BLENDED FINANCE SECTOR DEEP DIVE:

WATER, SANITATION & HYGIENE (WASH)

CONSULTATION PAPER

FINAL DRAFT AT MARCH 28, 2019

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INTRODUCTION

This Sector Deep Dive was commissioned by the Swedish International Development Cooperation Agency (Sida) to better understand how blended finance approaches can be used to mobilize additional private sector capital for Water, Sanitation, and Hygiene (WASH) projects. The initial findings of this study were discussed at a Knowledge Exchange Workshop on Blended Finance in Stockholm (May 2018) and also reflect on the "Closing the financing gap for water: The role of blended finance" conference in Eschborn, Germany co-organized by the OECD and GIZ (October 2018).

ABOUT CONVERGENCE

Convergence is the global network for blended finance. Convergence generates blended finance data, intelligence, and deal flow to increase private sector investment in developing countries for sustainable development. Convergence works to make the SDGs investable by supporting transactions and engaging in market building activities:

- A Global Network: Convergence has a global membership of over 280 public, private, and philanthropic organizations, including USAID, Credit Suisse, and the Rockefeller Foundation. Convergence creates many opportunities for Convergence members to connect, including through the Convergence deal and investor match-making platform and exclusive networking events.
- Data & Intelligence: Convergence curates and produces original content that builds the evidence base for blended finance and supports practitioners in their efforts to execute blended transactions, including i) data on deals and investors, ii) case studies, intelligence briefs, and market reports, iii) workshops and trainings, and iv) webinars.
- Deal Flow: Convergence has built an online deal match-making platform for investors and those seeking capital to connect. As of March 2019, there are credible opportunities seeking to raise over $2.3 billion, representing over $4.3 billion in aggregate deal size. All deals are screened by the Convergence team to ensure fit within the mandate and credibility criteria.
- Market Acceleration: Convergence's Design Funding program offers grants for the design of innovative blended finance vehicles that aim to mobilize private capital at scale. As of March 2019, grantees have raised over $300 million of investment – a 60x multiple on the $5 million Convergence has awarded.

Convergence focuses exclusively on blended finance to catalyze private investment. Other important stakeholders and initiatives, such as the Development Finance Institution (DFI) Working Group on Blended Concessional Finance for Private Sector Projects focus on a broader definition of blended finance that includes the use of development funding to mobilize commercial-orientated public capital (e.g., capital from multilateral development banks (MDBs) and DFIs. Convergence works closely with the OECD, DFI Working Group, and other key stakeholders to coordinate blended finance activity.

METHODOLOGY AND OVERVIEW

This Sector Deep Dive aims to better understand how blended finance approaches can be used to help close the financing gap in the water and sanitation sector. This paper focuses on blended finance solutions to mobilize additional sources of finance – specifically private sector investment – to the water and sanitation sector in developing countries. Convergence's research is based on the key assumptions that i) the financing gap for achieving universal access to water and sanitation is so large that new sources of financing must be explored; ii) grants and concessional long-term sovereign loans (i.e., aid) will continue to be the main development tool for WASH; and iii) the use of blended finance in the WASH sector can be reviewed to ascertain best uses of development capital to mobilize commercial capital to WASH.

The following research methodology was employed for the report:

- Review of Convergence's Historical Deals Database
- Examination of case studies that are part of Convergence's proprietary deal books
- Data analysis to identify sector specific trends
- Extensive desk research
- Interviews with private, public, and philanthropic sector organizations
- Discussions at the Knowledge Exchange Workshop on Blended Finance in Stockholm (May 2018)
- Reflecting on the main themes covered at the OECD-GIZ conference in October 2018
- Synthesis of findings into final report

Convergence maintains the largest and most detailed database of historical blended finance transactions in the market. Given the current state of information sharing, it is not possible for this database to be fully comprehensive, but it is the best depository there is to understand blended finance scale and trends. Convergence continues to build out this database to draw better insights about the market and disseminates this information to the development and finance communities to improve the efficiency and effectiveness of blended finance to achieve the SDGs. The data in this report reflects Convergence's collection efforts as of May 2018. For the purposes of this consultation paper, blended finance is defined as the strategic use of public and/or philanthropic concessional funding to catalyze private sector investment in SDG-related investments in developing countries.

The report contains five sections:

1. Blended Finance and WASH: This section provides an overview of blended finance to mobilize private sector investment and its potential to support the SDGs.
2. Current Trends and Landscape: This section provides analysis of blended finance deal trends in the WASH sector, as well as a landscape of relevant partners and innovative organizations.
3. Opportunities and Key Considerations: This section considers the opportunities and key considerations for unlocking more blended finance in the WASH sector.
4. Unlocking More Blended Finance: This section reviews lessons learned and best practices for unlocking more blended finance to achieve WASH objectives.
5. Conclusions: The final section outlines key conclusions on blended finance for the WASH sector.

BLENDED FINANCE AND WASH

THE RATIONALE FOR BLENDING

To achieve the Sustainable Development Goals (SDGs), a significant scale-up of investment is required. The United Nations (UN) estimates that $3.9 trillion is needed annually to achieve the SDGs by 2030 – much greater than the current aggregate SDG-focused funding of $1.5 trillion from domestic and international sources. According to the Organisation for Economic Cooperation and Development (OECD), official development assistance (ODA) from the OECD Development Assistance Committee (DAC) members currently amounts to $147 billion and philanthropic contributions to developing countries amounts to approximately $30 billion. To help close the $2 trillion per annum SDG investment gap, the international development community has been looking to mobilize new sources of capital, including more capital from the private sector.

Blended finance is recognized as one important approach for mobilizing additional sources of capital to achieve the SDGs. At the International Conference on Financing for Development in 2015, UN member countries adopted the Addis Ababa Action Agenda, which included consensus on the importance of deploying public funds to mobilize private sector investment: "*An important use of international public finance, including ODA, is to catalyse additional resource mobilization from other sources, public and private. It can be used to unlock additional finance through blended or pooled financing and risk mitigation.*" In a survey led by Convergence in 2016, respondents selected blended finance and foreign direct investment (FDI) as the top sources of financing for development (Figure 1). In October 2017, the OECD DAC adopted a set of 'Blended Finance Principles' to guide donors when engaging with private sector investors.

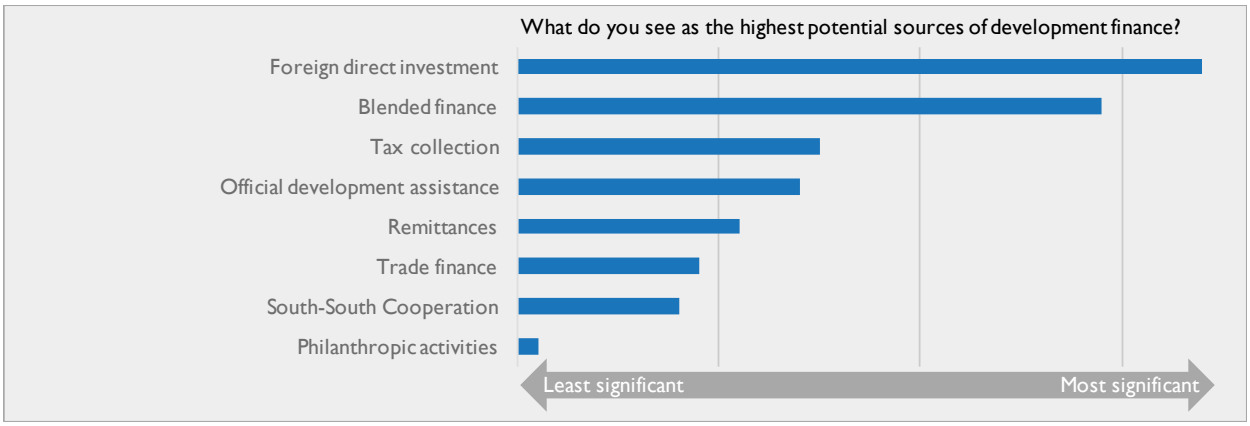

Figure 1: Survey response – What do you see as the highest potential sources of development finance?

For the purposes of this consultation paper, blended finance is defined as the strategic use of public and/or philanthropic concessional funding to catalyze private sector investment in SDG-related investments in developing countries. More specifically, blended finance is a structuring approach that enables different types of capital to invest alongside each other while each achieves its own objectives – development and financial. The main investment barriers for private sector investors addressed by blended finance are (i) high risk (perceived and real) and (ii) poor returns for the risk (relative to comparable investments) of investing in developing countries. Figure 2 highlights four common blended finance structures. Blended

finance can create acceptable risk-return investment opportunities in developing countries to mobilize private sector investment, achieving better development impact through greater sums of investment.

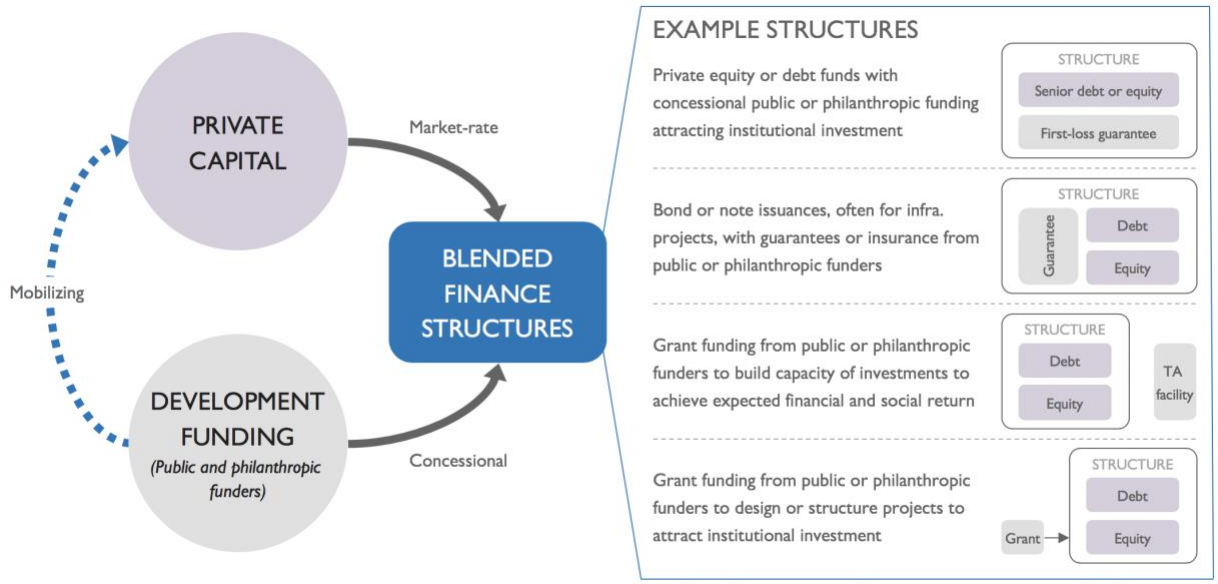

Figure 2: Typical blended finance mechanics and structures[1]

However, blended finance is not well suited to address all the SDGs. It can only be deployed for activities that can produce cash flows over time to repay investors an acceptable return that is comparable, or at a premium, to alternative investment opportunities. According to analysis conducted by the Sustainable Development Solutions Network (SDSN), approximately half of the funding required to achieve the SDGs in developing countries can be in the form of private investment. Based on Convergence's database, blended finance has demonstrated the strongest alignment with Goal 17 (*Partnerships for the Goals*), Goal 9 (*Industry, Innovation, and Infrastructure*), Goal 1 (*No Poverty*), and Goal 10 (*Decent Work and Economic Growth*). The suitability of blended finance also varies significantly within goals, particularly areas where both investment and policy action are required, such as education and health.

[1] There are a number of definitions of blended finance. The OECD definition is the broadest, including both concessional and non-concessional funding from public and philanthropic funders mobilizing non-concessional funding from either private or public sources. In this broad definition, concessional funding from a donor (e.g. European Commission) to mobilize funding from a DFI (e.g., the European Investment Bank) would be considered blended finance.

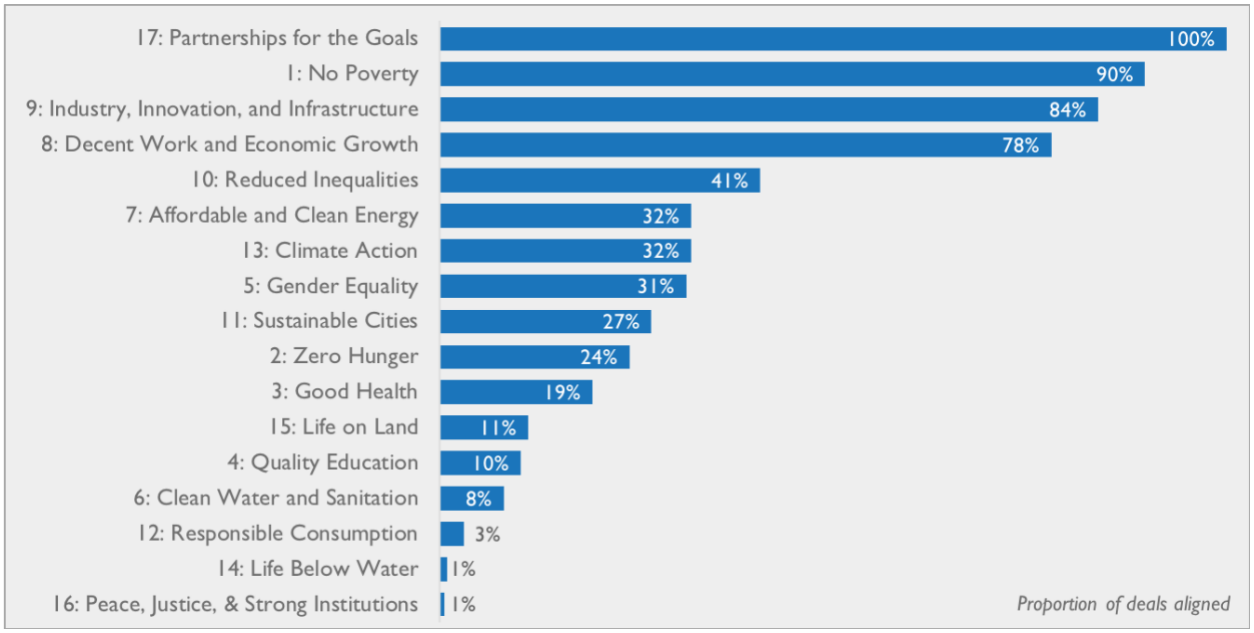

Figure 3: Convergence database analysis – Alignment with the SDGs

BLENDED FINANCE FOR WASH

Blended finance is one important tool for achieving Goal 6 (*Clean Water & Sanitation*): universal access to clean water and sanitation. Water scarcity, flooding, and lack of proper wastewater management hinder social and economic development, yet the current estimated financing gap in the water and sanitation sector is nearly $114 billion per year. In the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) 2017 report, UN-Water and the World Health Organization (WHO) outline the importance of universal WASH and the financing required to achieve it:

> *"Safe drinking-water and sanitation are crucial to human welfare, by supporting health and livelihoods and helping to create healthy environments. The consumption of unsafe water impairs human health through illnesses such as diarrhoea, and untreated sewage can contaminate drinking-water supplies and the environment, creating a heavy burden on communities.*
>
> *In recent years, much progress has been made in increasing access to drinking-water and sanitation, but still too many people lack access to safe, sustainable water supply and sanitation services. In 2015, the WHO / UNICEF Joint Monitoring Programme (JMP) estimated that 660 million people still do not have access to improved drinking-water sources, and over 2.4 billion people do not have access to improved sanitation.*
>
> *The Sustainable Development Goals (SDGs), as part of the 2030 Agenda for Sustainable Development, build upon the many achievements made under the Millennium Development Goals (MDGs), but are more aspirational, extensive and ambitious. Goal 6 is focused on clean water and sanitation. Going beyond "improved" drinking-water and sanitation, Target 6.1 calls for universal and equitable access to safe and affordable drinking-water, and Target 6.2 aspires to access to adequate and equitable sanitation and hygiene for all, as well as the end of open defecation.*

A large financing gap has been identified as one of the greatest barriers to achieving these targets. To meet Targets 6.1 and 6.2, capital financing would need to triple to $114 billion per annum and operating and maintenance costs need to be considered in addition. Beyond this global figure, there are large variations in financing needs from region to region and country to country. Hence, financing strategies are needed based on evidence and realistic proposals for how to fill the gaps."[i]

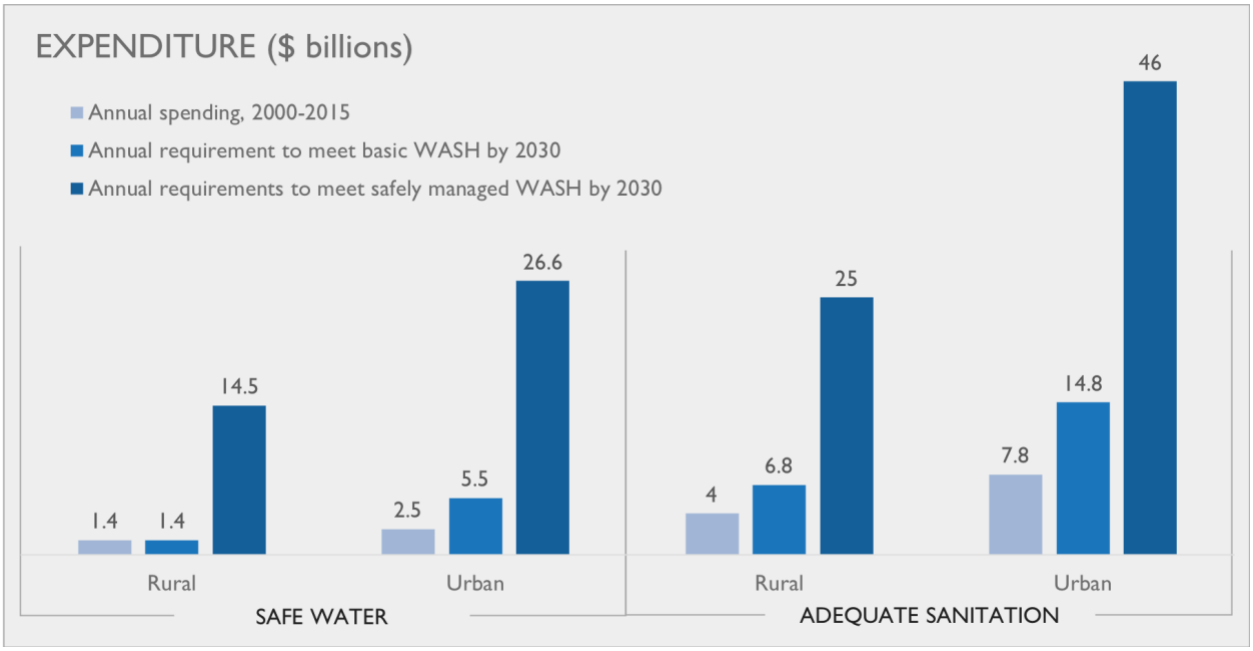

Figure 5: Required expenditure to achieve the 2030 Agenda[ii]

Blended finance is increasingly recognized as an important tool for mobilizing the additional sources of capital required to achieve the SDGs, including Goal 6 (*Clean Water & Sanitation*). While blended finance has been more actively used to support other SDGs, it can play an important role in mobilizing additional sources of finance and closing the investment gap for WASH. The WASH sector can also benefit from lessons learned and best practices to date across the practice of blended finance. Well-designed blended finance solutions attract new investors to a sector, and over time these investors become more comfortable with the investment opportunity and risks; as a result, the need for development capital decreases. For example, microfinance, renewable energy, infrastructure, and SME finance projects have received a lot of development capital over the past 15 years, with investors now prepared to take much more risk in these sectors without development capital.

CURRENT TRENDS AND LANDSCAPE

BLENDED FINANCE TRENDS

The following analysis is based on Convergence's historical blended finance deals database, which includes over 400 closed blended finance deals across sectors and regions. Convergence is closely aligned to the DFI Working Group definition of blended finance and seeks to capture all blended finance deals that met the key criteria of Convergence's definition. [2] As such, this Paper does not include transactions with public-on-public blending[3] or PPPs where no additional private sector commercial capital has been mobilized in the financing (i.e., beyond the project developer's contributions). While Convergence' s database is the largest database of closed blended finance transactions, it only captures a part of the full universe of blended finance. Efforts have been made to capture all relevant WASH sector blended finance transactions from many sources; however, there are likely more blended WASH projects in developing countries that have not been captured.

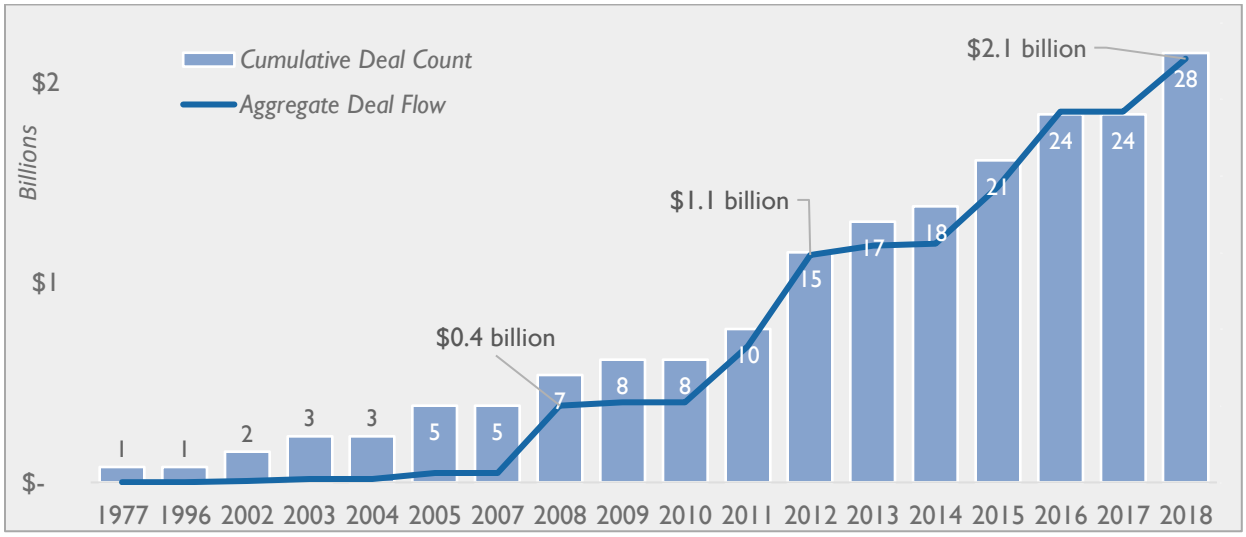

Figure 6: Blended finance transactions for water and sanitation over time

According to the Convergence database, there have been 28 blended finance transactions for the water and sanitation sector, which represent an aggregate volume of $2.1 billion invested. These deals are diverse

[2] To be included in the Convergence's database, a deal must meet three main criteria:

1. The transaction attracts financial participation from one or more commercial investor(s) that would otherwise not have invested in the region / sector / project
2. The transaction leverages concessional capital in one of the following ways:
    a. Public/philanthropic investors are subordinate or concessional within the capital structure
    b. Public/philanthropic investor provided guarantees or risk insurance
    c. Transaction design or preparation is grant funded
    d. Transaction is associated with a Technical Assistance facility
3. The transaction intends to create development impact related to the SDGs in emerging or frontier markets, or directly impacts beneficiaries in emerging or frontier markets

[3] Some definitions of blended finance include 'public-on-public' blending, whereby concessional capital is deployed by a development agency (e.g., the European Commission) to encourage commercially-oriented public agencies (i.e., DFIs) to invest in higher-risk countries, markets, and/or projects.

in size, deal type, region, financing model, and blending archetype. In terms of size, blended finance transactions target the water and sanitation sector have varied from a $700,000 point-of-access water purification project (e.g., Spring Health Safe Drinking Water) up to a $234 million national revolving fund (e.g., Philippines Water Revolving Fund). On average, blended finance transactions in the water and sanitation sector have been small relative to other sectors and SDGs. The average size of blended finance deals is $309 million, while the average water and sanitation deal is $68.5 million.

The majority of blended finance transactions in the water and sanitation sector to date have been either projects (43%) or funds (29%). Water and sanitation is often one of many sectors targeted by the blended finance funds that were analyzed (e.g., Brazilian Sustainable Technology Fund), although some funds do target the sector exclusively (e.g., Sustainable Water Fund). Water and sanitation projects have included infrastructure projects (e.g., Kalangala Infrastructure Services) as well as humanitarian programs (e.g., Safe Water Network). More recently, there has been an increase in revolving loan facilities, which provide loans to multiple water and sanitation projects or companies and, often, seek to mobilize co-investment from local financial institutions. Blended facilities for water and sanitation have been much larger on average ($171 million), compared to other deal types.

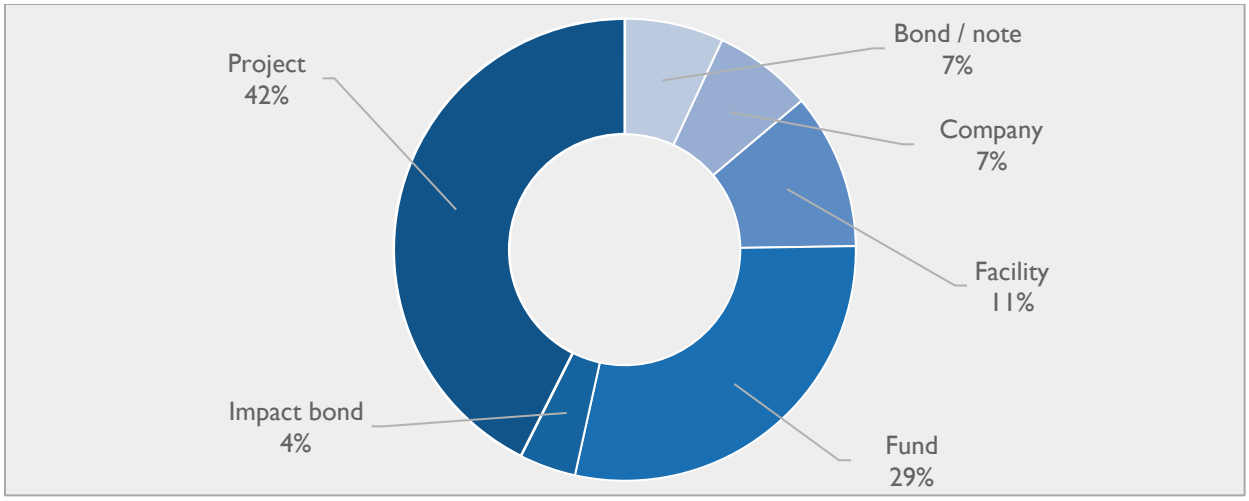

Figure 7: Blended finance transactions for water and sanitation by deal type

The largest proportion of blended finance transactions for the water and sanitation sector have targeted water supply services (57%). While blended finance approaches have been deployed for public water supply services (e.g., Philippines Water Revolving Fund), blended finance has been more commonly deployed for private / alternative water supply services (e.g., dloHaiti). Blended finance solutions for the water and sanitation sector have also focused considerably on bulk water supply (25%), storage and conveyance (18%) and urban drainage (14%). Financing sanitation can be particularly difficult because the infrastructure is often more expensive to build, has more difficulty recovering costs via tariffs, and tends to lag behind water supply service.

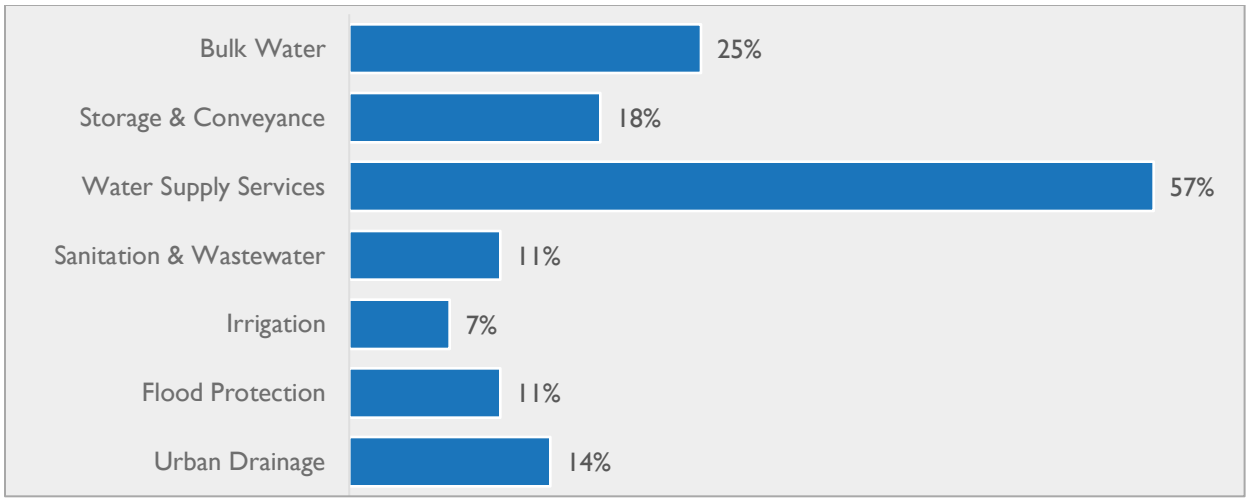

Figure 8: Blended finance transactions for water and sanitation by sub-sector

Water and sanitation blended finance transactions have most frequently targeted South Asia (32% of deals) and Sub-Saharan Africa (29% of deals). While only 7% of blended finance solutions for water and sanitation have targeted the Middle East and North Africa, the average deal size has been considerably larger in the region ($249 million). Relative to other sectors, there are few globally-focused water and sanitation blended finance solutions (only 7% of transactions), which may reflect the local-nature of water and sanitation projects and the important role of local financiers. Middle-income countries have been most frequently targeted by blended finance transactions in the water and sanitation sector. 86% of blended finance transactions for the water and sanitation sector have targeted one or more lower-middle income countries, while 43% have targeted one or more upper-middle income countries. Only a quarter of blended finance transactions for water and sanitation have targeted one or more low-income countries.

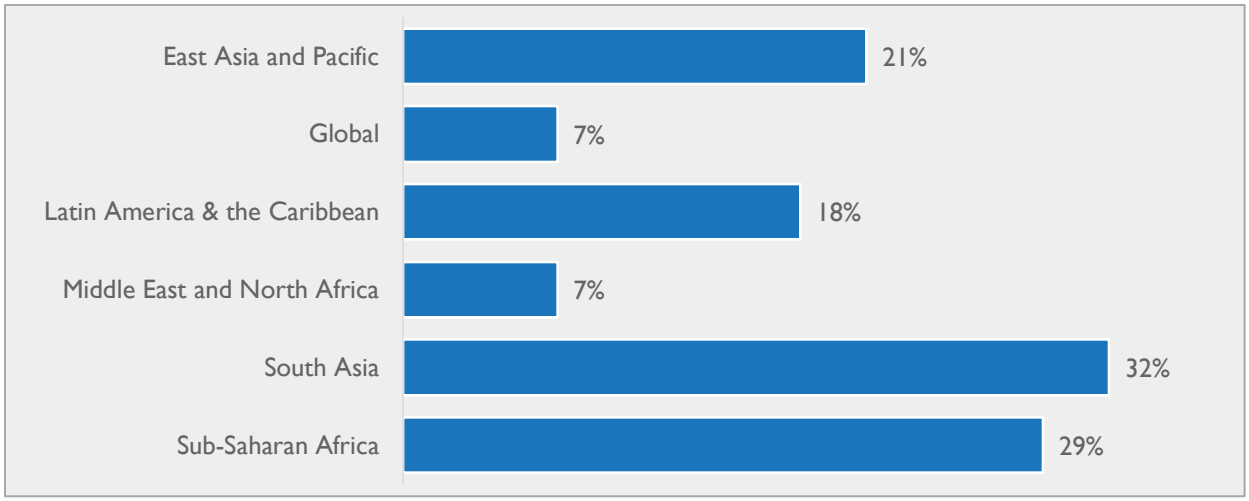

Figure 9: Blended finance transactions for water and sanitation by target region

Concessional capital (e.g., first-loss debt or equity) has been deployed most frequently for blended finance transactions targeting the water and sanitation sector, followed by guarantees / risk insurance. When guarantees / risk insurance or technical assistance funds are deployed to water and sanitation, deals have a larger average deal size. Partial credit guarantees have been successfully used in the sector to mobilize

international and local financiers (e.g., Municipality of Tlalnepantla de Baz Bond Issue in Mexico). Technical assistance funds alongside commercial investments can be critical for increasing commercial viability, including building the operational efficiency of service providers / project developers and supporting the broader enabling environment.

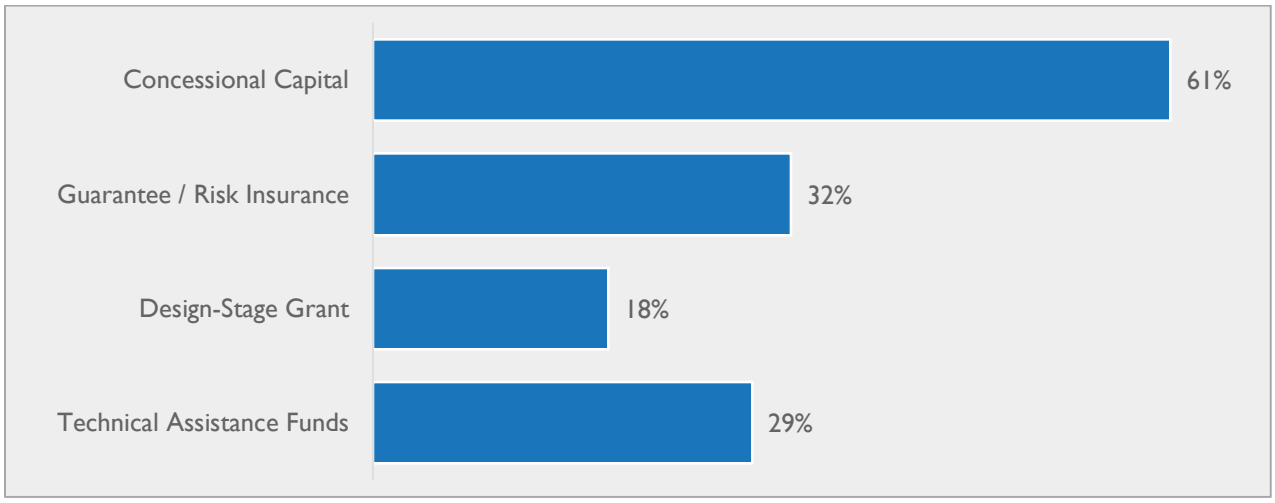

Figure 10: Blended finance transactions for water and sanitation by blending archetype

LANDSCAPE OF ACTIVE ORGANIZATIONS

There are several organizations that are actively working to increase the flow of private finance to the WASH sector. The following paragraphs highlight many but not all key organizations and initiatives promoting blended finance and WASH. This mapping is not comprehensive. Convergence has prioritized the most significant organizations that are involved in increasing the flow of private capital into this sector, defined as:

- Organizations who currently deliver, or have the potential to deliver, large amounts of private financing (particularly through blended finance structures) towards interventions targeted at the WASH sector; and
- Organizations whose activities have the potential to make a systematic impact on the flows of private finance to the WASH sector from an enabling environment or convening perspective.

AID AGENCIES / DONORS

The UN estimates that $114 billion in additional financing is needed in the water and sanitation sector to achieve Goal 6 (*Clean Water & Sanitation*) – nearly three times existing financing. Aid agencies and donors are a primary funder of WASH through traditional ODA (e.g., grants and long-term concessional sovereign loans). Approximately, $7 billion in ODA was directed towards WASH in 2015 alone. In terms of blended finance for the water and sanitation sector, the primary role of aid agencies and donors is to provide concessional capital (e.g., as guarantees or insurance, junior or subordinate debt or equity) to reduce the risks associated with water and sanitation projects for private investors. Aid agencies and donors also play an important role in providing grants for technical assistance and capacity building, to ensure there is a sufficient pipeline of bankable projects and businesses. To see an uptick of private financial flows in the

water and sanitation sector, it is critical that these institutions increase their allocations towards catalytic grant mechanisms and investments.

The United States Agency for International Development (USAID) is an active donor in this sector and has established a $40 million program called Water, Sanitation, and Hygiene Finance (WASH-FIN), which seeks to increase both public and private finance to effectively expand and improve service delivery of WASH. The primary areas of focus include promoting sustainable business models and proven commercial approaches; advocating for and tracking increased public investment; mobilizing private capital and market finance; and replicating success through knowledge sharing. In addition, USAID provides guarantees through the Development Credit Authority (DCA) and supports challenge funds that are used to identify and test innovative and replicable WASH technologies and delivery models, including in rural communities.

The Dutch Directorate General for International Cooperation (DGIS) established the Sustainable Water Fund (FDW) to stimulate public-private collaboration in the WASH sector. The fund supports proven pilot projects that require support prior to them becoming financially sustainable and market-based. In addition to catalyzing private finance through the FDW, DGIS is also focused on supporting the development of long-term, local currency financing options for the water and sanitation sector in developing countries, as is evidenced through a $15 million seed funding grant provided to the Water Finance Facility.

Other bilateral aid agencies of note include Australia's Department of Foreign Affairs and Trade (DFAT) and the United Kingdom's Department for International Development (DFID). DFAT's flagship $110 million Civil Society Water Sanitation and Hygiene Fund is an innovation and impact fund that supports new business models and innovations with the potential to scale and mobilize private sector investment in WASH initiatives. DFAT also promotes policy and regulatory reform and capacity building through the Water & Sanitation Initiative Global Program, implemented in partnership with various multilateral organizations. DFID supports a number of partnerships focused on private sector investment in the WASH sector, including Private Infrastructure Development Group (PIDG), the Community Led Infrastructure Finance Facility (CLIFF), and the Public Private Infrastructure Advisory Facility (PPIAF).

In addition, there are a number of key multilateral organizations focused on WASH, largely led by the World Health Organization (WHO) and the UN Children's Emergency Fund (UNICEF). The WHO works to support an enabling environment for investment in WASH through i) the UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) and ii) the TrackFin Initiative. The GLAAS 2017 report finds that countries are not increasing spending fast enough to meet the water and sanitation targets and that steps must be taken to identify new sources of funding. UNICEF is increasingly engaging with the private sector and other new partners to encourage innovation in sustainable markets for WASH. For example, UNICEF works with the private sector on promoting handwashing with soap in Pacific Island countries, installing water supplies in schools and kindergartens in Sao Tome, operating and maintaining water systems in Madagascar, and on peer-to-peer capacity building related to sanitation and water in Angola.[iii]

The World Bank Group (WBG) actively looks to stimulate private sector investment in the water and sanitation sector through its Water and Sanitation Program (WSP), which is a multi-donor partnership

supported by the Bank's Water Global Practice. The WSP works with client governments at the local and national level across 25 countries. WSP's Domestic Private Sector Participation (DPSP) program has cumulatively disbursed $252 million since its inception on 2011 and works with governments to scale up the technical, managerial, and financial capacity of the domestic private sector and local service providers.[iv]

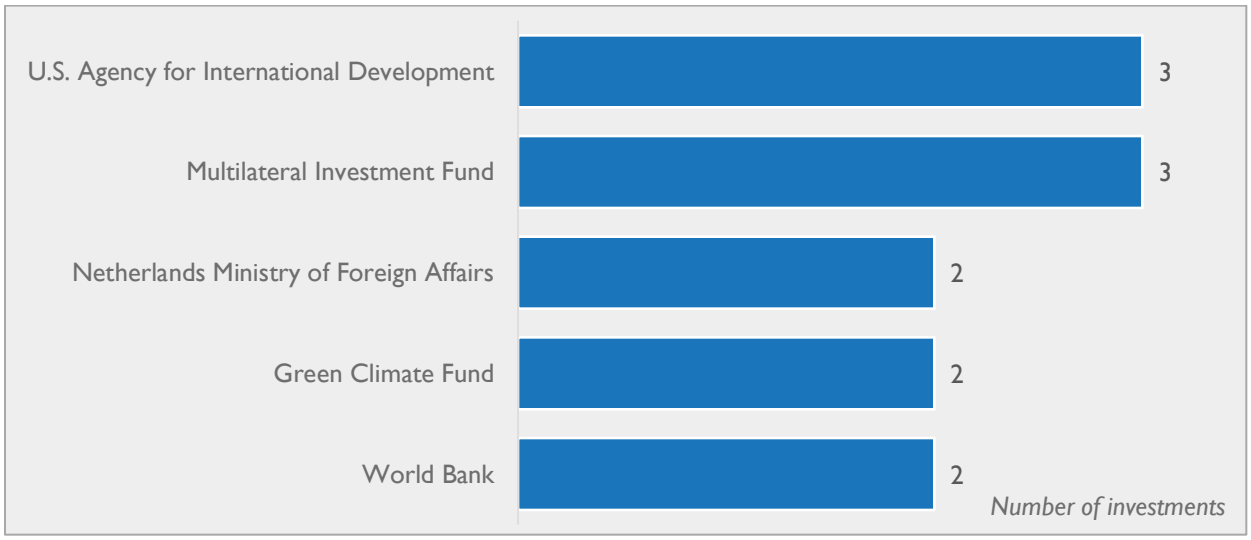

Figure 11: Top development agencies by number of investments to blended finance deals in the water and sanitation sector

MULTILATERAL DEVELOPMENT BANKS / DEVELOPMENT FINANCE INSTITUTIONS

The multilateral development banks (MDBs) and national development finance institutions (DFIs) summarized in the following section all play a pivotal role in mobilizing private sector capital at scale. To achieve scale, there is a need for MDBs and DFIs to deploy their capital more strategically and with a clearer intent to mobilize private sector investment. Importantly, MDBs (e.g., EIB, EBRD, IDB, and AfDB) support a significant volume of sovereign projects through sovereign loans and capital grants from donors. While these transactions are not included in this analysis, these activities are critical for achieving universal access to clean water and sanitation.

The International Finance Corporation (IFC) is one of the largest providers of development capital for water supply and sanitation. IFC provides debt, equity, and PPP advisory and structuring support to public utilities and private operators. Through its venture capital unit, IFC supports early stage companies that are developing new water technologies and delivery methods. IFC is the administrator for the Water Resources Group, a platform established by the World Economic Forum (WEF) that brings together public, private, and civil society stakeholders to discuss water management and develop concrete proposals for the management of water resources. Finally, IFC has developed the Sanitation and Safe Water for All program, an advisory services program designed to support market-based approaches with the potential to expand access to safe water and sanitation products and services for underserved consumers.

Other MDBs that actively support more private sector involvement in the water and sanitation sector include the Asian Development Bank (ADB) and the European Bank for Reconstruction and Development

(EBRD). ADB's water operational plan 2011-2020 explicitly calls for an enhanced partnership and increased engagement with the private sector. EBRD supports private operators in the delivery of urban WASH services through the provision of debt and equity financing. EBRD also funded the multi-donor Water Fund, which provides technical assistance to governments in EBRD focus countries to carry out regulatory work and reforms related to the management of water utilities.

Among the DFIs, the German development bank, KfW, and the Overseas Private Investment Corporation (OPIC) are active investors in WASH. KfW provided a concessional loan to the Government of India for the creation of a Water and Sanitation Pooled Fund, which supports local municipalities in Tamil Nadu to access finance for local infrastructure investment. OPIC provides debt finance and political risk insurance to organizations across the WASH value chain, ranging from construction of municipal infrastructure projects to supporting microfinance institutions that are active in the sector.

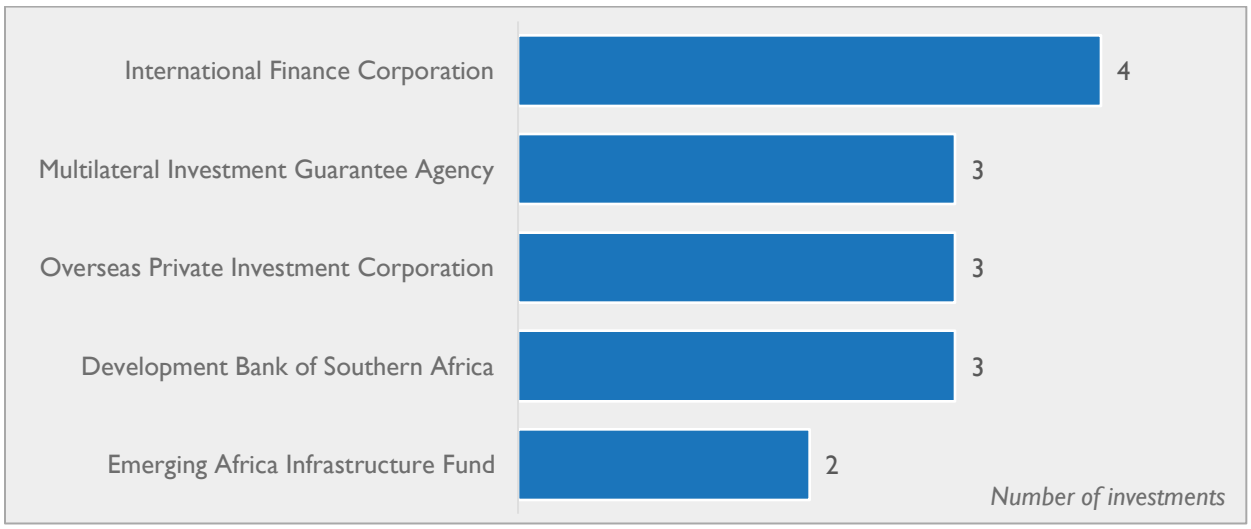

Figure 12: Top DFIs and MDBs by number of investments to blended finance deals in the water and sanitation sector

PHILANTHROPIC FOUNDATIONS / NON-GOVERNMENTAL ORGANIZATIONS

Philanthropic foundations and NGOs have relatively less capital to deploy and more commonly seek to have a catalytic role, providing small amounts of financing to seed or scale innovative technologies and initiatives. Philanthropic foundations and NGOs have also played a role in convening multi-stakeholder actors to foster collaboration and the dissemination of best practices and lessons learned.

The Bill and Melinda Gates Foundation is one of the leaders in the WASH space, with a focus on innovative approaches and technologies for sanitation. They provide grant funding and also support public-private partnerships. Other active foundations in the water and sanitation sector include Osprey Foundation, Conrad Hilton Foundation, and the Stone Family Foundation. All three of these organizations provide grant funding, risk capital, and non-financial expertise to support innovative market-based approaches for WASH.

There are also several notable NGOs that are active in the WASH space, including Habitat Against Humanity, Water.org, Sustainable Sanitation Alliance, Water for People, Water and Sanitation for the

Urban Poor, and Water Aid. These NGOs play a particularly important role in advocacy and supporting governments with policy and institutional reform, as well as promoting evidence-based approaches and convening practitioners to share best practice solutions.

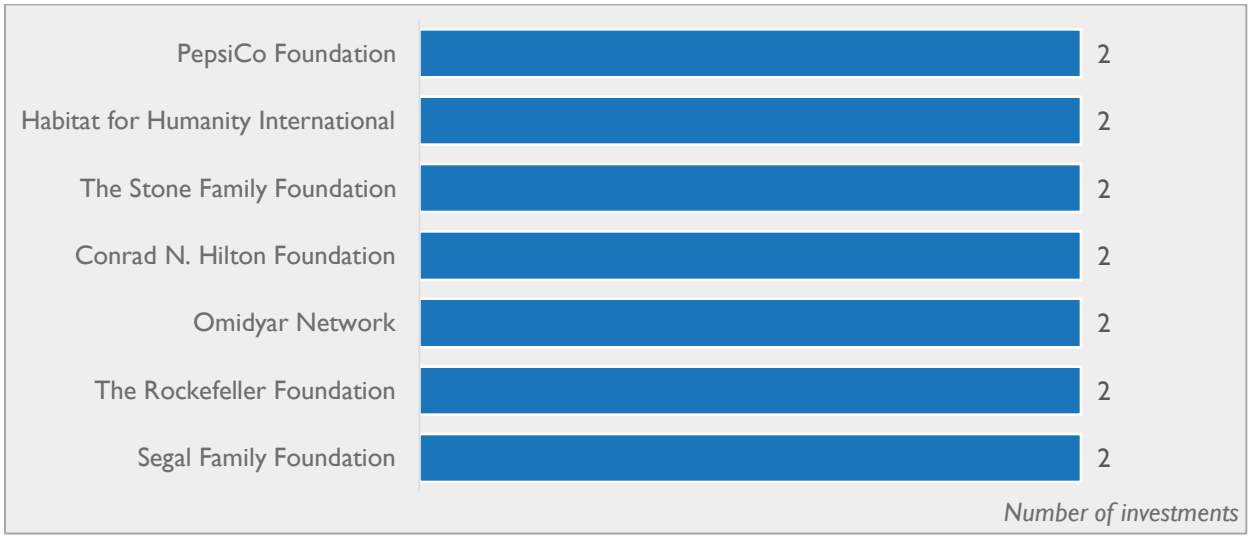

Figure 13: Top philanthropic organizations by number of investments to blended finance deals in the water and sanitation sector

PRIVATE INVESTORS

Private sector actors in the water and sanitation sector can be divided into two segments:

1. Water service provider companies actively implementing and investing in WASH projects; and
2. Financial investors prepared to invest debt and/or equity in projects

There are a number of water service provider companies that invest in and operate water and sanitation projects in developing countries, such as Veolia Group and SUEZ. Veolia is a global leader in optimized resource management present in developed and developing countries, with indicative activities including providing drinking water services in areas with water stress, such as in Niger; implementing reliable water and energy production and distribution services in Gabon; and establishing sanitation management systems in Morocco. Similarly, SUEZ is an expert in water and waste projects in developed and developing countries. Recently, Veolia and SUEZ were awarded a joint contract to build and operate a drinking water production plant in Gandharbpur, Bangladesh, which will be co-funded by the ADB, the French Development Agency (AFD), EIB, and the Bangladeshi government (investment terms and deal structure are not yet publicly available).

To date, there has been limited commercial financial investment into water and sanitation projects in developing countries. The Global Water Development Partners (GWDP), launched by Blackstone in 2014, is the first large, formal attempt by a mainstream private equity investor to support companies to create long-term and sustainable water infrastructure. Pictet Asset Management has set up an equity fund called Pictet Water that invests in public equities of companies that operate in the water supply and processing services as well as the water technology sectors. A portion of both funds is allocated towards investments in emerging economies, although no investments in developing countries have been executed to date.

There are a number of impact investing firms that have participated in the provision of catalytic capital and financing of projects in the water and sanitation sector. Within this ecosystem of investors, the work of WaterEquity and Calvert Impact Capital merit note. Through its first tiered fund with concessional capital, WaterCredit provided equity to microfinance institutions in Bangladesh, India, Kenya, and Uganda that provide affordable water and sanitation loans. WaterCredit is currently in the process of structuring a blended finance fund that will provide debt financing to microfinance institutions across multiple geographies (e.g., East Africa, South Asia), leveraging multiple capital tranches with distinct risk/return profiles including a first-loss tier. Calvert Impact Capital provides debt financing to financial intermediaries and equity investments in social enterprises that are active in the water and sanitation space.

OPPORTUNITIES AND BARRIERS

OPPORTUNITIES FOR BLENDED FINANCE

The first step is to identify where blended finance is well positioned to mobilize private sector investment for WASH projects. Blended finance can only mobilize private sector capital to water and sanitation projects with the ability generate positive returns on capital that are comparable, or at a premium, to alternative investment opportunities, including (i) projects with a clear, viable revenue model (e.g., services contract with government, a public-private partnership, a concession model, or a private sector service provider) and (ii) projects in middle-income countries and/or countries where the likelihood of the service provider receiving payments for its services is acceptable.

There are a number of important nuances on the financeability of water and sanitation projects:

- Sovereign (or sub-sovereign) vs. non-sovereign projects: Many WASH projects in developing countries are undertaken on a sovereign or sub-sovereign basis, whereby the ownership, operation, and maintenance of the project remains with the public sector. These projects are often financed by the development finance community on highly concessional terms. The combination of political risk and below-market financing terms has impeded private sector investment.

- Urban vs. rural projects: Rural projects, including both water and sanitation, are often less commercially viable than urban and peri-urban projects. While community-level water systems play a crucial role in supplying the vast majority consumers in many developing countries, rural providers often face limited management capacity, low operating revenues, and lack of access to finance. Alternative financing mechanisms therefore have a crucial role to play in supplementing the sector budget for rural water. Examples include franchise models and efforts to support local intermediaries to on-lend to small-scale, community-based projects.

- Sanitation vs. water projects: It should be noted that financing sanitation via commercial loans can be more difficult, as sanitation infrastructure is often more expensive to build, has more difficulty recovering costs via tariffs, and tends to lag behind water supply service. While many of the project characteristics for water and sanitation are similar, it is important to acknowledge that water financing is more common and more attractive to many commercial investors compared to sanitation projects.

Furthermore, sanitation financing is often required more so at the local, if not household-level, which can also be a barrier for mobilizing private financiers.

- Treatment plants vs. distribution systems: Similar to the energy sector, water and wastewater treatment plants can leverage structured project finance. Therefore, treatment plants can and have historically been able to mobilize strategic commercial investment – including from United Utilities, Veolia, Biwater, and Suez – as well as development finance from DFIs and MDBs. It is much harder to mobilize commercial or even quasi-commercial finance to distribution systems because of the high maintenance costs, low returns, and political nature of tariff collection. Private investment in distribution is commonly mobilized in more limited, defined areas (e.g., loss reduction contracts).

The following are potential financing models for mobilizing private sector investment for the water and sanitation sector in developing countries.

PUBLIC-PRIVATE PARTNERSHIPS

Public-private partnerships (PPPs) are multi-year – often multi-decade – agreements, whereby the public sector enter into long-term contractual agreements with private sector entities for the construction and management of infrastructure facilities. There are many types of PPPs, such as 'finance only', 'design-build-finance' (DBF), 'operations and maintenance' (O&M), 'build-own-operate' (BOO), and 'build-operate-transfer' (BOT). Regardless of the type of PPP, project finance must be raised through a combination of debt and equity. It is important to note that not all PPPs are blended, but there is strong potential to deploy blended finance approaches for PPPs, including grant-funded project preparation, concessional capital contributions, and risk mitigation instruments (e.g., guarantees, risk insurance).

CASE STUDY: KIGALI BULK SURFACE WATER SUPPLY PUBLIC-PRIVATE PARTNERSHIP (PPP)

Development challenge: Rwanda aims to ensure its full population has reliable access to clean water. Kigali is one of Africa's fastest growing cities, yet it continues to be difficult to attract private financing at the project-level.

Financing model: The Kigali Bulk Surface Water Supply Public-Private Partnership (PPP) is the first competitively tendered build-operate-transfer (BOT) water concession in Sub-Saharan Africa (outside of South Africa). The project developer, Kigali Water Limited (KWL), will sell potable water to the public sector Water & Sanitation Corporation of Rwanda (WASAC) under a 27-year PPP agreement, funded via a tiered capital structure.

Role of blended finance: The Emerging Africa Infrastructure Fund (EAIF), a blended finance fund, was the lead arranger and provided $2.6 million in junior debt and crowding in senior debt from the African Development Bank. The project also benefited from a $6.25 million technical assistance grant from the Private Infrastructure Development Group (PIDG). Technical assistance funds and advisory services from the World Bank and PIDG played an important role in determining the feasibility, scope, and structure of the PPP.

Box 1: Kigali Public-Private Partnership

There are multiple examples of blended finance deployed in public-private partnerships for WASH. On the one hand, PPPs can be a mechanism to help governments fund much needed investment while leveraging technology and operational efficiency strategies that can be used to improve the performance and financial sustainability of the entire system. On the other hand, PPPs are often better suited to larger

scale projects, given the time and resource intensity of structuring and fundraising for a single project, with multiple large-scale projects needed in many developing countries. As well, PPPs are best implemented in countries where legal, regulatory and enforcement risk is acceptable for private sector investors.

CREDIT ENHANCEMENT FOR MUNICIPAL BOND ISSUANCES

Municipal bonds are general obligation-borrowing undertaken usually by a local authority or government to finance local projects. Municipal bonds are a cheaper and longer tenure alternative to bank borrowing. In many developing countries, banks are unable to offer long-term loans due to concerns over term mismatch issues. Blended finance can be critical to the success of municipal bond issuances for WASH. In most municipal bond issuances for WASH to date, credit enhancements, in the form of full or partial guarantees, have been used to secure commercial financing. There have been a limited number of cases in India and South Africa of private placements of municipal bonds with institutional investors if the bond is rated by the domestic credit rating agency. There is greater potential for municipal bond issuances to raise substantial amounts of commercial capital for WASH through pooled financing. A drawback of partial credit guarantees (i.e., a guarantee for less than 100% of the debt obligation) is the major rating agencies' practices of only providing a two-notch enhancement above the obligor's rating.

CASE STUDY: TAMIL NADU WATER AND SANITATION POOLED FUND

Development challenge: India has long faced the challenge of providing safe drinking water to over 700 million people in more than 1.5 million villages. While India has seen an influx in infrastructure financing via bond issuances in urban areas, transaction expenses for bond issuances (e.g., fees, credit rating charges) to finance infrastructure projects at the small and medium-sized municipalities are prohibitive.

Financing model: The Tamil Nadu Water and Sanitation Pooled Fund (WSPF) is a special purpose vehicle created in 2002 to pool multiple municipal-level bond issuances to finance water and sanitation projects at the community-level. Pooling projects across 13 municipalities, the Tamil Nadu WSPF mobilized capital market finances through an unsecured structured debt obligation.

Role of blended finance: To bolster market confidence for the Tamil Nadu WSPF, the senior debt is cushioned by multiple layers of credit enhancement: i) a no-lien escrow account established by all 13 project sponsors on all revenues; ii) a bond services reserve fund invested in low-risk liquid securities; and iii) a USAID Development Credit Authority (DCA) guarantee for 50% of the principal amount. The WSPF received a 'high safety' credit rating.

Box 2: Tamil Nadu Bond Issuance

DEDICATED FINANCING INSTITUTION / FACILITY

A dedicated financing institution, such as a "water bank", can mobilize additional investments by issuing local currency bonds in the capital markets to support a country's national priority actions on water and sanitation service delivery. The national institution can then provide long-term loans to public or private water utilities that have little or no access to commercial finance, or that have access at unfavourable terms (e.g., short tenors). Blended finance can play two important roles in this financing model. First, the dedicated financing facility may leverage a blended finance structure to maximize the potential capital that

can be deployed to local projects. Second, the dedicated financing institution / facility may provide catalytic capital to these local projects, thereby attracting additional private investment from local institutions.

CASE STUDY: WATER FINANCE FACILITY

Development challenge: Long-term financing to local water utilities to increase access to water and sanitation in low-income countries and communities is limited. Development agencies have traditionally financed a large proportion of the WASH sector.

Financial model: The Water Finance Facility (WFF) will develop several country-level water financing facilities, which will issue local currency bonds to mobilize large-scale private investment from domestic institutional investors for on-lending to public or private water and sanitation companies. The first national facility will be the Kenya Pooled Water Fund (KPWF).

Role of blending: The bonds will have lower risk because of the pooling of projects of credit-worthy water and sanitation companies. The national finance facilities will further reduce risk by incorporating one or more of the following risk mitigation instruments: reserve funds, guarantees, soft loans or grants.

Box 3: Water Finance Facility

NATIONAL REVOLVING FUNDS

A revolving fund is when capital is raised with a certain purpose which can be made available to the same users more than once. 'Revolving' means that the fund's resources circulate between the fund and the beneficiaries, with an intention that the fund is self-sufficient and sustainable. The initial supply of lending capital usually comes from concessional capital providers from the public or philanthropic sector. The repayment of the loan, together with interest, is used to replenish the fund and make further loans.

CASE STUDY: PHILIPPINES WATER REVOLVING FUND

Development challenge: Public resources alone cannot meet the investment required for the Philippines to achieve its goals for access to potable water. In 2004, the government took direct action to support the crowding-in of domestic finance for WASH, with an executive order that categorized local water service providers according to their levels of creditworthiness. Those qualifying as creditworthy were expected to shift away from government financing and mobilize market-based financing sources.

Financing model: The Philippine Water Revolving Fund (PWRF) was set up in 2008 to provide loans to water service providers—local government units (LGUs) and water districts (WDs)—to finance local water and wastewater projects. Loan repayments made into the fund are revolved to finance other projects. The PWRF was established as the only water revolving fund outside the United States and Europe. The financial structure was designed for affordable loan terms and conditions to water service providers, and at market terms with other private finance initiatives.

Role of blending: The PWRF blends Official Development Assistance (ODA) and domestic public funds with commercial financing to lower borrowing rates, and to market water and sanitation projects to private finance initiatives (PFIs). Concessional seed financing from the Japan Bank for International Cooperation (JBIC), was provided to the PWRF at the start of the program. Blending through the revolving fund has resulted in lower borrowing costs for water service providers and longer tenors.

Box 4: Philippines Revolving Fund

MICROFINANCE / SME FINANCE

WASH microfinance products generally fall into one of three categories: loans for home-improvements; loans for WASH-related microbusinesses; and small and medium enterprise (SME) loans for community-managed or small private service providers.[v] There are a growing number of social enterprises in developing countries with innovative models to address market shortages quickly and effectively. Blended finance can play an important role through early-stage grant capital for the design and development of new businesses, technical assistance alongside commercial growth capital, and catalytic capital for mobilizing additional private sector investment.

ADDITIONAL OPPORTUNITIES

Beyond well-aligned segments, there are a number of other notable opportunities for blended finance:

- Blended finance is well aligned to local currency financing: Water and sanitation projects earn revenues (e.g., tariffs) in local currency; yet, the large majority of cross-border debt financing from development finance providers and private sector investors has been provided in hard currency to date. Blended finance can be used to transfer and, in certain cases, reduce foreign exchange risk, including by mobilizing domestic capital in local currency or attracting cross-border funding on a currency-hedged basis.
- Blended finance is aligned with addressing the real and perceived investment risks in the WASH sector: Given the significant barriers and risks described above, WASH projects are typically associated with higher real and perceived risks compared to other infrastructure and non-infrastructure (e.g., SME finance) projects. These higher levels of risk will not be overcome in the short to medium-term. Blended finance solutions can address some or all of these risks to mobilize greater private sector investment in credit-worthy WASH projects. Blended finance solutions that seek to diversify risk across multiple projects and / or sectors are particularly promising.
- Blended finance is aligned with more portfolio-level approaches: WASH blended finance transactions have been primarily implemented on a stand-alone project basis (e.g., a municipal water PPP), but this approach has two significant downsides. First, stand-alone WASH projects are less efficient than portfolio approaches: a portfolio approach can support five to 20 WASH projects but take a comparable period of time to structure. Second, WASH projects tend to be smaller than other infrastructure projects: given investors preference for risk diversification and scale, WASH projects face a greater challenge in raising commercial financing.

BARRIERS TO FINANCING WATER AND SANITATION

There are numerous barriers to private capital investment in developing countries, with Figure 10 providing a list of the most pervasive challenges based on surveys and interviews with private sector investment managers.

KEY BARRIERS	
1. Investment Risk	Risks are too high or return for the risk too low, perceived and/or real
2. Lack of Liquidity	Liquidity is often weak or non-existent
3. FX Risk	High foreign exchange (FX) risk cannot be mitigated adequately
4. Market Inefficiencies	Local financial markets often do not function efficiently - narrow and shallow
5. Investor Capacity	Private investors have knowledge and capability gaps as it relates to unfamiliar countries, regions, and/or sectors
6. Investor Mandate	Private investors have limited mandates and incentives to invest in developing countries
7. Investment Climate	Local and global investment climates are challenging, possibly due to poor regulatory and legal framework
8. Deal Size	Individual investment opportunities often too small and too bespoke
9. Market Volatility	High volatility impedes investors seeking stable investment returns
10. Investor Incentives	Status quo and investment community culture adverse selection away from developing countries except for limited number of Upper Middle-Income Countries

Figure 10: Traditional barriers to private sector investment in developing countries

In addition to traditional market barriers to private sector investment in developing countries, there are many sector-specific challenges in the WASH sector that impede investment, with main barriers described below.

Local nature of water and sanitation projects: Compared to other types of infrastructure (e.g., energy, transportation, and telecommunications), water and sanitation systems are usually implemented and funded at the municipal level because of the cost intensiveness of piping water and wastewater long distances. Local projects tend to be associated with higher risks because of market conditions (less developed capital markets), creditworthiness (lower average credit rating), tariffs (less efficient collection), and local political factors that can make water hard to finance.[vi] Further, local projects are smaller and less attractive for conventional bank financing and international financial institutions who want scale, because arranging fees can be costly. Blending approaches can be deployed to support sub-sovereign and municipal-level projects, by pooling projects and deploying concessional risk enhancing mechanisms like USAID DCA guarantees, which have been used multiple times in this sector.

Upfront capital requirements and long-term repayment: Beyond the local nature of the construction of water and sanitation infrastructure (e.g., water treatment plants), water and sanitation projects require capital upfront, but the revenue to repay capital (e.g., in the form of water and sewerage rates) is generated

over the whole lifetime of the plant, which may be twenty years or even longer. This is well beyond the typical tenor and well below the typical return rates that would appeal to commercial investors.[vii] Further, in water and sanitation projects there is a high proportion of "soft costs", such as project evaluation, project development, and contract negotiation costs. Patient, catalytic capital can be deployed to shorten the repayment period for commercial investors and/or to bolster their returns to reflect the increased risk of the extended tenor. For example, the Emerging Africa Infrastructure Fund, part of the Private Infrastructure Development Group, can provide extended tenors for water and sanitation projects in Africa.

Considerable operating and maintenance costs: Similar to energy projects, water and sanitation *distribution* projects have a particularly high ratio of operating expenditure to capital expenditure. Even after the original investment to construct water and sanitation infrastructure, maintenance requirements remain a significant expenditure.[viii] This adds an extra layer of risk when seeking commercial finance: a project cannot successfully repay investors if the infrastructure is not properly maintained and upgraded throughout the repayment period (often 10+ years). Notably, water and sanitation tariffs typically cover operating and maintenance costs; rather than initial construction costs. Yet, many of the societal and economic benefits of water and sanitation services are not reflected in their pricing. Guarantees and other risk mitigation instruments can help reduce these risks for commercial investors, and technical assistance funds can also support the proper management of water and sanitation infrastructure.

Cost recovery / efficiency barriers: Public sector entities in developing countries struggle to access commercial capital due to costs of capital that far outweigh their expected profit margins.[ix] A lack of financial and technical efficiencies undermines operating efficiency and constrains the sector's ability to maximize profitability, and is related to poor revenue collections, high levels of losses, significant operating costs, and poor management. Technical assistance funds for capacity building can significantly increase the effectiveness and efficiency of water and sanitation utility operations, boosting their perceived and actual credit-worthiness to commercial investors.

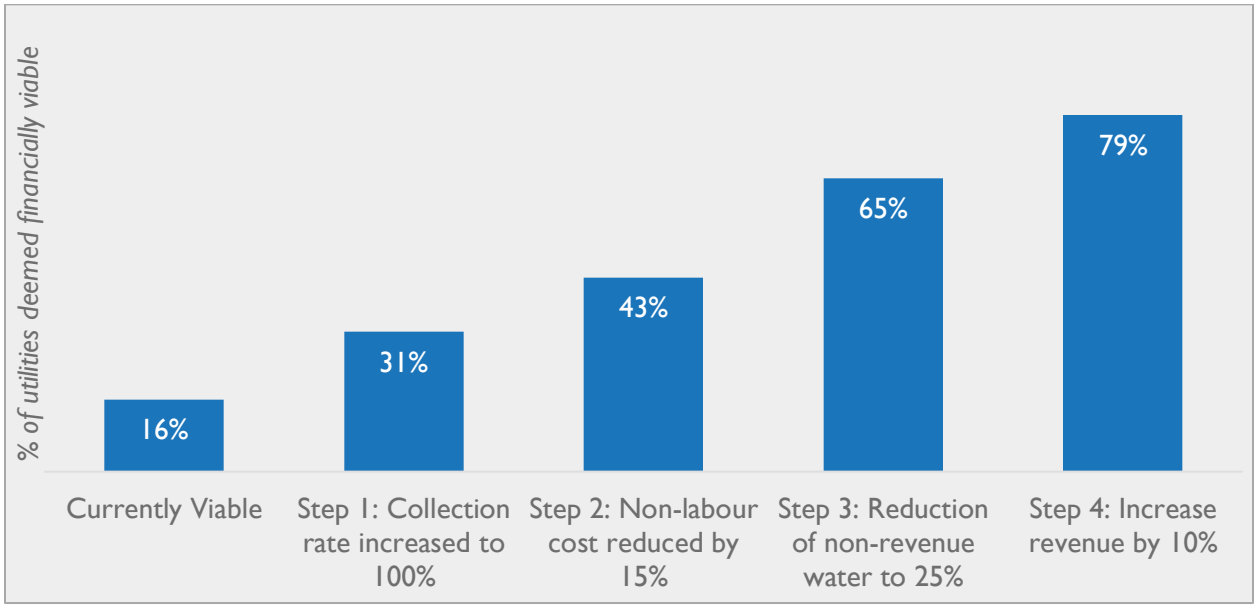

Figure 14: Operating Efficiency and the Impact on Financial Viability[x]

KEY CONSIDERATIONS FOR SCALING

This section looks at key considerations and lessons learned for scaling blended finance for the water and sanitation sector.

NEED FOR SCALE / TRANSFORMATIVE CHANGE

WASH is an important and complex sector that requires significant and coordinated efforts across public, philanthropic, and private sectors. Achieving universal access to WASH is only possible with government leadership and political commitment, and when policy makers and service providers are held to account for responsive services that reach all communities. At the highest level, policymakers need to promote a proper governance framework, including ensuring that key decisions with regard to tariff setting, organizational oversight, and financing are not politicized. To increase the efficiency of existing funding sources, water and sanitation service providers should be incentivized to reduce costs. Tariffs need to be set to achieve better cost-recovery, while targeted subsidies should be introduced as needed to alleviate the impact on low-income customers. Household investments should be mobilized, particularly for sanitation, and combined with facilitated access to finance.

Recognition is needed that water and sanitation can be transformed from a "spending sector" into one that can effectively contribute to efforts to promote economic growth and reduce poverty. As governments set their sector objectives, crafting sector financial strategies will be key to getting available funding sources (tariffs, taxes, and transfers) to leverage repayable financing, especially domestic private finance. Furthermore, outsourcing the financing and operation of water and sanitation systems to private operators can help countries improve operating performance and achieve access targets, while shifting risk from the public to the private sector. For blended finance to achieve scale, the approach and terms of individual transactions need to be standardized as much as possible and resources should be established to support investor education on blending mechanisms and standards.

VALUE OF TECHNICAL ASSISTANCE

Experience has shown that insufficient resources, management inefficiencies, and a lack of access to market financing mechanisms act as a severe constraint on the expansion of water supply systems. Successful and sustainable interventions for water and sanitation in developing countries often require both finance and capacity. As one blending approach, technical assistance alongside capital investments holds great potential to crowd-in additional capital. According to Convergence's database of historical blended finance transactions, approximately half of blended finance deals are those associated with a technical assistance facility. Donors are key in providing technical assistance and capacity building funding for projects and businesses to achieve bankability. The blended finance conversation is overly focused on capital supply, even though there often is not the absorptive capacity for that funding. Donors and stakeholders should share learnings on best practice approaches to project preparation and ensure coordination to promote only the best practice solutions.

Discussions of technical assistance in the context of blended finance typically focus on advisory, assistance, and / or training provided to investee businesses or financial institutions directly, but not necessarily other

ecosystem actors. However, technical assistance can and should encompass advisory, assistance, and / or training to other value chain and ecosystem actors as well and should include all support provided either pre- or post-investment to reduce transaction costs and operational risks and increase developmental impact. Technical assistance can be provided at three different levels: the beneficiary level (e.g. complementary education on safe sanitation practices), the service provider / project developer level (e.g. developing financial management skills and improving overall creditworthiness), or at the enabling environment level (e.g. policies and regulations that support private sector participation in WASH). Pre-investment technical assistance can also directly benefit the finance facility fund manager (e.g. in the form of feasibility studies, pipeline development or due diligence-related activities).

LEVERAGE MOMENTUM AROUND COMBATTING CLIMATE CHANGE

Efforts to increase financing for access to WASH may be able to leverage the momentum of climate finance to mobilize additional financing for water and sanitation projects that incorporate elements of water resource management. This is most clearly seen in the water utilities space. Climate change will place both established water and sanitation services as well as future gains in access and service quality at real risk, with most impacts experienced through more droughts, floods, and less predictable rainfall and water flows. The impacts of climate change are likely to be dramatic and severe for the billions of people who continue to seek the elusive goal of meeting their own basic needs. Water is a particularly key medium through which climate change impacts human populations, society and ecosystems, particularly due to predicted changes in its quality and quantity.

Increasing political attention, growing climate finance, and a long-overdue focus on the threats to sustainable WASH services offers an opportunity to leverage existing pools of dedicated public concessional funds to mobilize commercial capital. High-quality, climate-resilient water and sanitation projects can and should be central to the climate adaptation plans of countries with large populations living without access to WASH and are therefore highly vulnerable to climatic changes. Innovative sources (such as climate bonds) are absolutely essential to meeting joint climate and development goals. However, blended climate finance, for WASH and beyond, must be more equitably allocated. This will often require investments to support climate finance readiness and ensuring the systems are in place to sustain development and adaptation benefits.[xi]

EVIDENCE-BUILDING AND LEARNING

WASH is an area where blended finance has been implemented on a limited basis – it is still early days. Several isolated blended finance transactions have successfully mobilized additional financing for WASH, but these have been primarily in middle-income countries and have so far failed to be replicated and / or achieve scale. Repayable financing – as opposed to grants – remains at low levels in WASH, compared to other infrastructure sectors such as energy or telecommunications, which have been much more successful in mobilizing private sector investment. As such, there is still significant learning to be done on models and best practices for scaling blended finance for WASH to achieve the 2030 Agenda. Further, evidence of stronger, more capable finance and water and sanitation systems would give private financial institutions more confidence to invest in these countries and utilities.

On financing for WASH, efforts like GLAAS (Global Analysis and Assessment of Sanitation and Drinking-Water) and TrackFind (Tracking Financing to Sanitation, Hygiene, and Drinking-Water) are critical to supporting evidence-based planning and budgeting decisions. Understanding how much is spent on WASH by whom and for what is key to increasing spending efficiencies, improving targeting, and mobilizing WASH resources. To date, GLAAS has shown that a lack of financial data often impedes decision-making. On blended finance for WASH, deeper and more actionable blended finance data is required. The main factor influencing the investment decision-making of institutional investors is past performance of an asset class, previous successes/failures with similar investments, and expected return from the asset class. There is currently a paucity of return data on blended finance transactions – particularly target or actual return data for commercial tiers of capital in blended finance transactions. In addition, there are no standard frameworks to compare an investment opportunity's impact on the SDGs.

CONCLUSIONS

There is a need for scalable solutions to narrow the significant investment gap required to achieve Goal 6 (*Clean Water & Sanitation*); blended finance can help bridge the spectrum of small and large projects. Achieving Goal 6 (*Clean Water & Sanitation*) requires significant additional financing for a wide variety of projects: from large-scale water and water treatment projects to small-scale off-grid projects, as described in earlier sections. Small projects are particularly important in low-income countries and Least Developed Countries (LDCs). Projects in the WASH sector are complex to design, relatively small in size (e.g., often local), and characterized by significant investment risk (see below). The current practice of creating blended finance solutions on a project-specific basis impedes the flow of investment required. Portfolio approaches – bundling multiple projects in one blended finance structure/vehicle - has the potential to be more efficient and effective.

WASH sector projects have higher real and perceived risks compared to other sectors – bundling WASH projects with non-WASH projects diversifies and reduces risk for investors. As described in earlier sections, there are significant real and perceived risks in the WASH sector. A non-exhaustive list of risks, mostly unique to the WASH sector, include: political pressure on tariffs, public nature of water, health and safety of citizens, multiple level government involvement, sub-sovereign risk, poor solvency of sub-sovereign water companies, cost recovery/efficiency barriers, upfront capital requirements and long-term repayment, considerable operating and maintenance costs, and currency mismatch between revenues and debt. The portfolio approach identified above can diversify risk across many projects, while subordinated concessional capital in blended finance structures can absorb first losses, both of which help create acceptable risk-return for private investors. Further, sector diversification across multiple sectors (non-WASH) adds projects with lower perceived risk, likely attracting more private sector investors.

'Good practice' blended finance transactions in the WASH sector incorporate a local currency solution. Given the local nature of WASH projects and services, revenues are nearly always earned in local currencies. While financing for WASH sector projects would ideally be denominated in local currency, the large majority of current debt financing to developing countries is provided in hard currency. This currency mismatch exposes borrowing companies to undue risk. 'Good practice' blended finance solutions for the WASH sector will mobilize domestic capital (i.e., local currency), as well as cross-border financing on a currency-hedged basis. Examples of solutions mobilizing domestic capital include: GuarantCo, the Water Financing Facility, and African Guarantee Fund. Examples of solutions mobilizing currency-hedged cross-border finance include: The Currency Exchange Fund (TCX) and MFX Currency Risk Solutions (MFX).

Technical assistance funds are critical to scaling blended finance solutions in the WASH sector. Technical assistance can be an important tool for reducing both real and perceived risks associated with blended finance projects in the WASH sector. Technical assistance is valuable at both the project-level and the broader enabling environment. At the project-level, well structured technical assistance can concurrently build the capacity of the implementing company(ies) as well as the successful implementation of the project. Further, country, political, and regulatory risks also impede investment in the WASH sector. Technical assistance can be used to support systemic reforms, with the dual-benefit of increasing investment in the medium-term and transforming the sector over the long-term.

Strong potential to scale blended finance for the WASH sector by building on and increasing existing solutions. There are multiple existing WASH sector-specific blended finance solutions as well as multi-sector blended finance solutions that can be applied to the WASH sector. These solutions – or solutions that can be tweaked to address WASH – can be deployed to mobilize greater volumes of additional commercial financing for Goal 6 (*Clean Water & Sanitation*). Some of these models have been identified in earlier sections (e.g., national revolving funds). Development practitioners and investors interested in the WASH sector should consider scaling or replicating existing blended finance solutions rather than building new solutions with long lead times. Investment through these solutions can be deployed quickly: with 2030 looming on the horizon and a $150+ billion annual investment gap for Goal 6 (*Clean Water & Sanitation*), financing solutions are required as soon as practical.

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