generally. At the same time, efforts to avoid “green-washing” or “blue-washing” are imperative.

As noted above, at present, there is no common understanding or harmonised definition of what is considered a green or sustainable investment. While standards or metrics exist, the multiplicity and heterogeneity of definitions is often cited as an important barrier to scaling up sustainable investment. Differences in policies and standards relating to sustainable investments can result in market fragmentation and increased uncertainty, constraining the financing of transition-compatible assets and projects. (OECD, 2020^[30]; Och, 2020^[31])

Taxonomies for Sustainable Activities

The development of sustainable finance taxonomies can serve to reduce these uncertainties and to define clear metrics and thresholds for what is considered a sustainable project. This could increase investors' confidence and establish market clarity, and thus facilitating the mobilisation and reallocating of financial capital towards sustainability objectives.

Within its Action Plan for Sustainable Finance, the European Union (EU) is currently developing the EU taxonomy, establishing a unified classification system for sustainable economic activities with clearly defined thresholds and legal obligations for financial market participants, large companies, the EU and its member states. The EU taxonomy is unique in its approach to interlink six environmental objectives² based on a ‘Do No Significant Harm’ Principle.

Technical screening criteria define the metrics and thresholds for about 80 economic activities³. The screening criteria for the two environmental objectives *Climate Change Mitigation* and *Adaptation* entered into force in January 2022. A delegated act with the detailed criteria for the four remaining objectives will be published in 2022 and enter into force in in January 2023. The Platform on Sustainable Finance has published recommendations for these technical screening criteria in 2021. (European Commission, 2020^[32]; European Commission, 2021^[33])

Water-related activities under the EU taxonomy

The EU taxonomy explicitly includes water resources as one of the six environmental objectives notably the *Sustainable use of water and marine resources*. Thus, economic activities, which substantially contribute to this objective (while not doing significant harm to any of the other objectives), will be classified as taxonomy-compliant. Eligible activities are, for example, actions that improve water management and efficiency, including by protecting and enhancing the status of aquatic ecosystems or by promoting sustainable water use. Other activities include the protection of human health and of the environment from water pollution.

Further, the sixth environmental objective *Protection and restoration of biodiversity and ecosystems* also encompasses water-related investments, especially linked to nature-based solutions. Eligible activities contribute to the protection, conservation or restoration of biodiversity and ecosystems, and thereby enhancing ecosystem services (European Commission, 2020^[32]). Water plays a vital role for the functioning of all of these services and has therefore the potential to make substantial contributions to this target.

Box 4.2 gives an overview of the already elaborated criteria for the objectives *Climate change mitigation* and *Adaption* related to activities in the water sector. More detailed information on EU taxonomy developments in relation to water can be found in the background paper for the 6th Roundtable meeting on Financing Water (OECD, 2020^[34]).

Box 4.2. Screening criteria for water-related activities for the environmental objectives *Climate change mitigation* and *Climate change adaptation*

Screening criteria for mitigation

The screening criteria for mitigation related to water include economic activities leading to improved energy efficiency. The renewal of water collection, treatment and supply systems counts as eligible sustainable activities if it (a) lowers the average energy consumption of the system by at least 20% compared to own baseline performance averaged for three years (or by at least 10% for waste water systems), or (b) if it reduces leakage and closes the gap by at least 20% between current leakage level and an Infrastructure Leakage Index (ILI) of 1.5. The construction, extension and operation of water collection, treatment and supply systems are eligible activities, if (a) the leakage level equals to or is lower than 1.5 (ILI), or if (b) the average energy consumption of the system equals to or is lower than 0.5 kWh per cubic meter billed/unbilled authorised water supply. Wastewater (collection and treatment) systems need to demonstrate net zero energy use on an annual basis, in order to be eligible.

Screening criteria for adaptation

Eligible economic activities contributing to climate change adaption implement solutions for a list of climate-related risks, which include floods, sea level rise, droughts, water stress, changing precipitation patterns, temperature variability and permafrost thawing. The adaptation solutions shall favour nature-based solutions or rely on blue or green infrastructure to the extent possible. Non-life insurance related to the underwriting of the listed climate-related perils are also included as sustainable activities.

Adaptation solutions are “monitored and measured against pre-defined indicators and remedial action is considered where those indicators are not met”.

Source: (European Commission, 2020^[35]; European Commission, 2020^[36])

Implications for water-related investments

Investments in water-related projects are often hampered by a lack of experience of investors and financial institutions with the sector as well as both real and perceived risks. By defining water resource management as one of the key environmental objectives, the EU taxonomy raises the water sector’s visibility for financial actors and could raise investors’ awareness and interest. (OECD, 2020^[30]; Schütze et al., 2020^[37]) By increasing transparency, the EU taxonomy provides investors with more information on what they are investing in and can reduce reputational risks. This could help to attract more retail, as well as institutional savings into sustainable investment, including water-related investments. (OECD, 2020^[30]) For example, a study has shown that currently, only about 5% of the total asset value held by European

insurers may be taxonomy-compliant, indicating the possibility for insurers, as major long-term investors, to contribute more significantly to sustainable infrastructure projects (Scholer and Cuesta Barbera, 2020^[38]).

One characteristic of water-related projects is the potential to meet several environmental objectives, such as nature-based solutions or integrated watershed management, improving water quality, biodiversity, pollution control at the same time. These projects could gain prominence due to the EU taxonomy or other taxonomies of sustainable finance in other regions that would integrate water-related investments. Such taxonomies may encourage crosscutting investments allowing for multiple environmental improvements. For issuers, the taxonomy provides clear guidance on how to capture environmental performance in specific contexts, and to deal with the challenge of trade-offs between the various environmental objectives. However, in practice, the fragmentation of distinct aspects of water resources management and water and sanitation service delivery across specific taxonomy categories could undermine efforts to take a holistic, systemic approach to financing water-related investments.

Certain water-related investments, such as those delivering new access to water and sanitation services to previously underserved communities, could be classified as contributing primarily to social objectives and falling under the environmental objective of ‘sustainable use of water and marine resources’ or others. If finance is increasingly channelled towards sustainable investments, it could become challenging to attract funds for these types of water-related investments, if not included in the taxonomy. The Platform on Sustainable Finance is currently working on a possible taxonomy extension on social objectives and specifically recommends the inclusion of services for basic human needs, such as water, including wastewater management (European Commission, 2021^[39]; Platform on Sustainable Finance, 2021^[40]; Platform on Sustainable Finance, 2021^[41]).

Underpinning the **EU Green Bond Standard**, the taxonomy could also scale up water-related investments in the form of green bonds. Currently, the demand for green bonds outstrips the capacity of issuers to identify eligible ‘green’ projects and assets of financing. The EU taxonomy provides clear and standardised requirements for eligible projects and could thus reduce related cost, time and effort (OECD, 2020^[30]). It could hence improve the market’s ability to identify new projects and widens the range of eligible activities, including water-related activities (TEG, 2019^[42]). When demonstrating taxonomy-alignment, water-related projects could raise funds on the green bond market, opening up opportunities for new investors and scaling up sources of finance. Yet, the impact of the EU Green Bond Standard on the water sector’s representation on the green bond market could remain limited, without efforts to develop investment opportunities with an attractive risk-return profile and to pool smaller-scale investments.

A disadvantage of the taxonomy and its linked initiatives could be the required reporting procedures that could be complex, burdensome and costly for issuers and investors. It could be difficult for financial market participants and corporates to demonstrate multi-criteria compliance and can hence involve significant time and costs. Data gaps could create an additional burden and could hamper the use of the taxonomy. (OECD, 2020^[30]; Och, 2020^[31]) It would hence be crucial for the water sector, that project developers are able to provide relevant data and to demonstrate compliance with the taxonomy at reasonable cost. Public funds could be used to support water utilities and other project developers with technical assistance to develop bankable and taxonomy-aligned projects.

International outreach and other sustainable finance taxonomies

Other sustainable finance taxonomies have been developed in various regional and national contexts. China, for example, has developed frameworks for a ‘green industry’, ‘green lending’ and ‘green credit and green bonds’, usually referred to as the Chinese taxonomy. The latter contains detailed criteria and thresholds for its six objectives, which contain the water-related categories ‘Water saving and unconventional water use’ under the broader objective *Resource conservation and recycling*, and ‘Natural ecological protection’, ‘Ecological agriculture’ and ‘Disaster control’ under the objective *Ecological*

protection and climate change adaptation (OECD, 2020^[30]). Other examples stem from Japan, which published an updated Green Bond Guideline in 2020, Colombia, which started the development of a green taxonomy, or the ASEAN region with its ASEAN Green, Social and Sustainable Bond Standards. (IPSF, 2020^[43])

Overall, patchy global standards could be a hurdle to joint financing efforts of large-scale projects, such as water-related investments, and could deter investors from taking on multilateral or cross-border projects (Anthony, Yuan and Xia, 2021^[44]). Further, as financial markets are global in nature, investors seeking to build portfolios of sustainable investments need to have confidence that standards across jurisdictions are sufficiently comparable. The International Platform on Sustainable Finance, composed of experts from both the public and private sector, strives to compare, harmonise and develop and update the different initiatives and frameworks. Stakeholder engagement, including from the water sector, is encouraged and vital in order to help shaping the taxonomy frameworks in an effective way.

4.1.4. The role of blended finance: Illustrations from developing countries

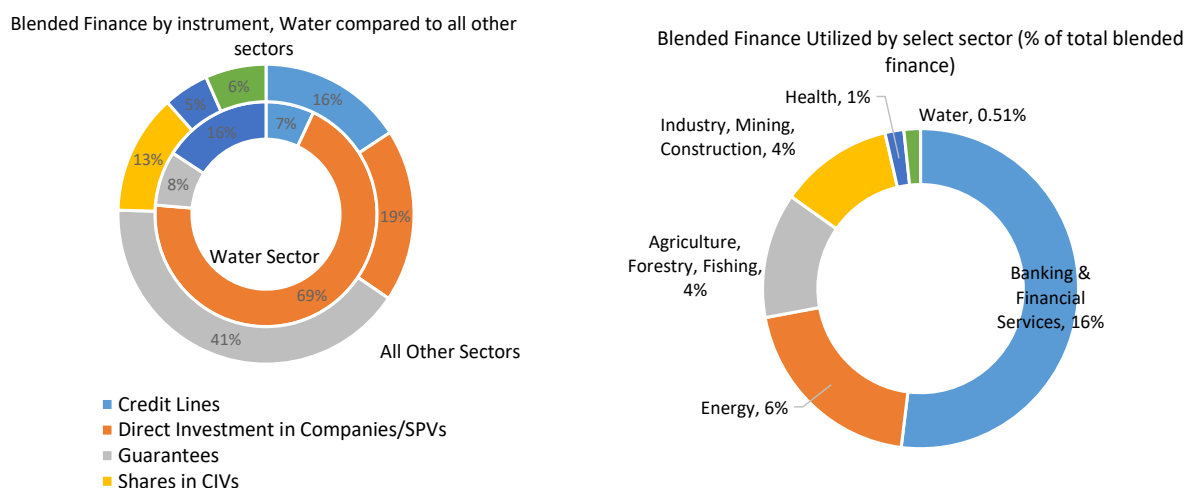
Concessional finance is playing an important role in developing countries to help finance investments in water security in developing countries. However, development finance flows, and particularly concessional finance flows, are not sufficient to address total financing needs and achieve the 2030 Agenda for Sustainable Development. (OECD, 2019^[1])

Development finance can be used strategically to blend in additional commercial finance. Blended approaches aim at mobilising additional capital for investments for sustainable development in developing countries and can act as risk-reducing mechanism to increase lenders' confidence. By deploying development finance in a way that addresses investment barriers preventing commercial actors from providing capital in SDG-relevant sectors, such as water and sanitation, blended finance operates as a market building instrument. It can thus provide a bridge from reliance on grant and other donor finance towards commercial finance. Similar approaches to use public funding strategically to mobilise commercial finance for water investments are also relevant in OECD countries, as are the use of blended finance instruments and mechanisms to de-risk investments. This section focuses on the developing country context.

Blended finance can help shift funds that are currently not directed to sustainable development to countries and sectors that have significant investment needs in order to deliver on the SDGs. Beyond addressing a financing gap, blended finance should aim to have a transitory nature, designed to enable stand-alone commercial investment in the long-run, by providing confidence, capacities and track record in markets where commercial investors are not yet present. To date, the use of blended finance models for water-related investments remains limited. Only USD 2.1 billion out of USD 157.2 billion mobilised through official development finance from 2012-2017 globally went to the WSS sector. This 1.36% share of private finance mobilised compared to the overall sample reveals the limited attractiveness of the sector to commercial investors. The banking and financial services, energy, industry, mining and construction sectors mobilised over 18 times the amount mobilised in the water and sanitation sector from 2012-17; mobilisation in agriculture was over twice as much (OECD, 2019^[1]). Recent data from 2016-18 confirm this trend, with the WSS sector accounting for only 1% of commercial finance mobilised by development finance (Figure 4.3.).

In terms of instruments, between 2012 and 2017, blended finance instruments differed depending on the sector. Guarantees, for example, mobilised 58% of the private finance in the WSS sector, while only 40% in all other sectors; syndicated loans mobilised 29% for WSS and 17% for the other sectors. Direct investment represented 17% of the private investment mobilised in all other sectors, comparative to 7% mobilised in the WSS sector (OECD, 2019^[1]). Direct investment in companies or special purpose vehicles (SPVs) accounted for the majority of commercial finance mobilised for WSS (69%) over the 2016-18 period (Figure 4.3).

Figure 4.3. Blended Finance by Selected Sector 2016-18



Note: In the left figure, the percentages are of all blended finance from 2016 to 2018; we excluded the largest sector “unallocated/unspecified 66%” to better show the selected sectors in context. In the right figure, “All Other Sectors” includes unallocated/unspecified and all remaining sectors

Source: Authors, based on OECD DAC data on amounts mobilised from the private sector by official development finance interventions: <https://www.oecd.org/dac/financing-sustainable-development/development-finance-standards/mobilisation.htm>

The fact that water and sanitation services are locally sourced and provided, and flood risks and irrigation best managed at a basin scale, makes it vital to closely cooperate with local actors and to align with local development needs. This also helps avoid excessive reliance on concessional finance and to avoid crowding out commercial finance by creating market distortions and undermining financial sustainability of the sector. Further, blended finance should be designed in conjunction with efforts to improve the enabling environment for commercial investments. Due to the public good dimension of water services and the common pool feature of water resources, the water sector requires strong regulatory and policy frameworks and robust allocation regimes (see Chapter 3 on the enabling environment). Yet, in developing countries, the water sector often faces a weak enabling environment with absent regulations or insufficient enforcement. Blended finance cannot compensate for an unfavourable enabling environment, but rather needs to be accompanied by efforts to promote a stable and conducive policy environment.

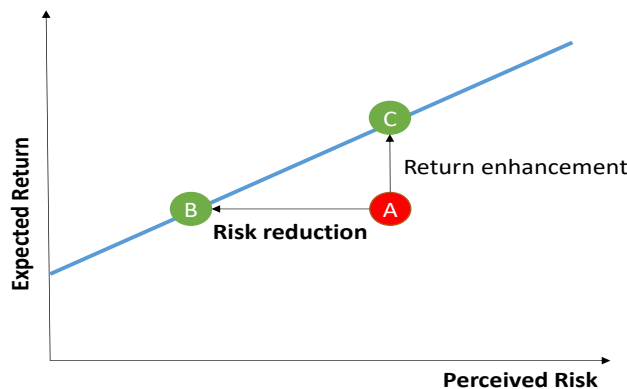
A diagnostic tool to assess the readiness for blended finance at country level

Blended finance is a relevant structuring instrument for projects that are either bankable or near-bankable. In the case of near-bankable projects, blended finance can play an enabling role – for example in underwriting credit risks for projects that lack collateral. However, many projects that are deemed bankable (i.e. that could be financed on market-based terms) are unable to attract financing because of the lack of domestic liquidity or capital availability. As a consequence, blended finance is necessary despite a project’s viability for market-based finance. To the extent that this lack of domestic liquidity is due to risks related to the specific country context or weakness in the enabling environment (as distinct from the specific project), then reducing those risks and perceptions of risk should pave the way for greater uptake of commercial finance (Money, forthcoming^[45]).

Blended finance can be applied as a structuring instrument to achieve one of two objectives: to reduce the perceived risk of a project, relative to its expected return; or to enhance the expected return of a project, relative to its perceived risk (Figure 4.4). In practice, most blended finance transactions are oriented

towards the reduction of risk. These risks are heterogeneous in nature and vary in salience from one country to another. As set out in (Money, forthcoming^[45]), the *perception* of these risks is also heterogeneous, depending on the actor and their motivations and incentives to act. Understanding these perceptions, and how they vary within and across countries and among relevant actors provides valuable insight in assessing the “readiness” for blended finance at country level and tailoring the blended finance approach to address specific local conditions. Reducing risk perceptions results in lowering the average cost of capital for projects. In the case of water, where revenues are scarce, and increasing returns may harm affordability objectives, it is an avenue to unlock access to finance.

Figure 4.4. Application of blended finance to reduce risk or enhance return



Note: Shifting from point A towards point B reduces risk to achieve bankability; shifting from point A towards point C enhances returns to achieve bankability.

Source: (Money, forthcoming^[45])

To gather empirical data on perceived risks an indicator scorecard has been designed to collect data from a range of financial actors (see Money (forthcoming^[45]) for further details on the rationale and approach). The indicators are grouped in three categories: liquidity, bankability and capacity. Liquidity refers to the availability of capital in the amount, denomination, duration and cost that is necessary for the viability of blended finance. Bankability refers to the availability of projects that could be financed on market terms, and considers inter alia creditworthiness, performance, resilience, sustainability and growth prospects. Capacity refers to the institutional, regulatory, policy, market and human capacity requirements that need to be met for blended finance projects to be implemented. The indicators are presented as a series of statements against which respondents provide a score based on a Likert scale.⁴

To apply the scorecard in a practical way, data would be collected and consolidated by relevant respondent categories. In the context of a national policy dialogue on financing water, the results could inform discussions between policy makers, development partners and financial market actors to target elements where strengthening the enabling environment is required. It could also inform the tailoring of blended finance instruments to the local context. Updated on a periodic basis, the scorecard could provide a longitudinal marker of changing risk perceptions regarding readiness for blended finance across a range of countries. (Money, forthcoming^[45])

Blended finance instruments and practical examples

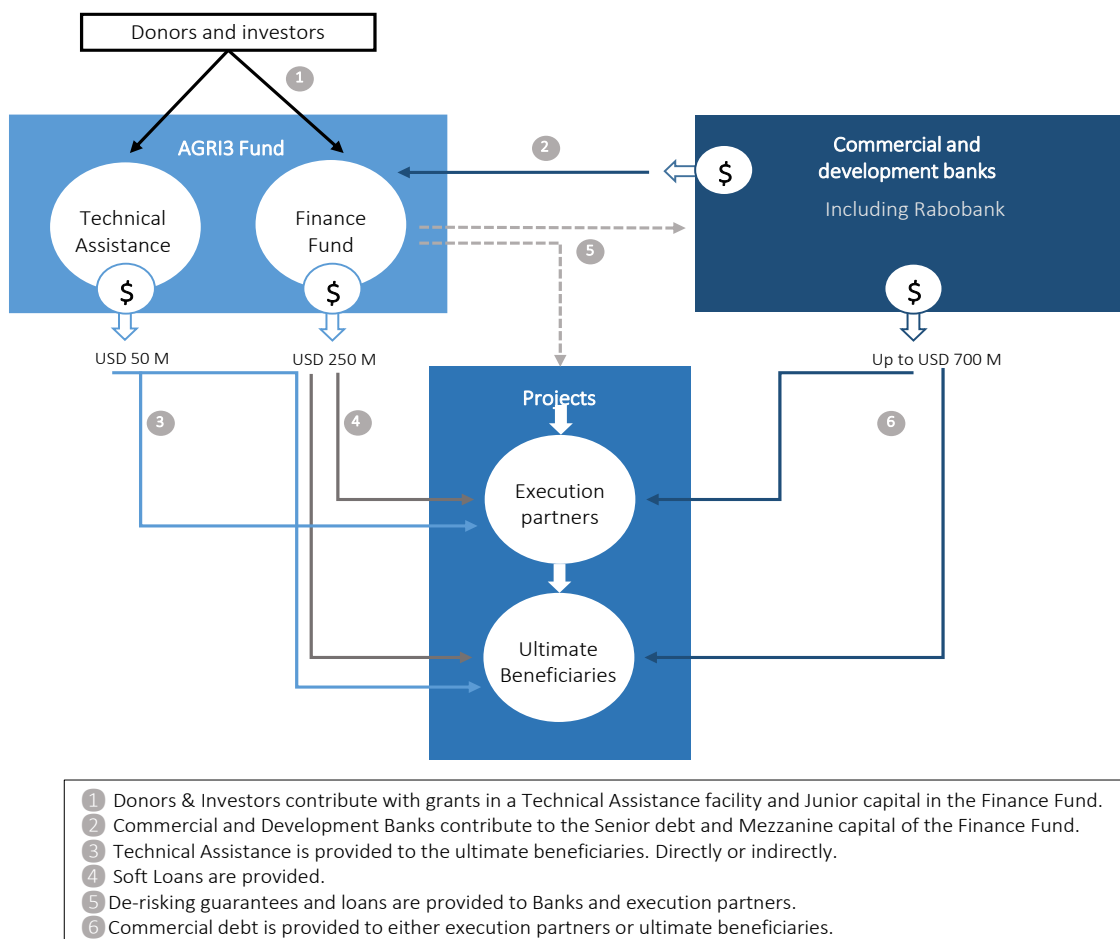
The following section will discuss different blended finance instruments in various contexts, such as large investments in water supply and sanitation, multi-purpose water infrastructure and micro-finance for off-grid sanitation or small-scale irrigation investments.

Guarantees

Guarantees are the most commonly used credit enhancing tool in the blended financing of water and sanitation utilities. The Philippine Water Revolving Fund, for example, had a primary and secondary guarantee in place, the former granted by the private Local Government Unit Guarantee Cooperation (LGUGC), covering a maximum of 85% of the bank's exposure, backed by the second guarantee from the USAID Development Credit Authority (up to 50% of the LGUGC's exposure). (OECD, 2019^[1])

Another example is the AGR13 Fund, a blended finance structure aiming to catalyse private finance for sustainable agriculture, reforestation, CO₂ reduction and improvement of rural livelihoods. Launched in 2020 as partnership between Rabobank and UNEP, The Sustainable Trade Initiative IDH and the Dutch Entrepreneurial Development Bank FMO, the AGR13 Fund aims at de-risking commercial loans by providing guarantees and thus unlocking at least USD 1 billion. The fund is composed of a USD 250 million guarantee 'Finance Fund', to which Rabobank and the Dutch Government have each committed USD 40 million, and a USD 50 million 'Technical Assistance Facility', managed by IDH. The fund targets guarantees of between USD 2 and 15 million to enable projects between USD 5 and 25 million, with tenors up to 12 years. Lower amounts are possible for initial project stages, if they are scalable that full implementation leads to commitment in the target range (IDH, 2020^[46]). Figure 4.5 visualises the different components and financing structure of the AGR13 Fund.

Figure 4.5. The AGR13 Fund structure



Source: Authors, adapted from IDH (2021), *AGR13 Fund Technical Assistance Facility, Financing Structure of the Fund.*, <https://www.idhsustainabletrade.com/landscapes/agri3-fund/>.

Credit enhancements

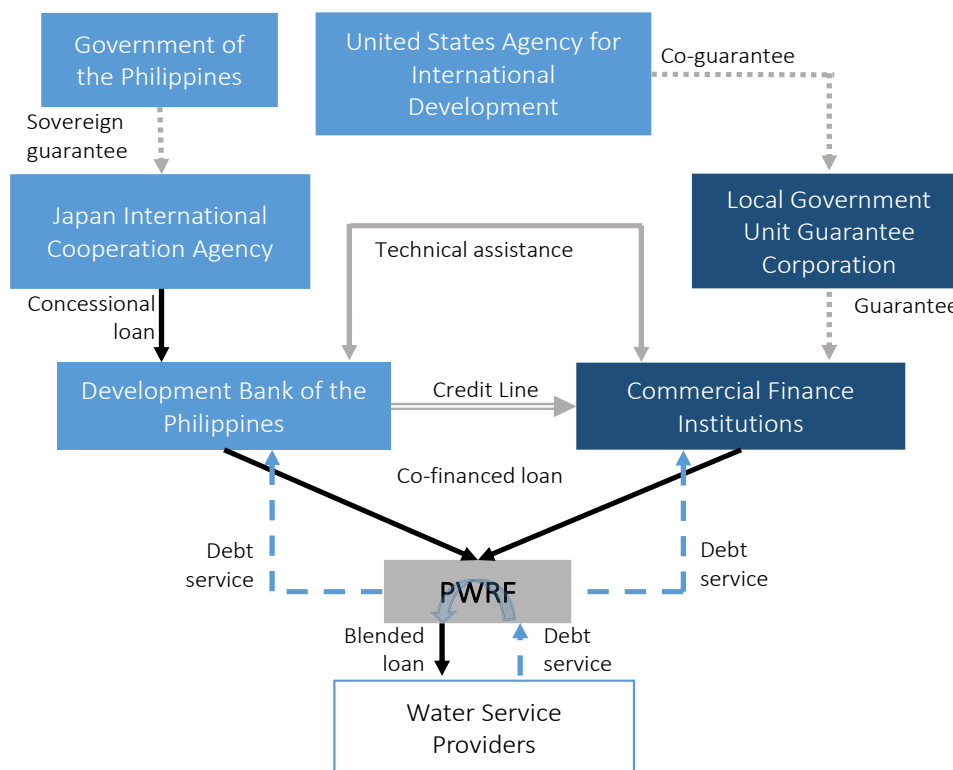
In Jamaica, the Jamaica Credit Enhancement Facility placed an USD 3 million grant from the Global Environment Facility-funded Caribbean Regional Fund of Wastewater Management project (CReW) in a reserve account as a guaranteed fund, and, with a 4:1 leverage of financial resources, allowed the fund to provide a secondary collateral against the USD 12 million loans from the National Bank to the national water and sanitation utility of Jamaica. (OECD, 2019^[1])

In Chile, the National Irrigation Commission manages a cost-share grant programme to support small-scale initiatives for irrigation development and management. Small and medium sized owners can complement their investments in irrigation and drainage projects for community or individual works with public grants. Small producers who benefit from the Agricultural Development Institute can receive financing of up to 90%, and small farmer organisations up to 70% of total costs (Pavez, Roose and Faúndez, 2020^[47]). Since the according law entered into force in 1986, about 23 000 farmers have benefitted from the program, which contributed to develop irrigation on 200 000 ha, including a growing number of small farmers over time. The programme also enabled 500 000 beneficiaries to shift to pressurised irrigation, representing a total area of 325 000 ha. (Gruère, Ashley and Cadilhon, 2018^[48]).

Investment funds or collective investment vehicles

Pooling mechanisms can use different types of instruments, including equity, debt or guarantees to invest in specific sectors or regions. Figure 4.6 illustrates the example of the USD 230 million Philippine Water Revolving fund (PWRF), which aims at sharing risk-return profiles, lowering borrower costs and marketing water and sanitation projects to private finance institutions. With a concessional loan from JICA, the Development Bank of the Philippines (DBP) blends public funds with commercial financing from finance institutions at a 75%-25% ratio from each source respectively. The PWRF revolves principal repayments on the loans, while interest payments are used to service the blended finance from DBP and local banks. A credit line is set up by DBP to mitigate the liquidity risks of the banks involved, which they can use to disburse their share of the blended loans.

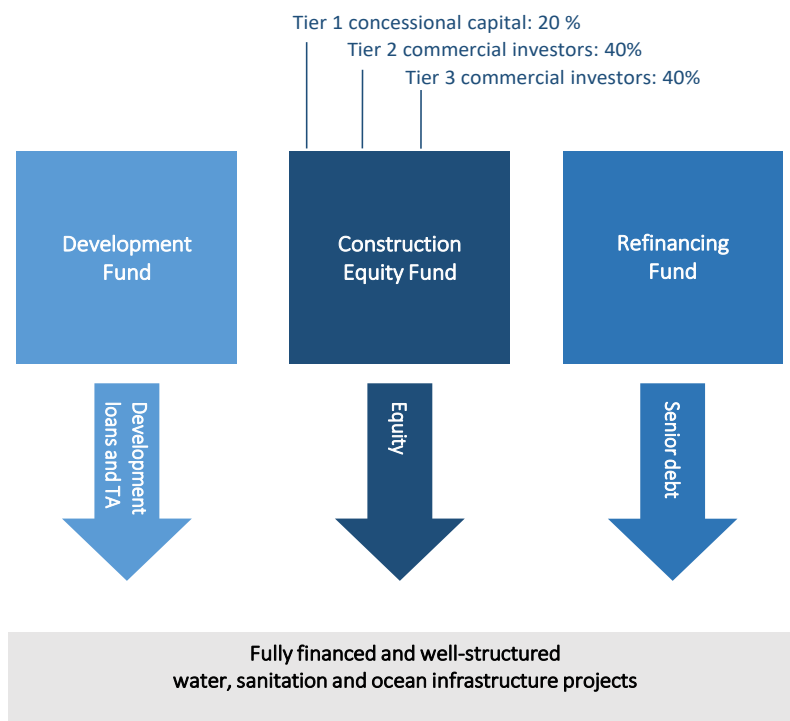
Figure 4.6. The Philippine Water Revolving Fund financing structure



Source: (OECD, 2019^[11])

The Dutch Fund for Climate and Development (DFCD) is another blended finance fund which aims at mobilising private sector investment in projects related to climate adaptation and mitigation in developing countries. It seeks high impact investments to protect and enhance the health of critical ecosystems and increase communities' resilience to climate change and extreme weather events. The fund is managed by a pioneering consortium of Climate Fund Managers (CFM), the World Wildlife Fund (WWF), SNV Netherlands Development Organisation and is led by the Dutch Entrepreneurial Development Bank, FMO. It is funded by Netherlands Ministry for Foreign Affairs with a total value of EUR 160 and will run until 2037. Its structure consists of three separate but operationally linked facilities with specific sub-sector focusses and roles across the project lifecycles: (i) The Origination Facility, (ii) the Land-use Facility and (iii) the Water Facility, which is led by Climate Fund Managers. The latter aims at financing investments in WSS, restoration and sustainable and climate-resilient management of wetlands, headwaters and floodplains and ocean infrastructure. The Water Facility Structure, called "Climate Investor 2", consists of three financing elements, a EUR 50 million Development Fund, a EUR 500 million Construction Equity Fund and a EUR 500 million Refinancing Fund. Tailored investment instruments allow investors to participate in specific project stages to meet their preferred risk-return requirements. Project developers benefit from continuous access to capital at different stages of the project. Figure 4.7 gives an overview of this financing structure. A total of EUR 75 million of DFCD's EUR 160 million will be allocated to the Water Facility to be deployed in about 30 projects, currently operating in 12 different countries. (DFCD, 2021^[49]; SNV, 2021^[50]; CFM, 2021^[51])

Figure 4.7. The Dutch Fund for Climate and Development financing structure



Note: Refinancing Fund to be launched.

Source: Authors, adapted from *Presentation, Seventh Roundtable on Financing Water*, Aart Mulder. https://www.slideshare.net/OECD_ENV/presentation-seventh-roundtable-on-financing-agricultural-water-aart-mulder.

Micro-finance

Small-scale off-grid sanitation, wastewater treatment on the household level and irrigation on the small-scale farm-level are less appealing from a commercial investment perspective due to limited capital absorption capacity and higher risk due to partially unproven technology. Micro-finance can help overcome this barrier and can enable households and individual farmers to access loans and to self-finance water-related investments.

With an USD 240 000 grant by Water.org, Gramalaya in India established the microfinance institution Gramalaya Urban and Rural Development Initiatives and Network (GUARDIAN), which focuses solely on water and sanitation engaging in micro lending to households to support the purchase of water and sanitation assets at a household level such as toilet construction, rainwater harvesting equipment and household purifiers. With the grant funding from water.org, GURARIDAN mobilised commercial financing from a local public-sector bank, and Indian Overseas Bank and social investors Acumen and Milaap (Share, 2012^[52]).

The Philippine example of technical advisory services and loans helped small-scale farmers to access finance for irrigation and water management investments. The thrift CARD SME Bank partnered with the International Finance Corporation (IFC) and designed an agro-finance strategy, trained loan officers on credit assessment in the sector and developed a credit scoring tool to assess viability of each crop and to understand production cycles. Linking the repayment schedule to the production cycle minimized repayment risks, and overall loan disbursement and the number of client farmers grew substantially. After a successful pilot phase, IFC provided a seven-year concessional loan package at competitive market rates to CARD SME Bank in 2016. The proceeds of the loan were blended with CARD SME Bank funds and disbursed to client farmers, tailored to their needs. Loans would range from between three months to

three years with volumes between about 500 and 85 000 EUR and are accompanied by advisory services enhancing farmers' awareness of new technology, innovations and production and marketing strategies. With this approach, CARD SME Bank's loan disbursement rose by 241% between 2016 and 2017 to reach underserved small-scale farmers and agribusinesses. With this new access to finance, farmers were able to expand production, input supply, and transportation and to improve their income. (SAFIN IDB, n.d.[53]).

Special Purpose Vehicles

Special Purpose Vehicles (SPVs) can be used to finance multipurpose water infrastructure (MPWI) and landscape-based approaches, which refer to investments that deliver multiple water-related benefits and which can include cross-sectoral benefits such as energy production, agriculture and biodiversity conservation. Traditionally, MPWI are large-size projects with a great heterogeneity of project characteristics.

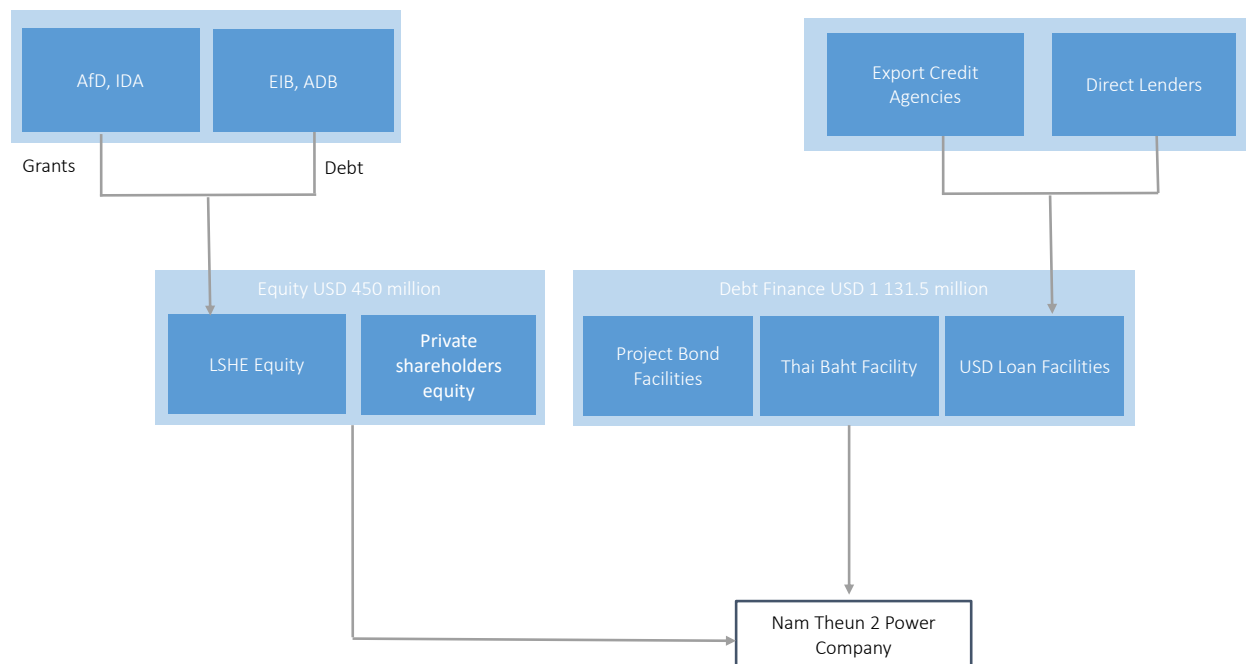
SPVs are typically owned by a consortium of project sponsors that can raise further debt funding if needed. Projects with a power element, such as hydropower production, can help generating clearly defined revenue streams and are thus especially valued by commercial investors. For example, the Nam Theun 2 power station in Laos is funded via power purchase agreement between the Electricity Generating Authority of Thailand and Électricité du Laos, a state owned utility. In this case, off-taker or counterparty risk is driven by the public sector's ability to honour contractual obligations.

Blended finance instruments for multi-purpose water infrastructure

Blended finance instruments for multi-purpose water infrastructure include equity and debt, guarantees to mitigate risk for commercial financiers and grant funding to bridge investment gaps with the ambition to mobilise commercial financing from local and international financial institutions. In the case of the Nam Theun 2 project in Thailand, direct investment in project finance vehicles via loans and equity were used strategically, leading to a share of 85% of commercial finance in the USD 1 300 million project costs. Figure 4.8 shows a simplified structure of the Nam Theun 2 financing scheme in which a total of 27 institutions including MDBs, DFIs, Export Credit Agencies and Thai Banks were involved. The state-run business Lao Holding State Enterprise owns the SPC Nam Theun 2 Power Company and has raised a combination of debt (e.g. AFD, EIB and ADB) and grant funding (AFD, World Bank's IDA) in both LCY and USD, which overall reduces the currency volatility risk for the project company.

In Jordan, for example, the viability gap grant funding of USD 93 million from the Millennium Challenge Corporation (MCC) and a USD 20 million grant from the national government allowed to leverage an additional USD 110 million from the private financiers for the expansion of the As-Samara wastewater treatment plant.

Figure 4.8. A simplified Nam Theun 2 financing scheme



Source: (OECD, 2019_[1])

Technical assistance

Technical assistance plays a key role for successful project development and implementation and can boost investors' confidence at multiple levels. Technical assistance is an integral part of blended finance arrangement and can be provided in kind or through grants. In the project preparation phase, technical assistance can come in the shape of policy advice to local government institutions, such as in Rwanda for the structuring of the newly established national water and sanitation utility WASAC, ensuring a successful off-take of the wastewater treatment plant from the Kigali Water Limited company when the Build-Operate Transfer agreement expires (OECD, 2019_[1]).

Technical assistance for project development is especially relevant for MPWI projects, given their long preparation and financing tenors, making them vulnerable to changing circumstances. For landscape-based approaches, mechanisms which mobilise and bring together local actors with a stake in improved resources management across the value chain can help materialise explicit and implicit revenue streams. One example are Water Funds, described in more detail in Box 4.1.

4.2. Tailored financing vehicles and approaches to create opportunities for scaling up investment

Private investors and particularly institutional investors are increasingly looking for opportunities to grow their sustainable finance portfolios but often lack adequate financial products to channel their investments (Trémolet, S. et al., 2019_[11]; OECD, 2020_[30]). They require appropriate investment vehicles that satisfy fiduciary requirements and provide investment opportunities at scale. Appropriate vehicles for water-related investments would account for and help overcome the specificities of the water sector, such as the need for long tenors, small ticket sizes, limited creditworthiness and the lack of clearly defined revenue

streams. The following section presents different financing vehicles in various contexts and different types of water-related investments.

4.2.1. Use-of-proceeds bonds

Bonds are a fixed income financial instrument to raise capital from investors through the debt capital market. The bond issuer raises a fixed amount of capital from investors, which is paid back after a specific time period with an agreed amount of interest. Bond finance can facilitate the flow of capital for water-related investments with clearly defined revenue streams. Bonds with long tenors, typical of the water sector, can attract institutional investors such as pension funds. Traditionally, bonds have been the asset class favoured by OECD pension funds and insurance companies, which in 2018 invested on average 45% and more than 50% of their portfolio respectively in bonds and bills (OECD, 2019^[54]; OECD, 2020^[55]). Investors increasingly show interest in use-of-proceed bonds, whose proceeds are earmarked for particular projects and purposes and which need to meet specified standards, concerning for instance social responsibility or sustainable development.

Green Bonds

One example for use-of-proceeds bonds are green bonds which are designated as “green” by the issuer or another entity, whereby a commitment is made to use the proceeds in a transparent manner, and exclusively to finance or refinance green projects, assets or business activities with an environmental benefit. Since the first green bond has been launched in 2007, issuance has been growing steadily up to cumulative USD 1.4 trillion by 2021. More than USD 350 billion have been issued globally in the first three quarters of 2021, the biggest shares coming from Germany and the United States (CBI, 2021^[56]). Looking at sectors, the majority of proceeds were used for investments for energy and buildings and only 9% fell to the water sector in 2019 (CBI, 2020^[57]). Reasons for this relatively small share are some clear limitations for certain water-related investments. Generally, bonds are largely used as refinancing instruments while project bonds only represent 1% of total bond market (and less than 50% of the green bond market) (TEG, 2020^[58]). Further, green bonds are mostly accessible to large-scale, creditworthy issuers, who can provide clear revenue streams associated with their repayment, which can be challenging especially for landscape-based approaches or investments on water resource management. The international bond market prefers large minimum sizes (EUR 300 to 500 million), rendering it difficult for small- and medium-sized companies or municipalities (often the case for water utilities) to get access to bond finance (TEG, 2020^[58]). In this context, an important role falls to intermediaries, working to pool small and medium sized demands for financing, facilitating access to bond finance.

One example of green bond issuance for the water sector is **Anglian Water**, the first utility company in the United Kingdom to issue a green bond in 2017, having raised GBP 830 million in green bonds since then. The company finances projects for water abstraction, water resource management and drought and flood resilience schemes and has segmented its investment plan into 12 categories according to their green and social characteristics. This allows the bank to tap into diverse pools of investors with different priorities for financial, social and environmental returns. The debt raised by the bank through UK-registered companies, is listed on the London stock exchange, their first year bond will mature in 2025 with a return to investors of 1.625 per cent (Anglian Water, 2020^[59]; Trémolet, S. et al., 2019^[11]).

Sustainability Awareness Bonds

Similar to green bonds, the European Investment Bank (EIB) has launched Sustainability Awareness Bonds (SABs) to raise debt financing focused in particular on water-related projects. Water supply, sanitation and flood protection projects, which contribute to four defined sustainability objectives⁵, can raise funds through this bond. While SABs attract sustainably responsible investors, they offer beneficial loan

conditions, such as long maturity and low interest rates, for project developers. In 2018, the EIB issued its first EUR 500 million SAB, followed by another USD 1 billion global SAB in May 2020 (EIB, 2020^[60]).

One example is the Emscher rehabilitation project in Germany, one of Europe's largest environmental projects. EUR 450 million of the EUR 1 250 million total costs are provided through SAB. In addition to its large volume, the loan has a long maturity of up to 45 years and interest rates can be fixed, allowing to benefit from current low interest rates. The project concerns the restructuring of a regional wastewater system and the restoration of the Emscher river bed, resulting in both social and environmental benefits and the creation of natural and recreational space (EIB, 2017^[61]).

Another project financed via SAB bonds is the Dhaka Environmentally Sustainable Water Supply project in Bangladesh. It aims at developing a new sustainable surface water resource to help covering the increasing water demand. Additionally, it will enable to reduce extraction from over-exploited groundwater resources and thus improve the city's resilience to adverse impacts from climate change. EUR 100 million of the EUR 493 million project costs will be covered via SAB bonds, directed to the Bangladesh Ministry of finance, which will on-lend to the Dhaka Water Supply and Sewerage Authority. The procurement for the different project components will be carried out according to ADB guidelines, and the operation will be covered by the EU Guarantee for EIB loans outside the EU. (EIB, 2013^[62])

Environmental Impact Bonds

Environmental impact bonds are pay-for-success financing structures, where private actors' pre-finance investments in environmental improvements and public funders commit to reimbursing them, when specific environmental outcomes have been met. They allow to transfer performance risk to investors, which lightens the burden on public funds and can increase efficiency. Environmental Impact Bonds can be the financial vehicle for green infrastructure, smart sewer and storm water infrastructure and coastal wetlands restoration (Trémolet, S. et al., 2019^[11]). The first Environmental Impact Bond was launched in October 2016 by DC Water in Washington to reduce storm wastewater runoff by replacing one water runoff tunnel with large-scale green infrastructure, an approach which by then had not been deployed at scale. The USD 25 million bond was sold to the impact investors Goldman Sachs Urban Investment Group and Calvert Impact Capital, with a three tiered structure, based on three possible outcomes: for 'as-expected performance', no extra payments will be paid, in case of 'over-performance', DC Water will make an outcome payment to the investors of USD 3.3 million and in case of 'under-performance', the investors will make a risk share payment of that same amount to DC Water. (Goldman Sachs, n.d.^[63])

Environmental impact bonds help to attract investors who wish to align their financial returns with positive environmental impact and, by having a strong focus on outcomes, can help building a broader evidence base and inform future planning.

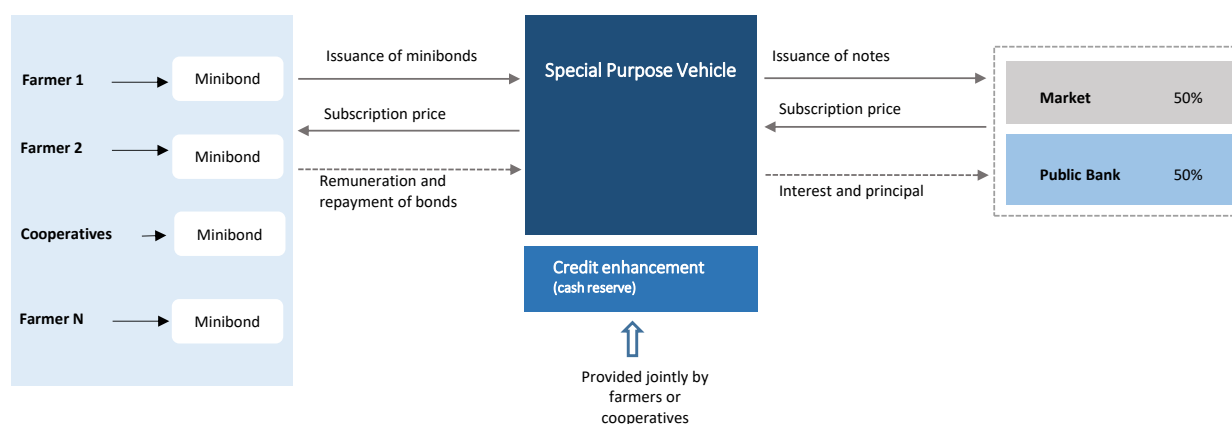
4.2.2. Special purpose vehicles to overcome the small-scale nature of water authorities

As mentioned earlier, different types of green bonds are mostly accessible for large-scale projects with stable revenue streams, while small-scale projects might face difficulties to raise debt financing. The Italian example of "hydrobonds" is a tool to mitigate the fragmented and small-scale nature of Italian water authorities. In 2014, eight water utilities in the Veneto Region (owned by the Vivacqua Consortium) side-stepped the bank loan market and accessed the capital markets by creating mini-bonds which were then pooled to form the so-called "hydrobonds". A special purpose vehicle⁶ was created and fully subscribed to these bonds (see Figure 4.9). This tool enabled the aggregation of small scale needs of a number of players to then be put on the market concertedly. The bonds were structured and bought by the EIB and other financial institutions, allowing the small-scale water suppliers in the Veneto region to raise EUR 500 million for capital expenditure (Rees, 2018^[64]; Gatti, 2018^[65]). SPVs need to be adjusted to local conditions and project specificities, in many cities or regions, a public development bank can assist in tailoring the approach to local needs. SPVs could also be promoted by special investment funds to be set

up by a legitimate and trusted organisation. When accepted by all stakeholders, SPVs can build trust in project implementation both in the short and the long term.

SPVs are not only an efficient tool for small-size projects, but are also typically used for large scale multi-purpose water infrastructure (MPWI) projects and are owned by a consortium of project sponsors, as mentioned above. These companies have limited recourse to their owners' assets and hence depend on the quality and cash flow of the asset, which can be generated through tariffs and power purchase agreements. An example are the pre-agreed tariffs for transport, electricity and water services between the Ugandan government and the Kalangala Infrastructure Services SPV, a MPWI project providing transport, water piping, wastewater plant construction services. (OECD, 2019^[11])

Figure 4.9. Financial structure based on the issuance of mini-bonds



Source: Authors, adapted from (EIB, 2019^[66])

4.2.3. Revolving funds

Revolving funds can be an effective model to attract commercial finance and to ensure available funding for water-related projects in the future. The **Clean Water and the Drinking Water State Revolving Funds (SRF)** in the United States are examples how priority water infrastructure projects can be financed through public loans, which leverage non-public sources of finance. The U.S. Environmental Protection Agency has partnered with the states and capitalises the SRFs with annual grants, states provide a 20% match. The states are responsible for the operation of their SRF programs, which function like environmental infrastructure banks: They provide assistance through loans with below market interest rates with periods of up to 30 years, through refinancing, guarantees or purchase of local debt and bond insurance. As money is paid back, the state makes new loans to other eligible high priority water projects; repayments and interest earnings are recycled back into the programme, financing future projects (see Figure 4.10) (EPA, 2020^[67]; Gebhardt, 2019^[68]).

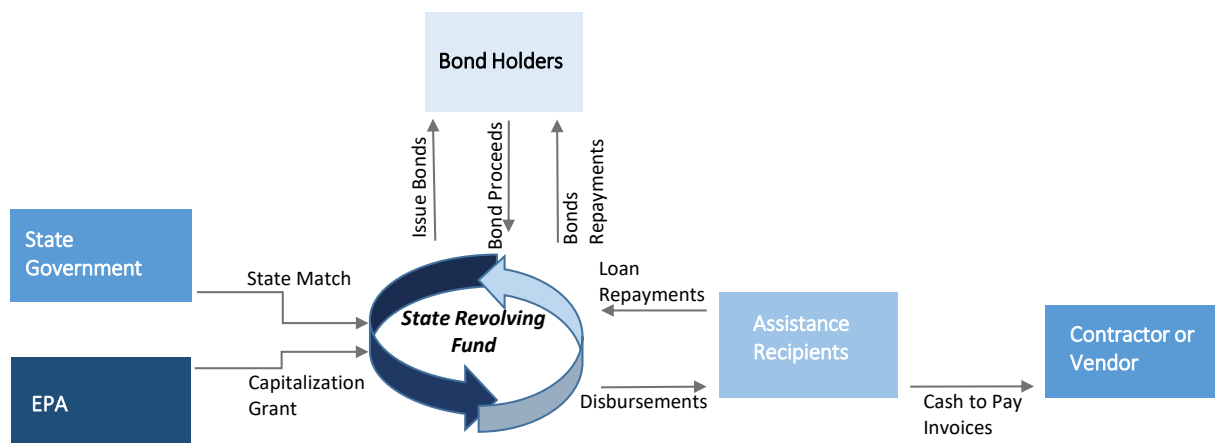
A key element of the U.S. SRF model is its integration with the U.S. capital market, where SRFs raise additional capital to supplement their lending capacity. The SRF bond sector has received AAA median rating, which allows SRFs to borrow at the best financing terms from the private capital market. Building on federal investments of USD 66.2 billion, the state Clean Water and Drinking Water SRFs have provided USD 179.1 billion to water systems and communities through 2019 (EPA, 2020^[67]; Gebhardt, 2019^[68]).

The programs are designed to be a sustainable source of funds. Sustainable fund operations are assured by the stipulation in the Federal Acts that federal and state equity contributions, and program earnings, be held in the SRFs in-perpetuity and used solely for the purposes prescribed by the Acts. The longer that federal appropriations and state match dollars are made available, the more financially resilient and less

dependent the SRFs are on future appropriations to sustain robust support to eligible financial assistance recipients. The result has been an ever-rising level of funding certainty that benefits all SRF stakeholders, including contract project developers and equipment vendors. Consistent funding has become a program bellwether that has produced tangible long-term benefits by enabling SRF administrators to largely match financial and technical assistance needs year in and year out. The beneficial result has been a persistently strong signal to the water infrastructure investment sector that planning and project development efforts will be rewarded with funding at better than market terms (Gebhardt, Zeigler and Mourant, 2022^[69]).

This model could find replication where national or subnational governments can concentrate sufficient financial resources to produce stable high credit mechanisms that can offer favourable market terms, independent of a country's own credit strength. One example of the successful use of a revolving fund mechanisms in a developing-country context is the previously mentioned Philippine Water Revolving Fund. Gebhardt, Zeigler and Mourant (2022^[69]) provide a checklist of enabling conditions that should be considered in efforts to adapt U.S. water financing experience in other countries.

Figure 4.10. Illustration of U.S. State Revolving Funds



Source: Authors, adapted from CWSRF Branch - PD-US Gov-EPA, Public Domain, <https://en.wikipedia.org/w/index.php?curid=19972913>

4.2.4. Dedicated financing institutions and funds to mobilise investment for water

NWB Bank is a dedicated financial institution helping to raise and distribute funding for water-related projects and other sectors. As national bank, a majority is owned by the Dutch water authorities, with minority shares owned by the Dutch state and provinces. The bank lends to local and regional authorities responsible for water management as well as for the health care, education and public housing sectors. It raises funds on the international capital market and has issued so-called water bonds. Funds raised via these use-of-proceeds bonds are earmarked for projects to mitigate and to adapt to climate change through waterway management and flood protection and to promote biodiversity projects such as water treatment projects. Thanks to a zero-default history, the bank has received its first AAA credit rating in 1996, giving access to finance at affordable conditions, and has received the highest rating for sustainability of their use-of-proceeds issuance from Cicero rating agency in 2019. In 2020, the bank has lent EUR 976 million to water authorities and for several years and it has been involved in financing Public-Private-Partnerships (NWB Bank, 2020^[70]; NWB, 2020^[71]). NWB is a fairly unique institution in the European context that other countries could use for inspiration. It was the inspiration behind the establishment of the Kenya Pooled Water Fund, a local capital market financing mechanism to mobilise water and sanitation infrastructure investments in Kenya (van Oppenraaij et al., 2022^[25]).⁷

In Europe, the **European Fund for Strategic Investment (EFSI)** is an example of a dedicated fund to mobilise commercial finance for strategically important projects through EU funding. The European Commission (EC) provides guarantees to EIB for projects supported by the EFSI and manages directly the assets covered by these guarantees. The projects are subject to the normal EIB project cycle governance, in addition to an EFSI specific governance structure, ensuring compliance with EFSI objectives. Thanks to a credit enhancement by the EC, the residual risk of the lending products are reduced significantly, unlocking additional and affordable private finance. By the end of 2019, additional investment totalled EUR 458 billion. (EIB, 2020^[72]; EIB, 2019^[73])

In South-East Asia, ADB has launched the **ASEAN Catalytic Green Finance Facility** in April 2019 to strategically unlock private investment for infrastructure projects in the region, which contribute to environmental sustainability goals, including resilient water infrastructure and multi-sectorial projects. The facility will mobilise a total of USD 1 billion from the ASEAN Infrastructure Fund, ADB and other development partners such as KfW, EIB and Afd. The funds will be used to cover a portion of capital or operational costs to achieve bankability and for credit enhancement support. Minimum revenue guarantees (of at maximum 7 years) will help to improve the projects' rate of return and first loss structures can improve the projects' risk profile. The facility thus facilitates the development of new financial products and models which meet the needs of the different types of projects. Technical assistance helps to develop new targets and performance measures and builds awareness and capacity to identify and structure relevant projects. The facility is in its pilot phase and aimed at identifying six to eight potential projects by the end of 2021. (ADB, 2020^[74])

The **Sustainable Water Impact Fund**, established in partnership between Renewable Resources Group (RRG) and the Nature Vest, The Nature Conservancy (TNC), seeks to provide competitive, risk-adjusted returns to investors by acquiring land and water assets to improve the management of surface water, groundwater and farming practices. The fund attracts capital from institutional investors with a traditional 10-year fund structure and closed with over USD 900 million in April 2020 (of which USD 300 million were provided by Goldman Sachs through client commitments (Goldman Sachs, 2020^[75])). TNC is technical advisor to the Fund, assessing the conservation opportunities of portfolio investments and to helping ensure investments continue to deliver the targeted benefits and intended impacts. One of the first projects is the investment in partly transforming a large dairy and feed-crop farm in California into groundwater recharge storage basins, which can provide wetland habitat for migratory birds. Other projects include an avocado and walnut farm in Chile and other land and asset investments in California, Chile and Australia. (TNC, 2020^[76]) Box 4.3 gives the example of dedicated development funds for climate action relevant for water.

Box 4.3. Development funds for climate action relevant for water

The Green Climate Fund

The Green Climate Fund (GCF) has been established within the framework of the UNFCCC to assist developing countries in adaptation and mitigation practices to counter climate change. As of July 2020, a total of USD 10.3 billion has been pledged, of which USD 8.31 billion confirmed by 45 countries and regions and one city. Approved projects comprise a total value of USD 30.3 billion, including GCF financing and co-financing. In terms of regions, projects are mostly located in Asia-Pacific (38%) and Africa (36%), followed by Latin America and the Caribbean (21%) and Eastern Europe (5%). The GCF structures its support through a combination of grant, concessional debt, guarantees or equity instruments to leverage blended finance and crowd-in private investment for climate action.

Water-related investments that contribute to climate action have benefitted from the fund. In Jordan, for example, the fund finances a USD 33.3 million project aiming to improve water use efficiency in

agriculture, and thus ensuring water and food security and protecting livelihoods in light of climate change. The financial support consists of a USD 25 million GCF grant, topped up with a total of USD 3.8 million of grants through co-financing arrangements and USD 4.5 million co-financed in-kind payments. The project was approved in March 2021 and is projected to benefit over 210 000 people.

The Adaptation Fund

Another example of dedicated climate funds is the Adaptation Fund, also established under the UNFCCC, which has committed USD 783 million to climate adaptation and resilience activities since 2010. Its financing mainly stems from sales of certified emission reductions under the Clean Development Mechanism. Additionally, the Fund receives contributions from governments, the private sector and individuals. The Fund finances projects in nine sectors, including agriculture (16%), water management (14%), disaster risk reduction (14%) and coastal zone management (9%).

A project addressing disaster risk reduction is located in Uruguay and Argentina, aiming at building resilience in vulnerable coastal cities and ecosystems of the Uruguay River. The 6-year project includes the implementation of sustainable infrastructure adapted to the adverse effects of climate change, community- and ecosystem-based adaptation measures, as well as the implementation of integrated climate risk management and early warning systems. From the total grant of approximately USD 14 million, USD 2.8 million have already been transferred since project approval in July 2019.

Another project is located in Zanzibar: a USD 1 million grant is allocated to a coastal management project, financing the construction of water harvesting infrastructures and the promotion of soil and water conservation techniques for improved water protection and crop productivity.

Source: (Green Climate Fund, 2021^[77]; Green Climate Fund, 2021^[78]; Adaptation Fund, 2019^[79]; Adaptation Fund, 2019^[80]; Adaptation Fund, 2020^[81])

4.2.5. Public-Private Partnerships (PPP)

PPP for flood protection under the EFSI

One example for a water-related project funded by the EFSI has the shape of a public-private partnership for flood protection in the Netherlands. The project concerned an upgrade of the Afsluitdijk dyke, ensuring compliance with flood directives in the future, and was awarded through a tender process to the private consortium Level, which is responsible for the design, construction, financing and maintenance over 25 years. The EFSI has supported the EUR 550 million project with a EUR 330 million loan. Besides increased flood protection and adaptation to climate change, the project also includes components to re-establish fish migration, the improvement and maintenance of a National Motorway and can boost the local economy through projects on recreation, tourism, nature and innovative sustainable energy sources. Payments to the consortium are based on the availability of the infrastructure, allowing for potential performance deductions (The Afsluitdijk, 2020^[82]; World Construction Network, 2019^[83]; EIB, 2018^[84]). This example shows how flood protection can be addressed effectively through cooperation between public and private entities as well as through cross-sectoral approaches (flood protection, transport, tourism, environmental protection), allowing for different types of revenue streams.

PPP in Chile for dam construction and irrigation

In Chile, the government has set up a PPP arrangement for dam construction, which would secure irrigation for agriculture. Since 2005, the Chilean government launched the construction of two large dams, Convento Viejo Etapa II, awarded in 2005 and currently operating, and Las Palmas, awarded in 2018, currently under construction. Together, these two dams allow increased irrigation security for 67 000 ha

land with capacities to supply irrigation needs of over 290 million cubic metres. The former project also generates electric energy with a capacity of 16.4 MW, and is connected to the Central Interconnected grid System. The Convento Viejo dam was developed as a pilot project with a cost-share mechanism: the state financed a part of the total cost, private investors built, exploit and maintain the dam, and the end users pay the license holder for water stored. Initially, the approach had faced opposition from farmers fearing higher costs of water. Eventually, the project led farmers to shift their production to high-value agriculture (e.g. fruit trees) or to sell their land to other farmers (Gruère, Ashley and Cadilhon, 2018^[48]). For the 2021 – 2025 period, three additional dams are in a planning stage.

PPPs in the People's Republic of China

ADB's Private Sector Operations Department (PSOD) is promoting PPP to finance WSS investments and arrangements including the prevention and rehabilitation of pollution in water bodies. One significant arrangement is the Integrated Water Management Project in China, for lake and river pollution prevention and rehabilitation initiatives that involve multiple environmental interlocking facilities (wastewater and sludge treatment plants, sewage collection systems) and services (riverbank reinforcement, wetland development). The innovation of this programme is that it is the first ADB non-sovereign financing programme to support an emerging PPP model for integrated wastewater management. An USD 150 million loan from ADB mobilised USD 300 million of commercial co-finance, accompanied with a smaller loan (USD 215 000) for technical assistance. The programme has revealed the scope for mobilising private sector participation in well-prepared, bankable projects. Similarly, by involving multiple environmental interlocking facilities and services, different private actors can be mobilised across a range of projects. (Money, 2018^[85])

Generally, PPPs are a form of outsourcing of operational and financial responsibility to the private sector (and have been used at scale in China). While, typically, PPP projects in the WSS sector are narrowly characterised by the Build-Operate-Transfer model, in China, PPP models are taking a broader concept, encompassing the long-term alliances between local governments, private developers and third-party financiers to fund water remediation, flood control and pollution prevention projects. For example, in order to reduce the credit risk faced by private financiers, users' payments for water, wastewater and waste treatment are ring-fenced from the local government's budgets. This allowed smaller cities, with less creditworthy municipal governments to have access to commercial finance (Money, 2018^[85]). Overall, private investment in the Chinese water and wastewater sector more than doubled in 2019 to USD 3.3 billion (GWI, 2020^[86]).

4.2.6. Risk-financing instruments

Risk-financing instruments are a mechanism to promote the sharing and transfer of risks and losses and reduce (at least part of) the burden on public funds in case of disasters (e.g. floods and droughts). Insurance can serve as a risk-communication tool which can help individuals to rationalise their land use choices in at-risk areas and can incentivise behaviour to reduce exposure. Flood insurance schemes, for example, if properly designed, could provide a strong incentive for risk-reduction behaviour – thus also reducing the need for public investment on the long run. In agriculture, adjusted crop insurance premiums which reflect water-holding capacity, can incentivise farmers to adopt more sustainable soil management practices and thus increase their resilience to drought. Risk sharing arrangements can operate at multiple levels, from individual households and business, to local communities and national or regional levels.

As an example of a risk sharing arrangement on the national level, France has established the natural disaster insurance system CatNat, a public-private compensation system that covers losses that cannot be insured in private markets, such as flooding. Under CatNat, it is mandatory for insurers to extend property and vehicle insurance contracts to cover damages caused by natural disasters. The premiums are not based on local natural disaster risks but are fixed by the Government following a principle of

national solidarity. (Poussin, Botzen and Aerts, 2013^[87]) Similarly, the British government has negotiated voluntary agreements with British insurance companies to help households in flood risk areas to find affordable home insurance holders and taxpayers. It aims to provide available and affordable insurance without placing unsustainable costs on wider policy (Surminskia and Hudsonb, 2017^[88]). Flood Re, a joint initiative by the government and insurers, allows for risk sharing between the government and private insurers, with an aim to keep household premiums affordable. In Romania, homeowners are legally required to purchase a home insurance covering damages from floods, landslides and earthquakes. Nonetheless, legal clauses exempt some households from this obligation on the basis of socio-economic criteria, leading to a share of on 38% of dwellings covered by insurance (Surminskia and Hudsonb, 2017^[88]).

In the agricultural sector, insurances are generally relatively expensive and premiums are heavily subsidised. Out of 65 developed and developing countries, almost two-thirds subsidized premium costs with an average subsidy rate of 47% (Mahul and Stutley, 2010^[89]; FAO, 2018^[90]). For developing countries, it remains difficult to provide subsidised coverage for numerous small-scale family farmers. Approaches such as weather-index-based insurances aim to address this challenge: The insurance holds, when rainfall or temperature exceed or fall under a specific threshold, and measurements are taken by weather stations or satellite technology. This reduces assessment and operational costs for insurers, reducing the premium costs. In India, for example, the Weather-based Crop Insurance Scheme had a coverage of about 1.7 million hectares in 2016 (Gulati, Terway and Hussain, 2018^[91]). In sub-Saharan Africa, the Agriculture and Climate Risk Enterprise (ACRE) is the largest index insurance programme among developing countries in which farmers pay a market premium, and the first agricultural insurance programme globally to reach smallholders using mobile technologies. Their insurances range from weather indexed coverage, soil moisture indexed to vegetation indexed coverage (ACRE, 2021^[92]). However, these programmes still require public support through subsidies. (Greatrex et al., 2015^[93])

4.3. Concluding remarks

The inventory of financing approaches summarised above underscores the range of new opportunities to harness domestic commercial finance for water investments. Governments have a decisive role to play to ensure the enabling environment is in place to take advantage of these opportunities. Success will depend on the enabling environment, which goes beyond water and encompasses the finance sector, capital markets and broader factors related to countries' governance and political stability.

Governments can also foster the development of commercial finance and capital markets able to lend at an affordable cost and appropriate long term maturity to water related projects. Appropriate vehicles for water-related investments need to overcome the specificities of the water sector, such as the need for long tenors, small ticket sizes, limited creditworthiness and the lack of clearly defined revenue streams. Transparency is needed for financiers to properly assess and price risk. Governments can also signal their intention and financial capacity to tender water projects over a multi-year time span. Project-level analyses need to be supplemented by the design, review and assessment of investment pathways.

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Notes

¹ For the full analysis and details related to the methodology, see (Lardoux de Pazzis and Muret, 2021^[26]).

² The six EU environmental objectives are: Climate change mitigation, Climate change adaptation, Sustainable use and protection of water and marine resources, Transition to a circular economy, Pollution prevention and control, Protection and restoration of biodiversity and ecosystems.

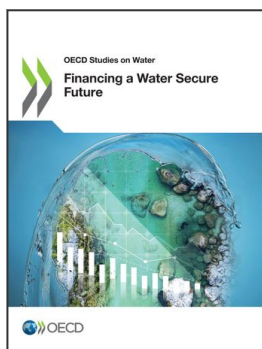
³ The economic activities are structured around the EU's NACE industry classification system, guaranteeing compatibility with EU Member States and international statistical frameworks and broad coverage of the economy (TEG, 2020^[94]).

⁴ The full analysis and indicator scorecard can be found in Money (forthcoming^[45])

⁵ Eligible projects need to contribute to the following four objectives: 1. Conservation of natural resources, 2. Pollution prevention and control, 3. Access to water and sanitation, 4. Natural disaster risk management.

⁶An SPV is created as a separate enterprise with its own balance sheet as a holding company for the securitization of debt, assuring repayment for investors. It is a well-known structure to commercial investors (OECD, 2019^[1]).

⁷ A detailed account of the rationale and process of setting up the Kenya Pooled Water Fund as well as the challenges of setting up such a local capital market financing facility can be found in (van Oppenraaij et al., 2022^[25]).



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