



**GREEN
CLIMATE
FUND**

Meeting of the Board
21 – 24 October 2024
Songdo, Incheon, Republic of Korea
Provisional agenda item 10

GCF/B.40/02/Add.16/Rev.01

19 October 2024

Consideration of funding proposals – Addendum XVI

Funding proposal package for FP254

Summary

This addendum contains the following six parts:

- a) A funding proposal summary titled “GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility” by the International Finance Corporation;
- b) No-objection letter(s) issued by the national designated authority(ies) or focal point(s);
- c) Environmental and Social report(s) disclosure;
- d) Independent Technical Advisory Panel’s assessment;
- e) Response from the accredited entity to the independent Technical Advisory Panel’s assessment; and
- f) Gender documentation of the funding proposal.

These documents are presented as submitted by the accredited entity and the national designated authority(ies) or focal point(s), respectively. Pursuant to the Comprehensive Information Disclosure Policy of the Fund, the funding proposal titled “GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility” submitted by the International Finance Corporation is being circulated on a limited distribution basis only to Board Members and Alternate Board Members to ensure confidentiality of certain proprietary, legally privileged or commercially sensitive information of the entity.

Disclaimer:

The boundaries and names shown and the designations used including maps, references and citations in this Funding Proposal do not imply any official endorsement or acceptance by the Green Climate Fund

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Funding Proposal

Project/Programme title:	GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility Africa: Cote d'Ivoire, Egypt, Gabon, Morocco, Tunisia Asia: India, Indonesia, Pakistan, Uzbekistan LAC: Chile, Peru Europe: Azerbaijan
Country(ies):	
Accredited Entity:	International Finance Corporation (IFC)
Date of first submission:	[2024/03/21]
Date of current submission	[2024/09/26]
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Note to Accredited Entities on the use of the funding proposal template

- Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc.
- Accredited Entities should ensure that annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents.
- The total number of pages for the funding proposal (excluding annexes) **should not exceed 60**. Proposals exceeding the prescribed length will not be assessed within the usual service standard time.
- The recommended font is Arial, size 11.
- Under the [GCF Information Disclosure Policy](#), project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Accredited Entities are asked to fill out information on disclosure in section G.4.

Please submit the completed proposal to:

fundingproposal@gcfund.org

Please use the following name convention for the file name:

“FP-[Accredited Entity Short Name]-[Country/Region]-[YYYY/MM/DD]”

A. PROJECT/PROGRAMME SUMMARY			
A.1. Project or programme	Programme	A.2. Public or private sector	Private Public
A.3. Request for Proposals (RFP)	Not applicable		
A.4. Result area(s)	<p>Check the applicable GCF result area(s) that the <i>overall</i> proposed project/programme targets below. For each checked result area(s), indicate the estimated percentage of GCF and Co-financers' contribution devoted to it. The total of the percentages when summed should be 100% for GCF and Co-financers' contribution respectively.</p>		
		GCF contribution	Co-financers' contribution¹
	Mitigation total	Enter number %	Enter number %
	<input type="checkbox"/> Energy generation and access	Enter number %	Enter number %
	<input type="checkbox"/> Low-emission transport	Enter number %	Enter number %
	<input checked="" type="checkbox"/> Buildings, cities, industries and appliances	50 %	50 %
	<input type="checkbox"/> Forestry and land use	Enter number %	Enter number %
	Adaptation total	Enter number %	Enter number %
	<input checked="" type="checkbox"/> Most vulnerable people and communities	15 %	15 %
	<input checked="" type="checkbox"/> Health and well-being, and food and water security	20 %	20 %
<input checked="" type="checkbox"/> Infrastructure and built environment	15 %	15 %	
<input type="checkbox"/> Ecosystems and ecosystem services	Enter number %	Enter number %	
A.5. Expected mitigation outcome (Core indicator 1: GHG emissions reduced, avoided or removed / sequestered)	[~3.64million tons CO2e over the life of the facility (30 years) ~ 104,012 tons CO2e per year ²]	A.6. Expected adaptation outcome (Core indicator 2: direct and indirect beneficiaries reached)	[~17.7 million] direct beneficiaries over the life of the Facility. 26.5 million indirect beneficiaries.
A.7. Total financing (GCF + co-finance³)	1,262,000,000 USD	A.9. Project size	Large (Over USD 250 million)
A.8. Total GCF funding requested	<u>258,000,000</u> USD		

¹ Co-financer's contribution means the financial resources required, whether Public Finance or Private Finance, in addition to the GCF contribution (i.e. GCF financial resources requested by the Accredited Entity) to implement the project or programme described in the funding proposal.

² The total lifespan of the project/programme is defined as the maximum number of years over which the outcomes of the investment are expected to be effective. This is different from the project/programme implementation period.

³ Refer to the Policy of Co-financing of the GCF.

A.10. Financial instrument(s) requested for the GCF funding	<input checked="" type="checkbox"/> Grant <u>8,000,000</u> <input type="checkbox"/> Equity <u>Enter number</u> <input checked="" type="checkbox"/> Loan <u>250,000,000</u> <input type="checkbox"/> Results-based payment <u>Enter number</u> <input type="checkbox"/> Guarantee <u>Enter number</u>		
A.11. Implementation period	15 years	A.12. Total lifespan	30 years
A.13. Expected date of AE internal approval	<u>10/18/2024</u>	A.14. ESS category	A
A.15. Has this FP been submitted as a CN before?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	A.16. Has Readiness or PPF support been used to prepare this FP?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
A.17. Is this FP included in the entity work programme?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	A.18. Is this FP included in the country programme?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
A.19. Complementarity and coherence	<p><i>Does the project/programme complement other climate finance funding (e.g. GEF, AF, CIF, etc.)? If yes, please elaborate in section B.1.</i></p> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		

A.20. Executing Entity information

IFC will act as the Accredited Entity for the Program and as an Executing Entity for Component 1 (the PPP Structuring Facility), and for Activities 2.1 and 2.2 of Component 2 (Concessional Finance Facility), on the terms and subject to the conditions set out in the AMA and the FAA. In addition, the borrowers and/or Project sponsors selected by IFC in accordance with the AMA and the Sponsor Selection Criteria (as defined below) to implement individual Projects under Component 2, will be the Executing Entities for such Projects under one or more of Activities 2.3, 3.1, or 4.1 of Component 2.

Component 1

IFC will be the Executing Entity for Component 1 (PPP Structuring Facility). As the Executing Entity, IFC will be responsible for the overall management, implementation and supervision of all Activities under Component 1, being the advisory services for the PPP Structuring Facility in accordance with its own policies and procedures and the terms of the AMA and FAA, which will include providing the necessary governance, oversight and quality assurance at the program level to identify climate-resilient water PPP projects and provide technical support to the relevant government agencies in target countries for the development and implementation of such PPP projects. This support will encompass project identification, structuring, and transaction support, enhancing the capacity of recipient countries to develop and implement climate-resilient water infrastructure projects through PPP approaches. Pursuant to the terms of an advisory services agreement or other similar agreement between IFC and the relevant government agencies (the “**Advisory Services Agreements**” and each an “**Advisory Services Agreement**”), IFC shall act as an advisor and technical assistance provider to the relevant government agencies (as beneficiaries) for the implementation of the Activities under Component 1. For the avoidance of doubt, any PPP project undertaken by a government agency beneficiary, either directly or together with the private sector operators selected by them, shall be at the discretion of the relevant beneficiary and is outside the scope of the Funded Activity.

Component 2

As an Executing Entity for the implementation of Activities 2.1 and 2.2 of Component 2 (Concessional Finance Facility), IFC will be responsible, for the overall management, implementation and supervision of Activities 2.1 and 2.2 in accordance with its own policies and procedures and the terms of the AMA and FAA. In the implementation of Activities 2.1 and 2.2, IFC will provide the necessary governance, oversight and quality assurance at the Program level for the purpose of identifying, evaluating, approving and monitoring individual Projects for inclusion in the Concessional Finance Facility and structuring and executing the financing package for each Project, including concessional financing funded by GCF, all in accordance with IFC’s policies and procedures, the AMA and the terms and conditions set out in the FAA. IFC will use its operation systems and established processes to evaluate individual Projects and select the Project Borrowers (as defined below) and/or sponsors for such Projects to act as Executing Entities in respect of such Projects in accordance with the AMA and the Sponsor Selection Criteria (as defined below) for the Concessional Finance Facility as set out in the FAA. Once selected, such Project Borrowers and sponsors shall become the Executing Entities for the relevant Project and as such shall be responsible for the management or implementation of the relevant Project under one or more of Activities 2.3, 3.1, or 4.1 under Component 2, the Concessional Finance Facility. Once selected, IFC and the selected Executing Entities shall enter into one or more Subsidiary Agreements pursuant to which such Executing Entities shall be responsible for the management and implementation of the relevant Projects under Component 2, the Concessional Finance Facility. Subsequent to the engagement of the Executing Entity in respect of individual Projects to implement one or more of Activities 2.3, 3.1, or 4.1, IFC will continue to provide oversight and supervision at the Program level, as per its established policies and procedures, the FAA (and in accordance with its responsibilities as the Accredited Entity as set out in the AMA).

The Executing Entities in respect of individual Projects under one or more of Activities 2.3, 3.1, or 4.1 of Component 2 will be assessed and selected in accordance with the

AMA and pursuant to IFC's internal policies and procedures, which will include, inter alia, a review by IFC of the following selection criteria ("**Sponsor Selection Criteria**"):

- i. Ultimate beneficial shareholding of the Sponsors and Executing Entities being satisfactory to IFC and; respective entities not being on the list of World Bank Group debarred entities;
- ii. Capabilities of the management team of each Executing Entity evidencing the involvement of qualified technical personnel and/or advisers able to deliver the construction and/or operation of the proposed project according to best industry practices and in accordance with IFC Performance Standards; and Availability of the financial resources required to complete the financial plan as presented to IFC (including where relevant appropriate contingencies) and a financial model demonstrating sustainable margins, leverage and debt ratios.

A.21. Executive summary (max. 750 words, approximately 1.5 pages)

The global climate change crisis is inextricably linked to water with increased variability in the water cycle, reduced water resource availability, and increasing CO₂ emissions due to lack of and/or inadequate water and sanitation (W&S) infrastructure. More and better W&S infrastructure is urgently needed. However, several challenges need to be overcome, including improvements in policies and regulations, adequate project preparation, availability of long-term financing with appropriate risk appetite, and affordability.

The proposed Scaling Resilient Water Infrastructure facility (“RWI facility” or “facility”) is a programmatic intervention to leverage on the strengths of the World Bank Group (including International Finance Corporation, International Bank for Reconstruction and Development, and Multilateral Investment Guarantee Agency) to overcome the mentioned challenges. The RWI Facility has two components: (1) the PPP Structuring Facility that will fund project preparation, structuring and transaction advisory activities provided by IFC to national and subnational government beneficiaries, including expenses related to advising on early project identification and development activities; and (2) the Concessional Finance Facility that enables eligible projects under the Programme with concessional co-investments alongside IFC’s own account investments.

Support from GCF for the RWI Facility will help facility to close critical viability gaps, strengthen local capacities, bring more private sector projects to market, lower the cost of borrowing, and crowd in commercial investments. The proposed facility will also have strong demonstration effects, proving workable business models and PPP structures which will facilitate the mobilization of commercial investors in the water and sanitation sector.

The facility will address water scarcity and contribute to climate change adaptation and mitigation benefits in the target countries by developing more Resilient Water Infrastructure with advanced technologies and sustainable practices. Additionally, a key objective is to reduce GHG emissions linked to water and sanitation infrastructure.

The proposed solutions include: (i) conventional water resources (CWR), such as groundwater and surface water, which are commonly used but will not be sufficient to meet the growing demand in water scarce areas; (ii) adequate wastewater treatment (WWT), needed to avoid contamination of existing resources and mitigate GHG emissions; (iii) water reuse and desalination - Unconventional Water Resources (UWRs), which are expected to continuously grow; and (iv) non-revenue water reduction (NRWR) to minimize inefficiencies.

B. PROJECT/PROGRAMME INFORMATION

B.1. Climate context (max. 1000 words, approximately 2 pages)

Water and sanitation in the climate crisis

Exacerbated by climate change, the global water crisis is one of the world's most urgent multi-dimensional crises and is threatening the world's ability to meet the SDGs (Nature, 2023). Water scarcity could cost some regions up to 6% of their GDP, trigger both domestic and cross-border displacement magnifying the internally displaced populations and refugee crises, and spark conflict (WBG, 2016). One-tenth of the world's population already live in countries with high or critical water stress and by 2040, one in four children globally will live in areas with extreme water shortages (Khemka, Lopez, & Jensen, 2023; 2030 Water Resources Group, 2009).

Regional climate constraints and water sector vulnerabilities

Water deficits are expected to increase and lead to high water stress in the countries targeted by the RWI Facility: some target countries of the facility are expected to experience water stress on a national level while others face critical situations in specific highly populated areas, placing economic activities and living conditions at risk. Climate (observed events and future projections) and water vulnerabilities for each target countries are summarized in Annex 23 and the tables 1A, 1B and 2 below. In the target countries, climate change – coupled with population growth and increased water demand – is likely to result in heightened water supply vulnerability. While non-climate stressors such as inefficiencies in governance and suboptimal water infrastructure management (including water losses) do contribute to the challenge, it is mostly climate change-driven variability that underpins the expected water deficit.

Overview of Climate Hazards and Vulnerabilities⁴

1A) Adaptation Scenarios (Climate Hazard History and Projection)

Note: The information in this table is derived from the country vulnerability annexes, where it is fully referenced, unless the information was derived from internal sources and information at the IFC. It was last updated in July/August 2024.

Country	Climate Hazard(s) addressed by RWI	Hazard History	Hazard Projection
Azerbaijan	<ul style="list-style-type: none"> - Riverine flooding - Temperature increases. - Precipitation changes/drought 	<p>Flooding: Flooding is a regular issue in the country, denuding the land and damaging soil. It is estimated to cause the Azerbaijan economy a total damage of USD18-25 million each year. Flooding typically occurs in late spring and early summer in higher altitude areas of the country (above 1,500 m in altitude), whereas in lower areas, flooding may occur in spring or autumn. The parts of the country at greatest risk of floods are in the central and south-eastern regions, while some parts of the country, such as the south slope of the Greater Caucasus, experience mudflows caused by flooding.</p> <p>Temperature change: Azerbaijan experiences hot summers and moderate winters. Average temperatures ranged between approximately 24°C in the summer months of July and August, and -1°C to 1°C during the winter (December to February).</p>	<p>Flooding: Heavy rainfall days (5-day cumulative precipitation) are projected to increase across all future climate scenarios, ranging between 7.2% (RCP2.6) up to 11.6% (RCP8.5) by 2100, compared to the historical baseline, which will likely increase the frequency of floods. Heavy rainfall days are projected to increase between 3.7mm (RCP2.6) up to 5.4mm (RCP8.5) by 2100, which will likely impact the surface water quality, groundwater contamination, and water and sanitation infrastructures and service supply. Increased average temperatures in the coming decades are likely to accelerate the glacial melting process; if this proceeds in line with the projections of glacial mass in other countries, this melting will lead to an initial increase in the flow of related rivers, followed by a longer-term reduction in flow by the end of the 21st century.</p>

⁴ Please also see the country annexes under Annex 23 for a complete picture of risks and hazards per country.

		<p>Precipitation changes/drought: Azerbaijan received an annual average precipitation of 490.15 mm during 1991-2020 period. Average rainfall in Azerbaijan follows a bimodal distribution throughout the months of the year, with average levels above 40 millimeters (mm) per month from April to June, and again in October. Precipitation is highest in May and June in the northern and western areas of Azerbaijan, where it can exceed 100 mm per month in places. On the other hand, precipitation in Baku remains below 25 mm per month on average for much of the year (from January to September) and averages only 33 mm in the wettest months of October and November.</p> <p>For one of Azerbaijan’s major glacial areas, the Gusarchay Basin, glacial area has decreased by approximately 50% over the past century.</p>	<p>Heatwave: Under three of the four emissions pathways, Azerbaijan is projected to experience temperatures above 40°C on an annual basis by the 2090s. Temperatures in Azerbaijan are projected to rise by approximately 4.7°C by the 2090s under the RCP8.5 emissions pathway, and by 1.2°C in the RCP2.6 emissions pathway, from the 1986–2005 baseline. The projected increases in temperature in Azerbaijan are above the global average increases, especially in the more extreme emissions scenarios.</p> <p>Drought: At present, Azerbaijan faces an annual median probability of severe meteorological drought of around 2%. The projected rise in the probability of severe drought is especially pronounced in the higher emissions pathways, from an observed median of 2% per year from 1986–2005 to a forecast median probability of 73% or 85% by the end of the century for RCP6.0 and RCP8.5, respectively.</p>
<p>Chile</p>	<ul style="list-style-type: none"> - Drought - Floods Sea-Level Rise 	<p>Drought: Chile has suffered many instances of drought, including a drought between 2008-2015 that affected much of the southern and central areas. Heatwaves with the persistent drought conditions impacted Chile during November and December of 2022. It resulted in record-breaking wildfires and an increase of 214% and 256%, respectively, in the number of hotspots detected when compared to the 2001–2021 average.</p> <p>Melting Glaciers: Glaciers have been losing mass for the last two decades, at a rate of around -0.69 and -0.79 m w.e. per year (WMO, 2023). There is an impact on the water availability in those basins where glacier contribution is significant (typically, basins between the Aconcagua and Cachapoal rivers, and some basins in northern Chile; Bitrán & Rivera, n.d.). This effect becomes more pronounced during low-flow periods (summer-autumn), particularly in drought periods when precipitation input,</p>	<p>Precipitation changes/Glacial Melt: The Andean regions, especially between latitudes 30° and 40°, are anticipated to face the most significant impacts. Projections suggest a 34% increase in the likelihood of severe droughts by mid-century and a 63% increase by the end of the century. Some regions are expected to expand, while others may face increased scarcity. The areas south of Coquimbo are projected to see a 20%–25% decrease in precipitation by mid-century, whereas some southern regions may experience stable or slightly increased water availability, with minor decreases in spring and summer. The Chilean government estimates that precipitation in some regions could increase by 15%–25% by the 2050s.</p> <p>Sea-level rise (SLR): SLR is projected to increase between 0.44m (RCP4.5) up to 0.59m (RCP8.5) (CCKP).</p>

		including snowmelt, diminishes (CEPAL, 2009).	
Côte d'Ivoire	<ul style="list-style-type: none"> - Flooding, - Water scarcity - SLR 	<p>Floods: Floods effect on average 45000 people every year, about 0.2% of the country's total population. The affected people are geographically concentrated in the coastal provinces in both present and future climate conditions, but with a pattern that seems more severe in the eastern part in the present climate, and western coastal provinces most affected under future climate conditions.</p> <p>Drought: Currently, an annual average of 2.3 million people (10%) are potentially affected by droughts.</p> <p>SLR: Impacts of SLR are likely already present in recurrent extreme inundation events.</p>	<p>Floods: Floods effect on average 45000 people every year, about 0.2% of the country's total population. The affected people are geographically concentrated in the coastal provinces in both present and future climate conditions, but with a pattern that seems more severe in the eastern part in the present climate, and western coastal provinces most affected under future climate conditions.</p> <p>Drought: The number of people exposed to drought is expected to increase to 22% (6.6 million people exposed every year - if population growth is accounted for), with the east of the country experiencing the largest increase. The GDP potentially affected by droughts is expected to increase from almost 4 billion to more than 8 billion USD annually - excluding expected economic development. While currently, on average 11% of the GDP is exposed, this is expected to rise to 25%.</p> <p>SLR: the sea level off the coast of Côte d'Ivoire is projected to rise. Until 2050, similar sea levels are projected under both emissions scenarios. Under RCP6.0 and compared to year 2000 levels, the median climate model projects a sea level rise by 11 cm in 2030, 20 cm in 2050 and 39 cm in 2080.</p>
Egypt	<ul style="list-style-type: none"> - Drought - River & Urban Flooding, - Landslides - SLR 	<p>The most common natural disasters are floods and heavy rainfall events and droughts.</p> <p>Floods: In the past 20 years, natural hazards have claimed nearly 1,500 lives in Egypt and caused approximately \$346.7 million in economic damages. The impact of such hazards is expected to increase due to climate change.</p> <p>Precipitation changes: Over the past 30 years, Egypt has experienced a statistically significant reduction in annual total precipitation, amounting to approximately 22%. This decline has led to reduced water availability in certain areas and longer periods of drought and dry spells. The decrease in precipitation has been particularly</p>	<p>Drought: The occurrence of drought is projected to increase across all climate scenarios, with the SPEI index ranging between -1.38 (RCP4.5) up to -2.45 (RCP8.5) by 2100, compared to the historical baseline of 0 (IFC CRP13). By increasing surface water evaporation and reducing groundwater recharge rates, higher temperatures and decreased rainfall could predispose Egypt to more frequent and prolonged hot and dry episodes.</p> <p>Precipitation: Heavy rainfall days (5-day cumulative precipitation) is projected to increase across all future climate scenarios, ranging between 1% (RCP2.6) up to 43% (RCP8.5) by 2100, compared to the historical baseline (CCKP), which will</p>

		<p>notable during the winter and early spring months. Additionally, there has been an observed increase in the frequency and severity of flash flooding in recent years.</p> <p>Drought: Climate change impacts are already being felt in the highly arid country, with increasing water scarcity and drought conditions posing risks to food security and potentially exacerbating conflicts over scarce resources, settlements, and population movements.</p> <p>SLR: The Nile Delta is particularly vulnerable to sea level rise as the IPCC named the Delta one of the world's three "extreme" vulnerability hotspots for this issue. With most of Egypt's population and infrastructure concentrated in the Nile Delta and along the Mediterranean coast, the country is particularly vulnerable to the impacts of sea level rise, such as inundation and saltwater intrusion. Sea levels rose from 1.8 mm annually until 1992 to 3.2 mm annually after 2012 and are expected to rise 1-6 mm/year along the coastal zones.</p>	<p>likely increase the frequency of floods. Heavy rainfall days are projected to increase between 3.91mm (RCP2.6) up to 5.55mm (RCP8.5) by 2100 (CCKP), which will likely impact the surface water quality, groundwater contamination, and water and sanitation infrastructures and service supply.</p> <p>Floods: Egypt is likely to face a slight increase in the frequency and severity of extreme rainfall events with a potential increase in the intensity of up to 14%. This will likely exacerbate mudslides, landslides and erosion (particularly in mountainous areas).</p> <p>Sea-level rise (SLR): SLR is projected to increase between 0.39m (RCP4.5) up to 0.57m (RCP8.5) (CCKP). Egypt ranks fifth in the world in terms of future SLR's potential economic impact on urban areas, with damage costs under a medium SLR scenario (RCP4.5 SSP2) of 1% of GDP annually by 2030.</p>
<p>Gabon</p>	<ul style="list-style-type: none"> - River & Urban Flooding, - Landslides, - Drought - SLR 	<p>Flooding: Gabon faces significant risks from hydrometeorological hazards and natural disasters, which predominantly impact the agricultural, water, energy, and oil and mining sectors through seasonal flooding, changing precipitation patterns, extreme winds, and landslides. Temperatures are already increasing, and more extreme weather events are anticipated in Gabon's near to medium-term future. Flooding—coastal, urban, and riverine—is a major hazard for Gabon, with life-threatening river floods likely to occur at least once in the next decade.</p> <p>Drought: Mean annual rainfall over Gabon has been observed to have decreased at an average rate of 3.8 mm per month, per decade since 1960 to date. These trends have been observed to be most acute in January and February and during the March, April, May rainfall season, declining at 5% per decade since 1960. Approximately 21,000 people are annually exposed by drought in Gabon, with the possibility of up to</p>	<p>Precipitation: Rainfall in Gabon is highly variable both seasonally and geographically, with projections differing across regions. Despite the inconsistencies, models predict an overall increase in rainfall across all emission scenarios through the 2090s. Coastal lowlands are expected to be particularly vulnerable to these changes, exacerbated by the anticipated rise in sea levels for the region. While annual mean precipitation is generally expected to increase, the magnitude and intensity of heavy rain events are also likely to rise.</p> <p>Drought: The occurrence of drought is projected to increase across all climate scenarios, with the SPEI index ranging between 0.20 (RCP4.5) up to 0.27 (RCP8.5) by 2100, compared to the historical baseline of 0 (IFC CRP14). Gabon is projected to experience similar dry conditions as present day. However, western areas of the country are projected to increase in aridity. Reduced precipitation and increasing heat trends for much of the country's agricultural areas are</p>

		<p>\$185 million USD impacted each year due to drought (WB 2021). SLR: Estimates suggest that the coastal shore erosion has experienced 100 to 250 m shoreline erosion since 1950, most specifically seen along Cap-Lopez to the north of Port-Gentil. Mangrove systems have disappeared at a rate of 50 hectares per year between 1960 and 1990. The annual average sea level change from 1993 to 2015 ranged approximately from 0mm to 70mm.</p>	<p>also expected to be impacted by increasing number of consecutive dry day. SLR: SLR is projected to increase between 0.56m (RCP4.5) up to 0.76m (RCP8.5) (CCKP).</p>
<p>India</p>	<ul style="list-style-type: none"> - River & Coast Flooding, - Water Scarcity, - Extreme Heat, - Landslide, - Cyclone, - SLR 	<p>Reduced precipitation and drought: Although there is inter-annual variability, the total precipitation during the Indian summer monsoon has remained largely stable over the period 1901–2020 and has shown a weak decreasing trend during the recent few decades. Based on the rainfall data from the India Meteorological Department (IMD) Observational Network, it is found that some states, including Meghalaya, Nagaland, West Bengal and Uttar Pradesh, have shown significant decreasing trends in Southwest monsoon rainfall during 1989–2018. There has been a shift in the recent period toward more frequent dry spells (27% higher during 1981–2011 relative to 1951–1980) and more intense wet spells during the summer monsoon season. Localized heavy precipitation: The frequency of localized heavy precipitation occurrences has increased worldwide in response to increased atmospheric moisture content. Over central India, the frequency of daily precipitation extremes with rainfall intensities exceeding 150 mm per day increased by about 75% during 1950–2015. SLR: Sea-level rise in the North Indian Ocean (NIO) occurred at a rate of 1.06–1.75 mm per year during 1874–2004 and has accelerated to 3.3 mm per year in the last two and a half decades (1993–2017), which is comparable to the current rate of global mean sea-level rise. At the end of the twenty-first century, the steric sea level in the NIO is projected to rise by approximately</p>	<p>SLR: At the end of the twenty-first century, the steric sea level in the NIO is projected to rise by approximately 300 mm relative to the average over 1986–2005 under the RCP4.5 scenario, with the corresponding projection for the global mean rise being approximately 180 mm. Drought: In South Asia there will be an increase in the frequency of drought events, with what is currently a 1 in 100-year event returning approximately every 40 to 50 years under 1.5°C–2°C of warming, and every 20 years under 3°C of warming. Flooding: even under lower emissions pathways consistent with the Paris Climate Agreement, almost all Asian countries face an increase in the frequency of extreme river flows.⁴² What would historically have been a 1 in 100-year flow, will become a 1 in 50-year or 1 in 25-year event in most of South, Southeast, and East Asia. by the 2030s is expected to increase the annually affected population by 9.3 million people, and impact GDP by \$62 billion, under the RCP8.5 emissions pathway</p>

		<p>300 mm relative to the average over 1986–2005 under the RCP4.5 scenario, with the corresponding projection for the global mean rise being approximately 180 mm.</p>	
<p>Indonesia</p>	<ul style="list-style-type: none"> - Precipitation changes/Drought/Flooding, - Landslide - EWEs, SLR 	<p>Decreased rainfall: USAID’s climate risk profile for Indonesia describes a decreased average annual precipitation of 3% during 1901–2013, but a 12% increase between 1985 and 2015. The greatest decreases in rainfall have occurred during the dry season, while the greatest increases in rainfall have occurred in the north of the country.</p> <p>Drought: Two primary types of droughts may affect Indonesia, meteorological (usually associated with a precipitation deficit) and hydrological (usually associated with a deficit in surface and subsurface water flow, potentially originating in the region’s wider river basins). At present, Indonesia faces an annual median probability of severe meteorological drought of around 4%, as defined by a Standardized Precipitation Evaporation Index (SPEI) of less than -2.</p> <p>Flooding: As of 2010, assuming protection for up to a 1 in 25-year event, the population annually affected by flooding in Indonesia is estimated at 1.5 million people and expected annual urban damage is estimated at \$1.4 billion</p>	<p>Flood: there is high uncertainty around climate change impacts on increased river flood risk but estimated that climate change could amplify coastal flood risk by 19–37% by 2030 (measured by Expected Annual Damage).²¹ Indonesia has one of the largest global populations inhabiting low elevation coastal zones, ranked 5th in the world with around 18% of its population inhabiting such areas. Population growth and development trends could increase the absolute size of this population to around 62 million people by 2030.</p> <p>Drought: the annual probability of experiencing a year with a severe drought by the 2090s roughly doubles from 4% to 9% under RCP2.6 and RCP8.5 emissions pathways, respectively. At a national scale, there exists few studies on climate change impacts on water stress and drought in Indonesia. However, droughts are expected to increase in frequency and intensity given the association of accentuated drought with El Niño events, which are expected to increase in frequency and intensity through warmer global temperatures.</p> <p>SLR: Indonesia is particularly exposed to sea-level rise, with the country ranked fifth highest in terms of population inhabiting the lower elevation coastal zone. The total population likely to be exposed to permanent flooding by the 2070s through the end of the century is high, at 4,215,690 without adaptation. It is estimated that by the 2030s approximately 5.5 million to 8 million people could reside in a 100-year floodplain (an area exposed to 1 in 100-year coastal floods resulting from storm surges), growing to 9.5 million to 14 million people by the 2060s. These estimates assume a modest sea-level rise of 10</p>

			centimeters (cm) by 2030 and 21 cm by 2060
<p>Morocco</p>	<ul style="list-style-type: none"> - River & Coastal Flooding, - Precipitation changes, - Landslides, - Extreme Heat, - SLR 	<p>Water Scarcity: Morocco is among the most water-stressed countries in the world. The country's total water resources are estimated at 22 billion m³ divided into 18 billion m³ of surface water (on average for the available historical series), and 4 billion m³ of groundwater. Since the late 1970s, Morocco has seen its water inflows (from surface water) declining. These declining inflows, combined with a growing demand pushed by demographic growth and economic development has pushed Morocco into a situation of water stress: between 1960 and 2020 the per capita availability of renewable water resources has decreased from 2,560 m³ to about 620 m³ per person per year, placing Morocco in what is considered a situation of structural water stress.</p> <p>Flooding: Floods are the most frequent climate-related natural hazard in Morocco. Due to its geographic position, high level of variability in rainfall, and topography, Morocco is particularly prone to floods. Indeed, 20 major events have been registered between 2000 and 2021, causing average direct losses estimated at USD 450 million per year.</p> <p>SLR Coastal erosion from sea level rise is already become a critical issue in Saidia (due to its low altitude and sandy beaches) and Tangier, where erosion is already estimated to be 2 m–3 m per year. Additional low-lying coastal lands at risk from flooding due to sea level rise include the Nador Lagoon, the Moulouya River and its delta (a biologically important estuary), and the low-lying coastal plains of Oued Nekor and Oued Laou.</p>	<p>Water scarcity & drought: Water scarcity and drought conditions are expected to increase risks of food insecurity and may exacerbate conflict situations over scarce resources and population movements. In Morocco, droughts are recurrent and becoming more frequent and, perhaps, more severe. Rising temperatures are expected to reduce stream flows and overall water availability; water shortages (particularly in the south) are likely as early as 2020. The reductions in mountain snowpack will result in a shift in seasonal water availability and an increased likelihood of flooding in October and November, but with less water availability the rest of the year. More erratic precipitation and increased drought conditions can expect more rapid springtime melt and thus reduce supplies of seasonal snowmelt for lowland areas. This is likely to result in increased demand for irrigation as well as the acceleration of siltation of dams due to heavy rainfall and riverbank erosion. Finally, an increased frequency of intense rainfall events is expected to lead to an increased resilience on groundwater resources and risks of overexploitation leading to insufficient recharge.</p> <p>Heatwaves: Heat waves will increase in their severity, frequency, and duration. Furthermore, the number of hot days (T_{max} > 35°C) is projected to increase most significantly in July, where up to an additional 11.4 hot days can be expected within the month under the worst-case scenario by the end of the century. The projected days with a heat index (a combination of temperature and relative humidity levels) > 35°C are also projected to increase, most notably in July and August, Morocco's warmest season.</p> <p>Precipitation: Precipitation trends in Morocco are highly variable, however the projections indicate significant reduction in average annual rainfall across the country from 10%–20% to as much as 30% decrease for the Saharan region.²⁶</p>

			<p>In Morocco, water resources are projected to decline due to increased arid periods and drought conditions. Additionally, projections indicate that winter precipitation will be reduced as warming increases.</p> <p>SLR: Morocco is projected to experience a sea level rise of 0.4-0.7 m by 2100 depending on climate scenario. Given that the country's urban coastal zones are home to 70.2% of the population and 90% of industrial activities, sea level rise may become a direct threat to the economy and infrastructure. It could cause permanent inundation of the lowest lying coastlines in Morocco, while increasing the risks of coastal erosion. Of the total length of Morocco's east Mediterranean coastline, 22% would be at very high risk and 42% at high risk by 2030.</p>
<p>Pakistan</p>	<ul style="list-style-type: none"> - Coastal, River & Urban Flooding, - Tropical Cyclones - Drought - Temperature increases - SLR 	<p>Drought: Pakistan regularly faces higher frequency and intensity of extreme climate events coupled with irregular monsoon rains causing frequent floods and droughts. The early 20th century was characterized by a prolonged decline in annual rainfall, and mean rainfall in the arid plains of Pakistan and the coastal belt has decreased by 10%–15% since 1960.</p> <p>Flood: Pakistan is extremely sensitive to flooding. In 2010 the Indus River flooded in late July and August, affecting 20 million people, and killing at least 2,000. Every year since 2010, Pakistan has experienced at least one flood event (of varying severity). However, due to changing glacial, river, and monsoon regimes, the exact patterns of flooding and their changes are difficult to predict.</p>	<p>Temperature: Mean annual temperatures in Pakistan are projected to increase by 1.5°C to 1.7 °C by the 2050s and could rise by as much as 3.2°C by the end of the century. On a sub-national level, warming is also strongly biased towards the more southerly regions, with Punjab and Balochistan all experiencing winter warming in the region of 0.91°C–1.12°C over the same period, and Khyber Pakhtunkhwa in the north experiencing only 0.52°C. By the 2060s, hot days in Pakistan are projected to increase by 13–61% annually.</p> <p>Drought: While the annual median probability for severe meteorological drought in Pakistan is 3%, some projections indicate this likelihood could rise to 25-65% depending on the scenario. 100-year drought happen every 50 years with 1.5C warming and 20 years with 3C.</p> <p>Flooding: Heavy rainfall days (5-day cumulative precipitation) is projected to increase across all climate scenarios, ranging between 14% (RCP2.6) up to 40% (RCP8.5) by 2100 compared to the historical baseline (CCKP), which will likely increase the frequency of floods. By 2030, flooding is expected to increase the annually affected population by 1.5 million people, and the impact on GDP by \$5.8 billion</p>

			<p>under the RCP8.5 emissions pathway.</p> <p>Melting Glaciers: Decrease in the glacier volume and snow cover leading to alterations in the seasonal flow pattern of Indus River System. Pakistan has some of the longest and largest mid-latitude glaciers, which extend approximately 15,000 sq. km. They are melting more quickly than before; the Siachen glacier has lost 17% of its ice since 1989. Some glaciers may be growing due to increase in rain locally, but the overall pattern trends towards the loss of ice.</p> <p>Sea-level rise (SLR): Pakistan's coastline holds considerable vulnerability to sea-level rise and its associated impacts. The largest area of vulnerability due to SLR is the Indus Delta, around 4,750 km² of which sits below 2 m, and it is estimated that around one million people live in the delta. Saline intrusion continues to be a major challenge in the coastal zone, degrading land quality and agricultural yields. The coastal areas in Pakistan are prone to cyclones and tsunamis.</p>
<p>Peru</p>	<ul style="list-style-type: none"> - EWEs - Flooding, - Landslides, - Water Scarcity, - Wildfire 	<p>Temperature changes: Since the 1960s, average temperatures have increased by 1°C, and increases of 2°C –3°C in average maximum temperatures and 4°C –6°C in average minimum temperatures are projected by 2065. Warming will occur more rapidly along the Costa and in the southeastern Sierra.</p> <p>Precipitation: Rainfall is expected to increase along the Costa, but projected changes in rainfall in the Sierra and the Selva vary, with some models suggesting increases and others decreases.</p> <p>Drought: A greater recurrence of dry spells and droughts have been experienced in the central and southern Sierra and Selva.</p> <p>EWEs: The number of intense rainstorms, mudflows, and forest fires has more than doubled in the past 10 years and floods have increased by 60 percent since the 1970s. The frequency and intensity of natural disasters such as floods and droughts are projected to increase with climate change.</p>	<p>Temperature increases: Under SSP1-1.9, SSP2-4.5 and SSP5-8.5, the annual mean temperature is projected to increase across all scenarios. Under SSP5-4.5, a median projection of 1.03°C in 2050 is projected and the upward trend of temperature is expected towards the end of the century. Under the optimistic scenario (SSP2-2.6), the projected median increase in mean temperature is 1°C, with a potential maximum increase of 1.7°C according to the 90th percentile projections.</p> <p>Precipitation changes: Precipitation levels will continue to increase as the century progresses under higher global emission scenarios (SSP3-7 and SSP5-8.5). Overall, Peru is likely to face a slight increase in the frequency and variability of rainfall events with a potential increase in the intensity.</p> <p>Landslides: This will likely exacerbate mudslides, landslides and erosion (particularly in mountainous areas). Whereas potential decreases might</p>

			exacerbate likelihood of water shortage.
Tunisia	<ul style="list-style-type: none"> - Drought - Extreme heat - SLR 	<p>Water scarcity: The World Resources Institute's aqueduct water risk measuring and mapping project ranks Tunisia as the twentieth-highest country in the world in terms of water stress. Owing to a continuing decline in rainfall, the country experienced a three-year drought from 2017 to 2020. Between September 2022 and March 2023, Tunisia saw only around 110 million cubic meters of rainfall, compared to an annual average of 520 million cubic meters prior to the drought. In 2023, Tunisia's share of water per capita has fallen to 400 cubic meters per year, far below the 1,000 cubic meters per year that the United Nations considers water poverty.</p> <p>SLR: Tunisian coasts are at high risk from sea level rise (SLR), coastal erosion and storm surges and a significant retreat of the coastline is expected by the end of the century. More than 3,000 ha of urban areas are considered vulnerable and threatened by submersion due to SLR</p>	<p>Reduced Rainfall: At a national scale, Tunisia is projected to experience significantly heightened dry conditions and significant drought severity, which will likely increase pressure on water resources for the country and region by mid-century and by end of the century. Across all RCPs, until the end of the century SPEI are expected to drop to - 2 (RCP2.6) to - 3.5 (RCP8.5). This means that the entire country will be under significant water stress, most acutely occurring in the central and northwestern areas in the 2050s and 2090s, respectively.</p> <p>Water scarcity: Tunisia is predicted to lose 75% of its total coastal water resources by 2050 because of a combination of increasing demand for water, overexploitation of groundwater, declining water stocks, and degradation of water quality in coastal aquifers. The United Nations predicts that while demand for drinking water in Tunisia could increase by 38% by 2100, Tunisia's renewable water resources will decrease between 31 and 61% by 2100 due to climate change.</p>
Uzbekistan	<ul style="list-style-type: none"> - Flood, - water scarcity, - landslide 	<p>Drought Uzbekistan's arid climate and regular high temperatures make drought an increasingly regular occurrence, with one drought every five years on average during the 1980s and 1990s and four episodes between 2000 and 2012.¹⁵ Three kinds of drought occur in the country: hydrological drought (water shortages from January to March due to low precipitation in the upper watershed of key rivers), meteorological drought (usually associated with a precipitation deficit, and typically occurring in spring or summer), and agricultural drought (a lack of moisture in the soil that inhibits crop growth).</p> <p>Flooding: The majority of Uzbekistan is at high risk of both river flooding and flash flooding. The most severe recent flood in terms of loss of life occurred in 1998 on the Aksu</p>	<p>Drought: the annual probability of experiencing a severe meteorological drought in Uzbekistan could increase significantly by the 2090s, under all but the lowest emissions pathway. Projections indicate that severe meteorological drought could occur in 58% of all years by the 2090s under RCP4.5, whereas under RCP8.5, severe drought is projected to occur in 87% of all years. While there is some variation regionally within Uzbekistan, risks generally increase westward. Under RCP8.5, by the 2090s, parts of the western Republic of Karakalpakstan are projected to experience severe drought in 95% of years, whereas the equivalent probability in the east is 78% for Tashkent and below 67% for parts of the Ferghana valley. Increased temperatures and more rapid melting of glaciers elsewhere in the region may lead to severe water</p>

		<p>and Shahimardan rivers, killing 109 people Water resources: As of 2014, 80% of Uzbekistan’s water supply came from resources originating outside its borders. Uzbekistan shares the major rivers of Central Asia (Amu, Darya, Syr Darya, and Zaravshan) with its neighbors; less than 10% of Uzbekistan’s water resources originates in the country. This makes the country vulnerable to increased upstream river regulation from other countries. In the absence of careful international coordination, the pressure on Uzbekistan’s water resources may increase as climate change leads to a reduction in river runoff in the long-term</p>	<p>shortages along Uzbekistan’s most important rivers, the Amu Darya and Syr Darya, by the 2040s and 2050s Precipitation: Precipitation levels will continue to increase as the century progresses under higher global emission scenarios (SSP3-7 and SSP5-8.5). Under the optimistic scenario SSP1-1.9 and SSP1-2.6, precipitation is projected to remain relatively consistent with current levels. Overall, the Uzbekistan is likely to face a slight increase in the frequency and severity of extreme rainfall events with a potential increase in the intensity of up to 14%. This will likely exacerbate mudslides, landslides and erosion (particularly in mountainous areas).</p>
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1B) Adaptation Scenarios (Hazard Impacts, Adaptive Capacity to Climate Change Impact on Water and Anticipated Adaptation Solution from the RWI)

Country	Impacts	Current adaptive capacity to climate change impact on water	Anticipated adaptation solution from the RWI
Azerbaijan	<p>Flooding: The parts of the country at greatest risk of floods are in the central and south-eastern regions, while some parts of the country, such as the south slope of the Greater Caucasus, experience mudflows caused by flooding.</p> <p>Temperature change: Azerbaijan’s Climate Risk Country Profile (2021) states that increases in temperature in the country could reduce agricultural productivity, exacerbate issues of desertification and soil salinity, and increased demand for irrigation, putting further pressure on the country’s water supply.</p> <p>Drought: Models project that by 2100, streamflow will fall by 26%–35% in the Alazani basin, and by 59%–72% in the Aghstev basin. Given that water demand is likely to increase with higher temperatures and population growth, they project water shortfalls in the summer months in the Alazani basin. Water shortages are likely to</p>	<p>The country is impacted by climate change and the traditional solutions are at risk. Azerbaijan’s goal is to increase water supply coverage, improving their infrastructure, while also facing increasing water scarcity. Climate change impacts, pollution, and mismanagement further exacerbate the situation. Specific adaptive solutions include (highlighted solutions are those supported by RWI):</p> <ul style="list-style-type: none"> - Assessment of Water Resources and Infrastructures - Diversification of Water Resources - Water Recycling and Reuse - Awareness and Community Engagement - Technological Solutions and Early Warning Systems - International Collaboration and Investment <p>The implementation of these solutions is hindered by capacity and financing gaps.</p>	<p>Based on the climate context of the country, the potential solutions to improve adaptation would include those set out as a focus below. The initial implementation plan will include conventional solution, but wastewater reuse is a solution which will be put forward.</p> <p>The benefits will therefore be related to mitigation with the reduction of GHG due to poor wastewater collection and treatment, but, above all, they will be related to adaptation through securing a sustainable source of fresh water.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input checked="" type="checkbox"/> Wastewater treatment <input type="checkbox"/> Desalination <input checked="" type="checkbox"/> Water reuse <input type="checkbox"/> Non-Revenue Water

	coincide with an increased need for irrigation (due to higher temperatures and changes in length of growing season).		
Chile	<p>Precipitation changes/Glacial Melt: Precipitation patterns, land use, wind, glacial and snowmelt, and other climatic conditions impact river systems, affecting irrigation for agriculture, water for human consumption, and hydroelectric generation. Climate change is expected to alter water availability and seasonality, as well as temperatures, which could affect snowmelt and accumulation in the Andes. Water access, storage, and management options will vary depending on whether precipitation occurs frequently or with long dry periods between rainfall. Overall, annual mean precipitation is expected to decrease through the end of the century. This will likely impact hydroelectric plant reservoirs, which have already seen decreased energy generation due to increased aridity and drought conditions. Under these conditions, it is highly likely that fossil fuels will replace a significant share of hydroelectric generation, leading to increased emissions and electricity prices.</p> <p>Sea-Level Rise: This may impact the water quality due to saturation and salinization of the basins that flow into the coast.</p>	<p>Regulatory Framework: Chile has implemented government reforms that allowed private operators to enter the water sector, leading to increased efficiency, investment, and improved water quality. The regulatory framework promotes transparency and incentivizes the private sector to operate in a sustainable manner.</p> <p>Private Sector Involvement: The private sector, represented by companies like Veolia and Aguas Andinas, has played a crucial role in promoting water resilience and implementing innovative solutions. Their expertise, access to technology, and sustainability credentials contribute to the development of cost-effective and efficient water management practices.</p> <p>Infrastructure Development: Investments in infrastructure, such as reservoirs, pipelines, and treatment plants, have enhanced the resilience of the water sector. These developments help mitigate the impacts of hazards like droughts and turbidity events, ensuring a reliable water supply.</p> <p>Water Treatment and Reuse: Chile has achieved 100 percent treatment of urban wastewater, which is an important step towards sustainability. There is also potential for further enhancing economic resilience by transforming wastewater into a productive resource. The private sector has been involved in promoting water reuse and implementing projects for the efficient use of water resources.</p>	<p>Based on the climate context of the country, the potential solutions to improve adaptation would include those set out as focus below.</p> <p>The benefits will be related to adaptation through securing new sources of fresh water and supporting the private sector in delivering the much needed investment to ensure continued resilience of the water sector in Chile.</p> <p>Addressing the very high levels of NRW (33%) is a key challenge in Chile.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input type="checkbox"/> Wastewater treatment <input checked="" type="checkbox"/> Desalination <input type="checkbox"/> Water reuse <input checked="" type="checkbox"/> Non-Revenue Water
Côte d'Ivoire	Drought: Currently, an annual average of 2.3 million people (10%) is potentially affected by droughts. In the future, this number is expected to increase	To provide a lasting solution to the problem of access to drinking water in Côte d'Ivoire and with a view to making drinking water accessible to all	The percentage of population benefiting from safely managed water supply services and sanitation services is known to be low. The country is not

	<p>to 22% (6.6 million people exposed every year - if population growth is accounted for), with the east of the country experiencing the largest increase. The GDP potentially affected by droughts is expected to increase from almost 4 billion to more than 8 billion USD annually - excluding expected economic development. While currently, on average 11% of the GDP is exposed, this is expected to rise to 25%.</p> <p>Flooding: Coastal areas show the largest direct economic loss. The pattern changes under future climate conditions, where a marked increase in risk can be detected in the district of Bas-Sassandra. The value of direct economic losses in terms in the present climate amounts to about 77 million USD, which accounts for 0.15% of the total stock value. The housing, service and agricultural sectors dominate the total direct economic loss.</p> <p>SLR: Threatens Côte d'Ivoire's coastal communities and may cause saline intrusion in coastal waterways and groundwater reservoirs, rendering water unusable for domestic use and harming biodiversity</p>	<p>and at a lower cost, the Ivorian Government has set up the 'Water for All' program. This commitment is materialized by the significant investments made in the drinking water sector from 2019 to 2021. Over this period, around 500 billion CFA francs have been invested through around 30 projects set up in rural and urban areas. This major investment, supported by sectoral reforms, in particular the creation of a sector dedicated to drinking water, has led to considerable achievements in terms of human hydraulic infrastructure and access to drinking water in Côte d'Ivoire</p>	<p>directly impacted by a lack of water resources, but its management requires urgent action. The focus will be to increase the coverage of conventional water supply systems as well as wastewater collection and treatment facilities.</p> <p>Mitigation benefits from reducing GHG emissions from poorly collected and treated wastewater, as well as reducing NRW.</p> <p>Due to population growth and lack of an effective management of wastewater, water scarcity is increasing in urban area and the impact of climate change makes the situation critical. The adaptation benefits come from the protection of surface and groundwater resources. The quality of water in this area is affected by bacteriological and chemical contamination.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input checked="" type="checkbox"/> Wastewater treatment <input type="checkbox"/> Desalination <input type="checkbox"/> Water reuse <input checked="" type="checkbox"/> Non-Revenue Water
<p>Egypt</p>	<p>Drought: Climate change projections indicate decreased precipitation and altered seasonal rainfall patterns, which are likely to diminish hydropower potential and result in revenue losses. Moreover, increased evaporation rates from existing water storage facilities will escalate shortages. Disaster risks from rising temperatures are expected to worsen existing tensions over water resources between agricultural, livestock, and human needs, particularly during periods of high aridity and drought. The quality of water from both surface and groundwater sources is also likely to be affected. Water</p>	<p>To build resilience in the water sector, the Egyptian government has carried out various efforts to secure new water resources, preserve limited water reserves, and improve water management. In this vein, Egypt adopted an Integrated Water Resources Management (IWRM) that promotes several strategies to enhance and monitor water management and available water resources. Finally, flooding hazards have also proven to be effectively mitigated by Egypt's flash flood warning system, established as a part of the Flash Flood Manager project, known as FlaFloM, in 2007–2009.</p>	<p>The country is suffering from severe water scarcity. There is an acute need for enhanced water supply services and addition of unconventional water sources in the mix such as desalination and/or wastewater reuse. The limited availability of surface water makes it paramount to collect and treat wastewater to protect these resources.</p> <p>Mitigation benefits from reducing GHG emissions from poorly collected and treated wastewater, as well as reducing NRW.</p>

	<p>scarcity and shifting rainfall patterns are anticipated to significantly impact the agricultural sector. Increased temperatures and deteriorating agricultural conditions will reduce 'working days,' adversely affecting the livelihoods and economic resilience of vulnerable groups.</p> <p>Floods: Flood risks are associated with the repercussions of increasing sea levels and inundation in coastal regions. For example, Alexandria has 45% of its population residing in areas situated below sea level, facing a significant risk of flooding (Al-Mailam et al, 2023). Additionally, flash flood events in the Red Sea area, occurring once every several years (5-10), have been attributed to variations in atmospheric pressures originating from cooler regions in Europe and warmer regions in Asia.</p> <p>SLR: Saline intrusion into water infrastructure and groundwater is a risk from continued SLR.</p>	<p>Significant project outputs include successfully forecasting flash floods up to forty-eight hours prior and implementing an atlas for flash floods covering the Sinai Peninsula.</p> <p>The Egyptian Government is always keen on the use of flash floods water for the recharge of groundwater aquifers and storage for the beneficial use of humans and animals (EEAA, 2016). Coastal protection measures are being instituted to defend vulnerable regions, especially the Nile Delta.</p>	<p>Adaptation benefits are linked to the generation of alternative and sustainable source of fresh water (desal + water reuse) to adapt to the increasing water scarcity due to climate change.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input checked="" type="checkbox"/> Wastewater treatment <input checked="" type="checkbox"/> Desalination <input checked="" type="checkbox"/> Water reuse <input checked="" type="checkbox"/> Non-Revenue Water
<p>Gabon</p>	<p>Flooding: the threat for salinization and coastal flooding remains high. Gabon's vulnerability related to the primary impact of increased rainfall may have in some areas, leading to increased river volumes, erosion, loss of soil and its unique biodiversity. Additionally, physical infrastructure and habitats remains at risk, and flooding can damage sanitation infrastructure and lead to the spread of fecal waste through flood water. The regions more significantly affected by floods are concentrated in the central part of the country along the Ogooué river.</p> <p>Water availability: Increased rainfall may lead to erosion in some areas, and changing soil quality and moisture levels could alter the balance of microorganisms. Diminished surface water runoff may also affect groundwater levels,</p>	<p>Gabon has implemented "Gabon Bleu," a Presidential marine conservation initiative aimed at sustainable management of its coastal and oceanic waters. This initiative includes establishing a comprehensive network of marine protected areas covering 26% of Gabon's EEZ, enhancing marine and coastal resource management for long-term sustainability.</p> <p>PPPs: The water sector in Gabon involves a collaborative effort between the public and private sectors, with a focus on improving water infrastructure and service delivery through public-private partnerships (PPPs). The Gabonese government plays a crucial role in setting policies, regulations, and strategic plans for the water sector, including initiatives like the Strategic Plan for Emerging Gabon: Vision 2025. Government ministries oversee</p>	<p>The percentage of population benefiting from safely managed water supply services and sanitation services is known to be low. The country is not directly impacted by a lack of water resources, but its management requires urgent action. The focus will be to increase the coverage of conventional water supply systems as well as wastewater collection and treatment facilities.</p> <p>Mitigation benefits from reducing GHG emissions from poorly collected and treated wastewater, as well as reducing NRW.</p> <p>Due to population growth and lack of an effective management of wastewater, water scarcity is increasing in urban area and the impact of climate change makes the</p>

	<p>impacting drinking water supplies and water availability for irrigation.</p> <p>SLR: Gabon is at risk from sea-level rise, which could lead to coastal area flooding and adversely affect coastal cities and oil extraction operations. Most of the population and infrastructure is located along the coast and Gabon's coastal zone includes the Estuaire, Ogooué Maritime and Nyanga. Expected sea level rise, storm surge and heavy storms are expected to put coastal zone communities, infrastructure, and economies at high risk.</p>	<p>and implement water sector projects, while also exploring and structuring PPP contracts with support from organizations like the African Legal Support Facility. 30</p> <p>The private sector contributes through concession contracts, such as the one held by the Société d'Energie et d'Eau du Gabon (SEEG) for water and electricity distribution. Private companies bring technical expertise, investment, and operational efficiency to water infrastructure projects and participate in bidding processes for contracts. Gabon is actively exploring PPP models to enhance service delivery and infrastructure development in the water sector, with ongoing efforts to structure contracts and build capacity for designing, negotiating, and monitoring these partnerships.</p>	<p>situation critical. The adaptation benefits come from the protection of surface and groundwater resources. The quality of water in this area is affected by bacteriological and chemical contamination.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input checked="" type="checkbox"/> Wastewater treatment <input type="checkbox"/> Desalination <input type="checkbox"/> Water reuse <input checked="" type="checkbox"/> Non-Revenue Water
<p>India</p>	<p>The unreliability of precipitation, dynamics of social vulnerability, and proliferation of chronically water scarce regions mean that an estimated 180 million people are already living in chronic (year-round) and severe water scarcity at any given time in India. Glacier loss and increases in precipitation extremes have the potential to exacerbate this issue.</p> <p>The irrigation sector accounts for 83% of India's national fresh water consumption. Changes in key climate variables, namely, temperature, precipitation, and humidity, may have significant long-term implications for the quality and quantity of water for agricultural use.</p> <p>The projected reduction in the frequency and regularity of wet days, and a decline in dry season runoff, will likely put additional strain on India's agricultural systems and any adverse impact on water availability would threaten food security and the viability and health of ecological assets.</p>	<p>Several initiatives and policy developments have been undertaken for efficient water resource governance in the period post-2010. A multipronged approach that looks at water as a key resource, recognises the need for a sustainable approach in the long run. The framework was laid down as the National Water Mission (2011) which looks at sustainable water use, enhancing water use efficiency, and increasing the availability of water. The mission emphasises water conservation, rainwater harvesting, and improving water use efficiency across sectors.</p>	<p>Based on the climate context of the country, the potential solutions to improve adaptation would include those set out as a focus below. the areas the programme will be focusing on are suffering from high water scarcity due to increasing demand and the impacts of climate change. Therefore, while implementation of water supply projects is not excluded (like NRW reduction), the main focus of the programme will be on developing sewerage and wastewater treatment facilities.</p> <p>This will bring both adaptation and mitigation benefits, by reducing the quantity of GHG emitted, but also protecting the exiting source of fresh water (surface water), and in the case of water reuse, adding a new sustainable source of fresh water to the mix.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Sewerage

	The fundamental shift is expected to also affect groundwater supplies, which are already stressed in the northwest and southern areas.		<input checked="" type="checkbox"/> Wastewater treatment <input checked="" type="checkbox"/> Water reuse <input checked="" type="checkbox"/> Non-Revenue Water <input checked="" type="checkbox"/> Desalination
Indonesia	<p>Climate modelling points to increased water scarcity in Indonesia over the next decades. Indonesia reported in its Second National Communication to the UNFCCC (2010) that 14% of its 453 districts record no months of surplus water. By 2025, this is projected as increase to 20% by 2025, and by 31% by 2050. A study modelling future seasonal rainfall variability in Nusa Tenggara Barat province found significant implications for the water sector. Crop water demand estimates suggest projected changes will impact the rice growing period between November and March and that there will likely be insufficient water for the second growing period, March to June, when chilies and tobacco are grown. In additional to water scarcity, saltwater intrusion is an issue facing Indonesia's water resources. This is currently experienced along Indonesia's coastline and is exacerbated by factors including land subsidence, sea level rise and groundwater exploitation. Sea level rise driven by climate change will likely result in greater saltwater intrusion over the next century.</p>	<p>As outlined in the National Medium-Term Development Plan 2020–2024 (RPJMN), Indonesia's targets to achieve by 2024, include:</p> <ul style="list-style-type: none"> • 90% of households live in housing with access to proper sanitation, including 15% of households with access to safe sanitation. • 100% of households live in housing with access to proper drinking water, including 15% of households with access to safe drinking water. • 30% of households with access to piped water. • 0% of households that still practice open defecation. • Restore 4 critical watersheds, by reducing erosion in critical watershed areas by greening 150,000 ha of land. <p>By 2030, the government of Indonesia aims to provide access to piped water supply for the entire population. Sustainable sanitation services are promoted through the Program for the Acceleration of Housing Sanitation Development (PPSP), which focuses on (1) Increasing institutional capacity in sanitation management services; (2) Increasing commitment of regional governments; (3) Development of settlement sanitation infrastructure and services; (4) Increasing changes in community behaviour; and (5) Development of cooperation and funding patterns</p>	<p>The focus of the programme will mainly be to increase the water supply and sanitation coverage ratios in a context of increasing water scarcity. Both conventional and unconventional solutions will be considered. The country is heavily impacted by climate change, and the unsustainable use of groundwater puts at risk an already fragile system (saline water intrusion, subsidence, etc...)</p> <p>The benefits will therefore be related to mitigation with the reduction of GHG due to poor wastewater collection and treatment, but, above all, they will be related to adaptation through securing a sustainable source of fresh water, and adapting to the effect on climate change, which are more acute on an insular context.</p> <p>Focus:</p> <input checked="" type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input checked="" type="checkbox"/> Wastewater treatment <input checked="" type="checkbox"/> Desalination <input type="checkbox"/> Water reuse <input checked="" type="checkbox"/> Non-Revenue Water
Morocco	Overall: Tourism and other industries along the coast continue to be a development	To meet the needs of its population and avoid failures that may worsen in the coming	Morocco is suffering from water scarcity. There is a need for enhanced water supply services

	<p>priority for the country and are likely affected by climate impacts.</p> <p>SLR: If sea levels rise 0.86 m by 2100, Tangier Bay is projected to lose 99.9% of its port infrastructure and 63% of the city's industrial zone. These climate risks are worrisome as the Moroccan coast continues to draw people from the drought-ridden interior. Rising sea levels are expected to exacerbate flooding risk of low-lying coastal zones, which will also result in the lost habitat and spawning grounds for coastal animals and marine life.</p> <p>Agriculture: Decreased water availability will continue to impact irrigation potential and in turn, reduce profitability of irrigated agriculture as alternatives require the pumping of groundwater, negatively affecting water tables and overall availability. Morocco's theoretical water allocation is 5.3 billion m³ per year, however, the average of water actually allocated over the last 11 years was 3.1 billion m³/year (58% of satisfaction).</p>	<p>decades, Morocco has implemented its National Water Strategy to improve water resource demand management and efficiency by irrigation programs, both across agriculture, industrial and touristic water saving scales. Morocco is in the process of constructing 60 large dams which would mobilize 1.7 billion m³ per year and support the more efficient transfer from the northern basins to the south. The increased preservation and protection of water resources and natural habitats can support biodiversity and conservation for key water resources.</p>	<p>and addition of unconventional water sources in the mix such as desalination and/or wastewater reuse. The limited availability of surface water makes it important to collect and treat wastewater to protect these resources.</p> <p>Mitigation benefits from reducing GHG emissions from poorly collected and treated wastewater, as well as reducing NRW.</p> <p>Adaptation benefits are linked to the generation of alternative and sustainable source of fresh water (desal + water reuse) to adapt to the increasing water scarcity due to climate change.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input checked="" type="checkbox"/> Wastewater treatment <input checked="" type="checkbox"/> Desalination <input checked="" type="checkbox"/> Water reuse <input checked="" type="checkbox"/> Non-Revenue Water
<p>Pakistan</p>	<p>Agriculture: Pakistan's crops are highly sensitive to changes in temperature and water availability. The impact of extreme climate events on the agricultural sector in Pakistan can be very significant, raising concerns regarding any increase in their frequency attributed to climate change. Floods inundate fertile land, kill livestock, destroy standing crops, and reduce or eliminate yields.</p> <p>Water: Pakistan faces high water stress, so the country needs to protect water sources, reduce non-revenue water, and improve wastewater treatments. The objectives at the national level are to increase water supply coverage, improve water governance, and ensure access to safe water. The impact of climate change is very acute,</p>	<p>Pakistan's deteriorating water resources situation requires Integrated Water Resources Management (IWRM).⁴⁴ In this respect, the country has made considerable progress in recent years, including through the adoption of the National Water Policy, which resulted in a paradigm shift in water resources planning, development, and management practices in the country. Additionally, public participation in water resources planning, policy and management during the last 5 years has increased substantially, and awareness has been generated among Pakistan's vulnerable groups on IWRM. Specifically, vulnerable groups actively participate in disaster related interventions</p>	<p>Pakistan faces high water stress, so the country needs to protect water sources, reduce non-revenue water, and improve wastewater treatments. The objectives at the national level are to increase water supply coverage, improve water governance, and ensure access to safe water. The impact of climate change is very acute, and the water scarcity level require immediate action. The programme will therefore mainly focus on protect the existing sources and securing new sustainable sources of fresh water. This will be done through reduction of NRW, develop more efficient water supply systems and increasing the collection and wastewater treatment rates. The use of</p>

	<p>and the water scarcity level require immediate action. Water demand is projected to increase by almost 60 percent, with the highest rates of increase coming from the domestic and industrial sectors. This heightened demand will result in unintended consequences that deprive downstream areas of water rights. The competition among sectors will necessitate inter-sectoral trade-offs that will likely be made at the expense of water for agriculture. It is projected that, in the next three decades, about 10 percent of all irrigation water will need to be repurposed to meet non-agricultural demand.</p> <p>Flood: An increase in the number of people affected by flooding is projected, with a likely increase of around 5 million people exposed to extreme river floods by 2035–2044, and a potential increase of around 1 million annually exposed to coastal flooding by 2070–2100</p>	<p>and are actively taking part in consultations regarding small dam activities.</p>	<p>wastewater reuse will also be part of the overall implementation plan, but, unlike Egypt, limited opportunities for desalination exist. Despite important mitigation benefits, the focus will mainly be to increase water resilience in increasingly water scarce areas and therefore contribute to the adaptation goals.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input checked="" type="checkbox"/> Wastewater treatment <input type="checkbox"/> Desalination <input type="checkbox"/> Water reuse <input checked="" type="checkbox"/> Non-Revenue Water
<p>Peru</p>	<p>INFRASTRUCTURE Peru's infrastructure is highly vulnerable to climate variability. Floods and resulting mudslides weaken transportation infrastructure (only 13 percent of roads are paved) and can devastate the urban poor population's housing</p> <p>Health By 2070 approximately 25 million people are projected to be at risk of malaria. Greater frequency of severe storms and floods increases the likelihood of the spread of cholera and other diseases caused by poor sanitation.</p> <p>Glacial melt: when rising temperatures accelerate glacial retreat, too much water is released during the rainy season (causing flooding) and not enough during the dry season (limiting water</p>	<p>Peru's strong economic development has helped improve access to water and sanitation services. Access to at least improved water sources increased from 86.1 percent to 90.8 percent from 2013 to 2019, countrywide.</p> <p>Wastewater treatment has improved over the last few years. The fraction of wastewater collected by public drainage networks that was treated prior to being discharged into waterbodies or used for irrigation increased from 46.2 percent in 2013 to 77.5 percent in 2020, mainly thanks to the construction and operation of two large new wastewater treatment plants to serve the southern districts of Lima and Callao</p>	<p>Based on the climate context of the country, the potential solutions to improve adaptation would include those set out as focus below.</p> <p>The benefits will be related to adaptation through securing new sources of fresh water, and supporting the water sector in delivering the much needed investment to ensure continued resilience of the water sector in Peru.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input checked="" type="checkbox"/> Wastewater treatment <input type="checkbox"/> Desalination <input checked="" type="checkbox"/> Water reuse <input checked="" type="checkbox"/> Non-Revenue Water

	availability for irrigation and consumption).		
Tunisia	<p>SLR: Tunisia is also expected to experience loss through the submersion of approximately 16,000 ha of agricultural land in low-lying coastal areas and approximately 700,000 ha of built-up areas. Salinization is expected to impact up to 50% of resources available in coastal aquifers, with the potential to indirectly jeopardize the sustainability of 38,000 ha of irrigable land by the 2050s (10% of currently irrigated land). The country's burgeoning tourism industry is expected to see a decline in activity due to retreating beaches, with losses estimated at USD 2 billion, approximately 0.5% of annual GDP</p> <p>Agriculture: increased temperature, sea level rise, and decreased precipitation will also exacerbate existing water resources challenges as currently the agriculture sector in Tunisia utilizes approximately 80% of all water resources. Floods and droughts are expected to occur more frequently in coastal, desert, and urban areas, which may result in crop losses and food insecurity</p>	<p>Tunisia has made notable progress in improving water supply, sanitation and water-related health services, significant imbalances and lack of access remain high, especially across different geographies and between urban and rural populations. In fact, the increasing deployment of non-conventional water resources and the need to pump water across large distances and vertical gradients make the Tunisian water system very energy-intensive</p>	<p>Tunisia faces high water stress, so the country needs to protect water sources, reduce non-revenue water, and improve wastewater treatments. The objectives at the national level are to increase water availability, improve water governance, and ensure access to safe water. The impact of climate change is very acute, and the water scarcity levels require immediate action. The programme will therefore mainly focus on protect the existing sources and securing new sustainable sources of fresh water. This will be done through reduction of NRW, develop more efficient water supply systems and increasing the collection and wastewater treatment rates. The use of wastewater reuse will also be part of the overall implementation plan, and opportunities for desalination exist. Despite important mitigation benefits, the focus will mainly be to increase water resilience in increasingly water scarce areas and therefore contribute to the adaptation goals.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input checked="" type="checkbox"/> Wastewater treatment <input checked="" type="checkbox"/> Desalination <input checked="" type="checkbox"/> Water reuse <input checked="" type="checkbox"/> Non-Revenue Water
Uzbekistan	<p>Water resources: temperature rises of between 2.2°C and 3.1°C by the 2050s in mountainous areas of Tajikistan could lead to a loss in glacial mass of 36%–45%, relative to present levels. This causes only a slight reduction in river flow by the 2050s, as the smaller glacial mass and increased</p>	<p>The Uzsvtaminot Joint Stock Company (UJSC), established in 2019, is a government-owned entity responsible for improving and expanding water supply and sanitation (WSS) services throughout the country, serving 22.2 million people through its 17 regional WSS utilities</p>	<p>Based on the climate context of the country, the potential solutions to improve adaptation would include those set out as a focus below</p> <p>The programme will mainly focus on protecting the existing sources and securing new</p>

	<p>evapotranspiration are partly offset by a faster glacial melt rate. In Uzbekistan, the mountain headwaters of the Syr Darya Basin are primarily located in the western Tien Shan and Alai mountains, while glacial ablation contributes to runoff in the Basin, snow melt and summer precipitation are also a factor.</p> <p>Temperature changes. The model ensemble projects that under RCP8.5, the number of tropical nights (with a minimum temperature of at least 20°C) could increase significantly in Uzbekistan by the 2090s, rising to approximately double the baseline level. This will increase water demand in all sectors</p>	<p>(suvtaminots). The regional suvtaminots, however, face challenges as they strive to evolve into modern, performance-driven utilities grappling with persistent issues such as excessive non-revenue water (NRW) and energy costs, high staff turnover rate, and a lack of smart water management systems and technologies essential for efficient asset and operational management</p>	<p>sustainable sources of fresh water. This will be done through reduction of NRW, develop more efficient water supply systems and increasing the collection and wastewater treatment rates. Despite important mitigation benefits, the focus will mainly be to increase water resilience in increasingly water scarce areas and therefore contribute to the adaptation goals.</p> <p>Focus:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Conventional water supply <input checked="" type="checkbox"/> Sewerage <input checked="" type="checkbox"/> Wastewater treatment <input checked="" type="checkbox"/> Non-Revenue Water
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2) GHG Emission Scenarios

Note: The information in this table is derived from country-level information in Climate Action Tracker, and a review of the target countries' Nationally Determined Contributions, last updated in July/August 2024.

Country	GHG emission scenario from the water sector
Azerbaijan	<p>Azerbaijan, with a focus on its sustainable socio-economic development, seeks to reduce their greenhouse gas emissions by 40% compared to 1990 by 2050. The total volume of greenhouse gas emissions in 2016 is assumed to be 61 Mio tCO₂eq. The key emitting sector in Azerbaijan, as of 2016, is the energy sector comprising 78.6% of total greenhouse gas emissions from the country. To address this, key mitigation measures in this sector involve a heavy focus on renewable energy projects including flexible regulation of alternative energy tariffs, strengthen scientific and technical skills, training of specialists, raising awareness of renewable energy amongst consumers and involving the private sector in the process. Furthermore, Azerbaijan takes a focus on both heat supply and transport under the energy use sector. For heat supply, the installation of modern boilers and heating network systems must meet energy saving and environmental requirement. While for transport, there is a turn of focus to electric motors and alternative modes of transport, such as shuttle buses and cycling designated paths. Notably, agriculture, land use change and forestry contribute to 14.17% of total greenhouse gas emissions in 2016, thus being the second largest emitting sector. Adaptation measures have been developed including improving livestock management and introducing climate-smart agricultural technologies but are most likely successful when coupled with the prior mentioned mitigation plans in the energy sector, such as the use of renewable energy sources.</p>
Chile	<p>In 2016 Chile's share of global greenhouse gas emissions was approximately 0.25%. In that same year, CO₂ emissions per person in Chile was 4.4 tCO₂, which is significantly below the OECD average of 9.2 tCO₂ a year. Despite this, Chile's emissions have still increased by 114.7% since 1990 and 20% since 2007. Furthermore, Chile's emissions increased by 115% from 50 MtCO₂e to 107 MtCO₂e, excluding LULUCF. The energy sector comprised of 78% of total emissions in 2016 due to the use of mineral coal for electricity generation and diesel for transportation. The land use, land-use change, and forestry sector are the sole absorbing GHG sector in the country. Chile have been the potential to be the frontrunners in climate action globally since their emissions are declining to a level that they could potentially meet its NDC target 95 MtCO₂e by 2030. Chile was the first Latin American country to outline its long-term climate strategy to the UNFCCC at COP26 in Glasgow focussing on</p>

	<p>a reduction on emissions. This includes ensuring the supply of 80% of the energy mix should be comprised of renewables in 2030 and 65% in 2050. Furthermore, they aim to reduce emissions from industry and mining by 70% and transport by 40% by 2050. Tangible action includes the shutdown of coal-fired power plants to phase coal out completely by 2030, with more than 1 GW of coal capacity already being shut down.</p>
Côte d'Ivoire	<p>In 2021, Côte d'Ivoire emitted 52.47 million tonnes of CO₂ equivalent representing 0.11% of global emissions. Land-Use Change and Forestry accounted for 48% of the country's emissions and the energy sector accounted for 27%. In 2022, Côte d'Ivoire submitted its revised NDC for the period 2021-2030, in which it raised its climate ambition to 30.41% corresponding to a reduction of 37 million tonnes of CO₂ equivalent in GHG emissions by all sectors, including Forestry and other Land Uses, by 2030 compared to the new reference scenario. The country pledges to reduce its national GHG emissions by 10.5% by 2030 (compared to the reference scenario) through the implementation of measures in the energy, waste, and agriculture sectors, and an additional 19.6%, resulting from the implementation of measures in the Forestry and other Land Uses sector. Côte d'Ivoire could further increase its ambition in terms of mitigation, provided it receives additional financial support from the international community. The mitigation component of the NDC includes 38 measures (27 unconditional and 11 conditional), and implementation is estimated at approximately 10 billion USD</p>
Egypt	<p>Egypt holds a 0.73% share of global emissions, with their baseline greenhouse gas emissions being 87,694 Gg CO₂e in 2015 and their mitigation target being 80,520 Gg CO₂e by 2030. Egypt is Africa's second largest fossil fuel producer, thus their focus on expanding their production and exporter has been prioritised over investments in renewable energy. Key mitigation plans in this field include the modernisation of the oil and gas sector such as by adopting energy efficiency and low carbon technologies in both upstream and downstream activities. It must be noted that though Egypt is taking steps towards investing in large-scale investment projects, however these are marginally smaller than investments in the fossil fuel sector. Further, the transport sector is a highly emitting sector with road transport being the largest GHG contributor in the transport sector. In Egypt's NDC, the outline plans to rehabilitate existing tram lines and metro networks, with a mitigation target being 8,960 Gg CO₂e. The industry sector in Egypt is pledged to be decarbonised, reducing the energy intensity, encouraging use of renewable fuels and low carbon improvements. These sectors are mostly under Egypt's mitigation plans however water resources and irrigation is a key adaptation measure in the country's climate action plan. Their adaptation policy plans to address the volatility of water flows in the River Nile due to water shortages because of climate change or flash flooding. This includes water conservation measures in agriculture, industry and municipal supplies with a focus of rehabilitation of irrigation canals.</p>
Gabon	<p>Gabon's per capita CO₂ emissions from fossil fuels and industry was 2.4 tonnes per person, compared to the world's per capita consumption being 4.7 tonnes. Gabon is specifically struggling with forest degradation in their country, with the LULUCF sector specifically being ignored when it comes to climate action, mitigation and data even though forests cover 88% of Gabon. Of the LULUCF emissions, 87% are attributable to forest degradation. Therefore, the LULUCF sectors have significant influence in Gabon's emissions profile. If Gabon continues business as usual, 92% of Gabon's projected emissions in 2025 will originate from LULUCF emissions. Forest degradation is a net source of emissions for Gabon and is the largest sole contributor to the country's emissions, accounting for 81% of emissions of all sectors. This has therefore become a key focus in mitigation action, such as through the adoption of the Warsaw framework for REDD+ at COP19, providing guidance on methodology, measurement, reporting and verification of emissions from REDD+ initiatives. Notably, the sole focus on the LULUCF sector in mitigation plans can potentially overshadow industry emissions, with newer focuses being on hydroelectricity.</p>
India	<p>India is the third largest greenhouse gas polluter in the world, following the United States and China. Despite this, India has the lowest per capita emissions in the G20, with 1.9tCO₂ per person, which is an eighth of what the average American emits per year. India now emits 4 billion metric tons of CO₂ equivalent per year. A primary reason for the rising emissions has been the increasing use of coal-fired electricity generation, where this polluting fuel accounts for three-quarters of India's power supply making up 32% of total GHG emissions (excluding LULUCF) being the largest emitter in India.</p>

	<p>Following this, agricultural sector accounts for 22.37% of total emissions and manufacturing accounts for 19.65% of total emissions. The key mitigation plans are to reduce emissions intensity of its GDP by 45% by 2030 and to achieve 50% cumulative electric power installed capacity from non-fossil fuel-based energy resource by 2030, with help from technology transfer and low-cost international finance. Furthermore, India pledges to create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030.</p>
Indonesia	<p>Indonesia's greenhouse gas emissions were 1.453 GtCO₂eq in 2021, representing an increase of 0.452 GtCO₂eq since 2000 emissions. The main contributing factors are peat fires, contributing to 50.13% of total emissions, and energy, making up 34.49% of total emissions according to the third biennial report. In the forestry sector, Indonesia has set an ambitious target by 2030 to restore 2 million ha of peat lands and rehabilitate 12 million ha worth of degraded lands. REDD+ implementation plays a key role in supporting the achievement of Indonesia's emission reduction target in forestry sector. In the energy sector, Indonesia is embarking on a mixed energy use policy where they are developing cleaner energy sources, allowing them to be on the path of decarbonisation. Some of their ambition targets include a) new and renewable energy at least 23% in 2025 and at least 31% in 2050; b) oil should be less than 25% in 2025 and less than 20% in 2050; c) coal should be minimum 30% in 2025 and minimum 25% in 2050; and d) gas should be minimum 22% in 2025 and minimum 24% in 2050.</p>
Morocco	<p>Morocco's baseline GHG emissions in 2010 was 51 MtCO₂eq, with a predicted risk to 139 MtCO₂eq in 2040. In 2023, 69.1 million metric tons of CO₂ was emitted in Morocco due to oil, gas and coal consumption. In 2022, the world per capita CO₂ emissions from fossil fuels and industry were 4.7 tones, with Morocco's per capita consumption being 1.8 tones. Based on the NDC, Morocco aims to reduce its greenhouse gas emissions by 45.5%. according to the new NDC, there are mitigation targets set for two new large industrial subsectors: cement and phosphates. This is particularly important as 75% of the world's phosphate reserves is hosted in Morocco. A key mitigation strategy is carbon capture and storage, reducing carbon intensity in the cement industry. Successfully, Morocco have committed to halt the development of new coalfired power plants at COP26, ramping up decarbonisation efforts in key sectors and the release of the National Energy Efficiency Strategy aiming to reduce energy consumption in key sectors in the Moroccan economy.</p>
Pakistan	<p>Pakistan's emissions (excluding land use) have increased by 140% between 1990 and 2017. Increases have been evident in all sectors, but most notably in the energy and agriculture sector. In Pakistan, the largest driver of overall GHG emissions are CO₂ emissions from fossil fuel combustion. The industrial sector is the largest contributor to this, constituting 32% of energy related CO₂ emissions, followed by transport and electricity at 28% and 27% respectively. Fossil fuels make up approximately 60% of Pakistan's energy mix. The NDC outlines high priority climate actions to ultimately reduce future GHG emissions through mitigation. In the energy sector, there is a pledge to shift to renewable energy where by 2030, 60% of all energy produced in the country should be generated from a renewable source, such as hydropower shifting away from coal power plants. In the transportation sector, there is a target that by 2030, 30% of all new vehicles sold in Pakistan should be electric. In the land-use change and forestry sector, there are continued investment in afforestation programmes.</p>
Peru	<p>Peru's emissions, excluding LULUCF, have almost doubled since 1990 (being 54MtCO₂e) to 102 MtCO₂e. In 2021 the world's per capita CO₂ emissions from fossil fuels and industry was 4.7 tons, whilst Peru's was 1.7 tons. In the same year, Peru accounted for 0.15% of global CO₂ emissions. Transport accounts for 46% of total energy related CO₂ emissions and electricity and heat producers 23%. Peru has built on the National Strategy on Climate Change by trying to prioritise renewable energy generation. With political turmoil and instability, climate action has been slow and often sidelined. As a result, new contracts for oil extraction have been approved as well as the spilling of oil barrels in the Pacific Ocean on the coastline. The LULUCF sector is the biggest source of emissions, with 2021 reporting the highest deforestation rate despite the signing of the Glasgow Leaders' Declaration on Forests and Land Use at COP26, but evidently failing to take meaningful action. The current NDCs are rated insufficient.</p>

<p>Tunisia</p>	<p>Tunisia’s emissions in 2022 amounted to 35.58 million tonnes of CO2. The vast majority of CO2 emissions in the energy sector come from the burning of fossil fuels such as coal, oil and natural gas for power generation or to fuel vehicles and machines. Industrial processes account for 14% of emissions, agriculture for 10% and the waste sector accounts for 7% off all emissions. Tunisia submitted its updated NDC in 2021. The updated NDC has an emissions reduction target of 45% by 2030 as compared to a 2010 baseline. The updated NDC covers the energy, industrial processes and product use, agriculture, forestry and land use, waste, water, ecosystems, coastal zones, health, and tourism sectors. The overall cost of NDC implementation is estimated at USD 19.3 billion for 2021-2030 including 14.3 billion US dollars for mitigation, 4.3 billion US dollars for adaptation, and 0.7 billion US dollars for capacity building actions. Tunisia is committed to achieving carbon neutrality by 2050 as reflected in the Long-term Low Emission Development Strategy (LT LEDS) submitted to the UNFCCC in 2022.</p>
<p>Uzbekistan</p>	<p>Uzbekistan’s economy is the second most emitting in the region with a CO2, Intensity of GDP roughly 77% higher than the global average. The Uzbek energy sector contributes to roughly 83%, 116.1 MT of CO2, of its total GHG emissions, where the residential and industrial sectors account for over 70% of total GHG emissions. Electricity & heat generation contribute to almost 40% of GHG emissions. The Republic of Uzbekistan seeks to strengthen measures and actions to combat climate change in order to reduce by 2030 specific greenhouse gas emissions per unit of GDP by 10% from the level of 2010. Uzbekistan plans to increase the share of RES to at least 25% of the country’s electricity supply by 2030. Consequently, the Uzbek government plans to expand renewable electricity generation capacity to 15 GW by installing 12 GW of variable renewable energy, 7.0 GW solar and 5.0 GW wind, and 1.5 GW of hydropower by 2030.</p>

BARRIERS

While target countries of the facility each have their own climate goals underpinned by technical and financing needs, they all face the following barriers in implementing climate smart water sector projects:

- a) Financial barriers: Access to capital for infrastructure investments, particularly from commercial and private investments is challenging due to high initial capital costs and long payback periods of infrastructure investments compared to other sectors; lack of credit worthy municipalities arising from tariffs below cost recovery and inadequate transfers from central government; lack of bankable PPP structures; underdeveloped local capital markets; affordability issues of the citizens; and insufficient expertise to tap to green finance and capital markets.
- b) Institutional and capacity barriers: Political economy constraints around tariffs; institutional reform and short-term political focus; and limited capacity at the utility level on designing, constructing and operating climate smart water infrastructure.
- c) Policy and strategy-related barriers: lack of systematic and comprehensive approach to address climate change in water services, and inadequate policies and regulations to incentivize climate investments, especially when it comes to scalable PPP models for water projects.

COMPLEMENTARITY

The RWI Facility directly addresses these barriers through:

- a) The Facility provides concessional financing and innovative financial instruments to bridge the viability gap for climate-resilient water projects. It also supports the development of bankable PPP structures and helps mobilize private sector investment.
- b) The Facility offers technical assistance and capacity building programs to strengthen the ability of water utilities and government agencies to design, implement, and operate climate-smart water infrastructure. It also supports institutional reforms necessary for sustainable water management.
- c) The Facility supports the creation of enabling environments for climate investments in water infrastructure, with a focus on scalable PPP models.

The table below illustrates the varying degrees of water stress and wastewater management challenges across the target countries, highlighting the urgent need for climate-resilient interventions:

COUNTRY/ Subregion	Source: WRI Aqueduct Risk Assessment and respective metrics		
	Water Stress level ⁵ – Baseline ⁶	Water Stress level – Business-as-usual scenario 2050 ⁵	Untreated -connected Wastewater ⁷ / Resulting GHG Risk Level
EGYPT	Extremely High (>80%)	Extremely High (>80%)	20-40% / Medium - High
Alexandria	Extremely High (>80%)	Extremely High (>80%)	
GABON	Low (<10%)	Low (<10%)	>80% / Extremely High
Port-Gentil	Low (<10%)	Low (<10%)	
COTE D'IVOIRE	Low (<10%)	Low (<10%)	>80% / Extremely High
Abidjan	Low (<10%)	Low (<10%)	
MOROCCO	High (40-80%)	Extremely High (>80%)	20-40% / Medium - High
Casablanca	Extremely High (>80%)	Extremely High (>80%)	
TUNISIA	Extremely High (>80%)	Extremely High (>80%)	20-40% / Medium - High
Tunis	Extremely High (>80%)	Extremely High (>80%)	
INDIA	Extremely High (>80%)	Extremely High (>80%)	>80% / Extremely High
Pune	Extremely High (>80%)	Extremely High (>80%)	
INDONESIA	Medium - High (20-40%)	Medium - High (20-40%)	>80% / Extremely High
Java	High (40-80%)	High (40-80%)	
PAKISTAN	High (40-80%)	High (40-80%)	40-80% / High
Karachi	Extremely High (>80%)	Extremely High (>80%)	
UZBEKISTAN	High (40-80%)	High (40-80%)	>80% / Extremely High
Samarkand	Extremely High (>80%)	Extremely High (>80%)	
CHILE	Extremely High (>80%)	Extremely High (>80%)	20-40% / Medium - High
Valparaiso	Extremely High (>80%)	Extremely High (>80%)	
PERU	High (40-80%)	High (40-80%)	20-40% / Medium - High
Lima	Extremely High (>80%)	Extremely High (>80%)	
AZERBAIJAN	Medium - High (20-40%)	Medium - High (20-40%)	40-80% / High
Baku	Extremely High (>80%)	Extremely High (>80%)	

Mitigation and Adaptation Benefits

In line with best practice, it is important to prioritize projects that deliver both mitigation and adaptation benefits:

Mitigation:

- Reduction of greenhouse gas emissions from water and wastewater operations.
- Enhancement of energy efficiency in water infrastructure.
- Promotion of renewable energy use in water sector projects.

⁵ Water stress measures the ratio of total water demand to available renewable surface and groundwater supplies.

⁶ Baseline scenario represents a 40-year period (1979– 2019).

⁷ This indicator measures the percentage of domestic wastewater that is connected through a sewerage system but not treated to at least a primary treatment level. Untreated wastewater fosters anaerobic conditions, leading to methane production during organic decomposition. Decentralized systems, such as septic tanks or latrines, are not considered here due to the difficulty to gather precise and representative data, but do also represent an important opportunity for development and climate impact mitigation.

Adaptation:

- Improvement of water supply reliability under various climate scenarios.
- Enhancement of infrastructure resilience to climate-induced extreme events.
- Strengthening of adaptive capacity in water resource management.

RWI Facility's Strategic Positioning

The RWI Facility is strategically positioned to address these climate-induced water sector vulnerabilities through a comprehensive, climate-centric approach:

Climate Risk Assessment and Project Eligibility:

All projects considered for RWI Facility support are expected to demonstrate clear links to addressing climate vulnerabilities. The facility will employ a robust climate risk assessment methodology, including:

- a) **Demonstrated climate vulnerability:** Addressing water sector vulnerabilities directly linked to observed or projected climate change impacts.
- b) **Alignment with national climate strategies:** Aligning with the country's Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs).
- c) **Quantifiable climate resilience benefits:** Demonstrate potential for measurable improvements in climate resilience, such as increased water availability under drought conditions or reduced flood risk.
- d) **Mitigation co-benefits:** Where applicable, contribute to GHG emission reductions, particularly in wastewater treatment and water supply operations.

Further, the following are additional measures that are taking into account:

- Use of multiple climate scenarios to evaluate project resilience.
- Assessment of both near-term and long-term climate projections.
- Integration of climate projections with models to assess impacts on water resources.

Eligibility criteria are set out in the term sheet.

RWI Facility Investment Solutions

For detailed country analysis on hazards and proposed solutions for each country, please refer to annex 23 and country annexes. Although certain solutions may be the focus in some of the target countries, all the solutions will be accessible to all target countries.

1. Conventional water supply:

- **Bulk water supply and storage:** This type of infrastructure allows for better management of an increasingly scarce resource in case of droughts or extreme temperature events. The eligible project will have undergone an assessment to confirm the sustainability of the operation over time. The key aspect is to avoid overexploitation and secure conservation of the resource for all usage. The storage facilities, by nature, provide a buffer against the impact of climate change and give more flexibility to a water system to recover and prevent negative effects in the short or medium term. The facility will contemplate all sorts of bulk water supply options (groundwater, surface water, unconventional water) to build the ground for reaching SDG 6. The RWI facility will also impose constraints on the developer to increase best practices in terms of management of the resources, in close collaboration with the Environmental and Social teams.

- **Water treatment and treated water distribution facilities:** The considered climate hazard can have an impact on the quality and availability of the treated water. The RWI Facility will have as its main objective to guarantee the safety of the water supplied to the customer and its availability in moments of need. In case of floods, the quality of the raw water can be affected (due to uncontrolled runoffs mainly). The RWI facility will allow the development of more modern and more robust water treatment plants which will guarantee the delivery of safe water to the customers. In case of droughts and extreme temperature events, the RWI Facility would secure more efficient treatment facilities (higher recovery rate – ratio between raw water and treated water), which is key to maintaining high availability and avoiding shutdowns.

- Conveyance systems: Efficient, effective, and reliable conveyance systems are key to increasing the availability of raw water in areas that are suffering from high water scarcity (due to demand increase or the effect of climate change). A conveyance system is usually composed of a pumping system and a pipeline (usually several km – up to several hundred). The RWI Facility will allow the development of a better pumping facility, to allow efficient operations, optimizing the energy consumption, as well as tailored water transfer systems securing high availability. Water conveyance systems are increasingly important in the water sector because areas that had been spared from water scarcity are becoming increasingly water scarce. In turn, better management of the water resource demands more flexibility in the raw water systems to adapt to the effects of climate hazards.

Countries where conventional water supply will be a focus are: all countries except Egypt and Morocco.

2. Wastewater treatment:

- Wastewater collection and sewerage networks: Wastewater collection and sewerage networks, which can intercept wastewater before it reaches the environment and can convey the wastewater to a centralized wastewater treatment facility (large scale or delocalized) are key to the preservation of the water resource, everywhere in the world. Uncollected wastewater is responsible for the contamination of surface water (rivers, lakes) but also of groundwater by infiltration and of the ocean. The RWI Facility will put a lot of emphasis on increasing the sanitation coverage ratio in the considered countries, and the first step to do that is to collect the wastewater. According to the UN, two-thirds of the world's population does not benefit from proper sanitation services. This exacerbates the impact of climate change on the resources and the capacity of the water sector to adapt. Besides, uncollected wastewater discharged in water bodies may create anaerobic conditions and generate methane emissions which directly contribute to global warming. Collecting wastewater is therefore solving both the issue of resource preservation and avoiding contribution to global warming.

- Wastewater treatment facilities: The RWI Facility will support the development and construction of wastewater treatment plant (WWTP) to increase the share of the world population that is benefiting from sanitation services and to protect the water resources that are put in danger by climate hazards like droughts, floods (runoffs) and pollution. WWTPs are the second step of the strategy that the RWI Facility will support (the first step being wastewater collection). The overall objective and contribution of WWTP to solving the problems at stake is to allow the discharge of treated wastewater which is harmless to the environment. Besides, the RWI Facility will also support projects that aim at refurbishing or upscaling wastewater treatment systems that are not effective, suitable, or viable anymore due to the effect of climate change on the water sector. This would be done through increasing the treatment capacity or upgrading the actual treatment process. The latter is a key step in the fight against climate change as outdated treatment processes (anaerobic process, sludge digestion without methane capture, septic tanks, etc....) are known to account for around 1.2% of the global GHG emissions according to the Global Water Intelligence. Based on this fact, the RWI facility will also support projects that aim at adding methane capture and waste-to-value elements to a wastewater treatment process. These additional elements are thought to foster a more circular use of resources and therefore increase the resilience of the system. In particular Methane capture and better use of the treated sludge also allows reduction in methane emissions from wastewater treatment. Enhancing wastewater collection and treatment worldwide is therefore contributing to adaptation, and mitigation goals but is also directly in line with SDG6.

Countries where wastewater treatment will be a focus are:

- Wastewater networks: Azerbaijan, Chile, Cote d'Ivoire, Egypt, Gabon, India, Indonesia, Pakistan, Peru, Tunisia, Uzbekistan
- Wastewater treatment: Azerbaijan, Cote d'Ivoire, Egypt, Gabon, India, Indonesia, Pakistan, Peru, Tunisia, Uzbekistan

3. Unconventional water supply:

The RWI facility will also support the development of unconventional water supply solutions (wastewater reuse mainly but also desalination when the latter makes development and climate sense). Due to the effect of climate change, the intensity of the considered climate hazards magnifies the increasing trend of water scarcity worldwide. It is therefore important to consider all sources of water in the mix to optimize the availability and resilience of water supply services and reach SDG6. Through the RWI Facility, unconventional water supply services are expected to bring new sustainable volumes of fresh water to the areas where they will be implemented.

Countries where unconventional water supply will be a focus are:

- Desalination: Egypt, Indonesia, India, Chile and Morocco
- Water Reuse: Azerbaijan, Egypt, India, and Morocco

4. Non-Revenue Water: (Physical losses reduction - leakages reduction, pipe replacement):

The RWI Facility aims at supporting NRW reduction activities and in particular projects that aim at reducing physical losses or leakages in water distribution networks. Physical loss reduction has several co-benefits and allows good progress both on the water supply universalization front and on the climate change adaptation and mitigation fronts. Reducing leakages in a distribution network allows to free up additional volumes to satisfy the demand without having to increase the volumes abstracted from the environment (this is adaptation) and without increasing the capacity of the water supply system (this helps with universalization). On top of this, it allows reducing the energy required (this is mitigation), mainly for pumping and treatment processes to satisfy the demand for distributed water. In the context of water scarcity or increasing contaminated sources, being able to count on better-performing networks and/or newly available volumes of water is a key aspect of securing the resilience of the sector.

Countries where NRW will be a focus are: Chile, Egypt, Gabon, India, Morocco, Pakistan, Tunisia, Uzbekistan

Implementation Roadmap

The RWI Facility's implementation roadmap aims to maximize climate resilience outcomes:

1. **Country-Specific Approaches:** Interventions will be tailored to the unique climate vulnerabilities and water sector challenges of each target country.
2. **Scalability and Replicability:** Priority may be given to projects with high potential for scaling up and replicating to amplify climate resilience impacts.
3. **Innovation Promotion:** The facility may support the scaling of innovative technologies and approaches for climate-resilient water management.
4. **Capacity Building:** A strong focus will be placed on enhancing local capacity for climate-resilient water infrastructure through the PPP Advisory Support.
5. **Stakeholder Engagement:** The facility will include robust engagement with local communities, governments, and other stakeholders to enhance project sustainability and climate resilience outcomes.
6. **Monitoring and Evaluation:** A comprehensive M&E framework will be implemented to track and report on climate resilience improvements and greenhouse gas emission reductions.

Having a climate-centric approach, the RWI Facility aims to significantly enhance the resilience of water sectors to climate change impacts in target countries, while simultaneously contributing to global climate change mitigation efforts. The facility's interventions will play a crucial role in safeguarding water security in the face of escalating climate risks, supporting sustainable development, and improving the quality of life for millions of people in climate-vulnerable regions.

B.2 (a). Theory of change narrative and diagram (max. 1500 words, approximately 3 pages plus diagram)

Context and Problem Statement

The global water sector faces unprecedented challenges due to climate change, rapid urbanization, and population growth. These challenges are particularly acute in developing countries, where existing water infrastructure is often inadequate or aging, and financial and technical resources are limited. Climate change is altering precipitation patterns, increasing the frequency and intensity of extreme weather events, and exacerbating water scarcity in many regions. Simultaneously, rising temperatures are accelerating glacial melt and sea-level rise, further threatening water security and infrastructure.

Key climate-related impacts on the water sector include:

1. **Increased water scarcity and drought (impacting ARA1, ARA2):** Many regions are experiencing more frequent and severe droughts, changes in precipitation patterns, and increased evapotranspiration rates. This is leading to reduced surface water availability, groundwater depletion, and intensified competition for water resources among various sectors.

2. **Heightened flood risks (impacting ARA1, ARA3):** Climate change is altering the intensity and frequency of extreme precipitation events, leading to more frequent and severe flooding in many areas. This poses significant risks to water and sanitation infrastructure, as well as to human settlements and economic activities.
3. **Deteriorating water quality (impacting ARA2, ARA3):** Rising temperatures, changes in water flow patterns, and increased pollution loads are negatively impacting water quality. This affects both surface water and groundwater resources, making it more challenging and costly to treat water for human consumption and other uses.
4. **Sea-level rise and coastal flooding (impacting ARA1, ARA3):** Many coastal areas are facing increased risks from sea-level rise, storm surges, and saltwater intrusion into freshwater aquifers. This threatens the sustainability of water supply systems in coastal regions and small island developing states.
5. **Changes in water demand patterns (impacting ARA2, MRA3):** Rising temperatures are altering water demand for agriculture, energy production, and urban consumption. In addition, in some regions, accelerated glacial melt is altering river flow patterns, affecting long-term water availability and increasing the risk of glacial lake outburst floods.

These climate impacts are compounded by non-climatic factors, including:

1. Rapid population growth and urbanization, increasing pressure on water resources and infrastructure.
2. Aging and inadequate water and sanitation infrastructure in many developing countries.
3. Inefficient water use practices and high levels of non-revenue water.
4. Limited financial resources for infrastructure investment and maintenance.
5. Weak institutional capacity and inadequate regulation for climate-resilient water management.

The water sector also contributes to climate change through greenhouse gas (GHG) emissions, primarily from energy-intensive water treatment and distribution processes, and methane emissions from untreated wastewater. These emissions, while often overlooked, represent a significant opportunity for mitigation efforts.

Despite the critical need for climate-resilient water infrastructure, several barriers hinder progress:

1. **Limited access to long-term, affordable financing:** Traditional funding sources often lack the patience and risk appetite required for large-scale, climate-resilient water infrastructure projects.
2. **Insufficient technical capacity:** Many water utilities and local governments lack the expertise to design, implement, and operate climate-resilient water systems.
3. **Weak enabling environments and regulatory framework:** Inadequate regulatory frameworks, policies, and institutional arrangements hinder the development of climate-responsive water management strategies.
4. **Limited private sector engagement:** The perceived risks and complexities of water sector investments, particularly in developing countries, have deterred significant private sector participation.
5. **Lack of integrated approaches:** Many water projects fail to adequately address both mitigation and adaptation aspects of climate change, missing opportunities for synergies and co-benefits.
6. **Data and information gaps:** Limited availability of reliable climate and hydrological data hampers effective planning and decision-making for climate-resilient water infrastructure.
7. **Fragmented governance:** Complex and often overlapping institutional arrangements in the water sector make it challenging to implement comprehensive, climate-responsive strategies.

These challenges create a vicious cycle where inadequate investment leads to deteriorating infrastructure, increased vulnerability to climate impacts, and higher GHG emissions from inefficient water and wastewater systems. Breaking

this cycle requires a transformative approach that addresses both the financing gap and the technical capacity constraints in the water sector.

i. Intervention Strategy

The RWI Facility aims to catalyze a paradigm shift towards climate-resilient, low-emission water infrastructure in developing countries. The Facility's intervention strategy is built on four interconnected pillars:

- a) **Concessional Financing:** The Facility will provide \$250 million in concessional loans to support climate-resilient water infrastructure projects. This financing will help bridge the viability gap for projects that incorporate climate resilience measures, which often have higher upfront costs but greater long-term benefits.
- b) **Technical Assistance:** An \$8 million grant component will fund technical assistance for project preparation, structuring, and capacity building including structuring of PPPs. This will enable that climate considerations are integrated into project design and that implementing entities have the necessary skills to manage climate-resilient infrastructure.
- c) **Mobilization and Co-financing:** By de-risking investments through concessional finance and demonstrating viable business models, as well as preparing PPP financing solutions where these are possible, the Facility aims to crowd in an additional \$1 billion in co-financing.
- d) **Knowledge Management and Replication:** The Facility will systematically capture and disseminate lessons learned, best practices, and innovative approaches to promote replication and scaling of successful interventions.

ii. Theory of Change Logic

The RWI Facility's theory of change is based on the following logical progression:

I. Inputs:

- \$250 million in GCF concessional loans.
- \$8 million in GCF grants for technical assistance.
- \$1 billion in additional co-financing from the IFC and other investors ("mobilization").
- IFC's technical expertise and global network.
- Knowledge and resources from technical partners.

II. Activities:

1. Provide concessional loans for climate-resilient water infrastructure projects.
2. Conduct climate vulnerability assessments for potential projects, incorporating country-specific climate projections and water sector challenges.
3. Offer technical assistance for integrating climate resilience into project design, tailored to local contexts.
4. Support the development of innovative financing mechanisms (e.g., green bonds, resilience bonds) adapted to local capital markets.
5. Assist in structuring public-private partnerships (PPPs) for climate-resilient water projects, considering country-specific regulatory frameworks.
6. Implement capacity building programs for water utilities, regulators, and local financial institutions, addressing identified skill gaps.
7. Develop and disseminate knowledge products on climate-resilient water infrastructure, incorporating lessons from diverse country contexts.

III. Outputs (by Year 15, end of implementation period):

1. **Climate-resilient water and sanitation infrastructure** developed or upgraded, addressing country-specific vulnerabilities (e.g., drought-resilient supply in Morocco).
2. **Energy-efficient and low-emission water technologies** deployed, reducing the sector's carbon footprint, with up to 1.8 million tCO₂e emissions avoided.
3. **Innovative financing mechanisms** for the water sector are established, with up to 4 innovative financing mechanisms deployed across target countries.
4. **PPP models for climate-resilient water projects** demonstrated, tailored to local regulatory environments, with a minimum of 2 PPP models for climate-resilient water projects demonstrated across target countries.
5. **Enhanced capacity of water sector stakeholders to design and implement climate resilient project**, targeting up to 3 countries receiving technical assistance for climate-resilient water PPP projects.
6. **Knowledge products** for climate-resilient water infrastructure disseminated, facilitating case studies and best practice guides on climate-resilient water PPPs.

IV. Expected Outcomes (Between Year 15, and Year 30):

1. **Increased climate resilience of water infrastructure and services by:**
 - Increasing their supply capacity, with up to 850 million litres per day climate-resilient water supply capacity operational.
 - Up to 4 projects allowing more resilient water supply systems, reducing disruptions due to climate-related events.
 - Approximately, 14.7 million people (7.3 million female) benefiting from more climate-resilient water security.
2. **Reduced GHG emissions from water and sanitation systems by:**
 - Up to 3 million tCO₂e emissions reduced from water and wastewater operations.
 - Up to 2 wastewater reuse projects implemented, enhancing resource recovery and promoting zero liquid discharge.
3. **Enhanced private sector participation in climate-resilient water investments, including:**
 - USD 1.000 billion in capital mobilized for climate-resilient water infrastructure projects.
 - At least 2 successful PPP transactions for climate-resilient water infrastructure operational.
 - Up to 4 innovative financing mechanisms for climate-resilient water projects implemented and operational.
4. **Strengthened institutional capacity for climate-responsive water management by:**
 - Up to 5 countries with improved capacity to develop and implement climate-resilient water PPP projects.
 - Up to 3 countries with climate-resilient water PPP frameworks and guidelines integrated into national planning processes.
 - Enhanced ability of water utilities and regulators in target countries to assess and manage climate risks in water infrastructure planning and operations.

V. Impact (Paradigm Shift) (by Year 30, end of total lifespan):

Transformation of water and sanitation sectors in developing countries towards climate-resilient, low-emission pathways, characterized by:

1. **Scale:** Significant increase in climate-resilient water infrastructure investments across targeted countries and regions. The Facility will:

- a) Develop and implement up to 6 climate-resilient water infrastructure sub-projects across targeted countries.
- b) Mobilize USD 1.000 billion in capital for climate-resilient water infrastructure program.
- c) Reduce GHG emissions by approximately 36.4 thousand tCO₂e at mid-term and approximately 3.64 million tCO₂e by the end of the program.
- d) Provide 850 MLD (million liters per day) of climate-resilient water supply capacity.
- e) The Facility will benefit approximately 17.7 million direct beneficiaries (8.8 million female) and approximately 26.5 million indirect beneficiaries (13.2 million female), with the ratio of indirect to direct beneficiaries being 1.5x.

- **Outcome contribution:** The enhanced climate resilience of water supply systems in vulnerable communities (Outcome 3) and Increased private sector investment in climate-resilient water infrastructure (Outcome 2) will drive the scaling up of climate-resilient infrastructure beyond the program's direct investments.

2. **Replicability:** Widespread adoption of proven models for financing and implementing climate-resilient water projects. The Facility will:

- a) Demonstrate at least 2 successful PPP transactions for climate-resilient water infrastructure projects.
- b) Implement up to 4 innovative financing mechanisms for climate-resilient water projects.
- c) Develop standardized tools and approaches that can be easily adapted and replicated in different contexts, including PPP frameworks.

- **Outcome contribution:** The enhanced private sector participation (Outcome 2) and strengthened capacity of government agencies to develop and implement climate-resilient water PPP projects (Outcome 4) will provide replicable blueprints for other countries and regions, as well as improved wastewater management contributing to climate change mitigation and adaptation (Outcome 4).

3. **Sustainability:** Self-sustaining markets for climate-resilient water investments, supported by strong local capacity and enabling environments. By the end of the program:

- a) Enhanced climate resilience of water supply systems in vulnerable communities through up to 4 projects that will allow more resilient water supply systems.
- b) Up to 3 countries (implementation period) and up to 5 countries (final) will have strengthened institutional and regulatory frameworks to better support climate-resilient water investments.

- **Outcome contribution:** The enhanced climate resilience of water supply systems in vulnerable communities (Outcome 1) will demonstrate the long-term viability of such investments, while reduced GHG emissions from water and sanitation systems (Core 1: GHG emissions reduced, avoided or removed/sequestered) will contribute to the overall sustainability of the sector.

4. **Knowledge and Learning:** Establishment of robust knowledge-sharing platforms and communities of practice, facilitating the exchange of best practices in climate-resilient water management across target countries. This includes:

- a) Providing technical assistance for climate-resilient water PPP projects to up to 3 countries.
- b) Supporting up to 3 countries in adopting or improving climate-resilient water PPP frameworks and guidelines.
- c) Delivering capacity building programs on climate-resilient water PPPs to government officials.
- d) Facilitating knowledge sharing on successful PPP models across countries through case studies and best practice guides.

- **Outcome contribution:** All outcomes, particularly the capacity of government agencies to develop and implement climate-resilient water PPP projects (Outcome 1), will generate valuable lessons and best practices, which will be systematically captured and disseminated to facilitate replication and scaling.

5. **Enabling Environment:** Catalyzation of systemic changes in institutional frameworks beyond the direct scope of the project, fostering a conducive environment for continued climate-resilient water investments.

This will be evidenced by the adoption of climate-responsive water policies, and the integration of climate resilience criteria in national infrastructure planning processes across the region.

- **Outcome contribution:** The strengthened capacity of government agencies to develop and implement climate-resilient water PPP projects (Outcome 1) and increased private sector investment in climate-resilient water infrastructure (Outcome 2) will drive reforms beyond the program's direct scope.

iii. Causal Pathways and Assumptions

The ToC is underpinned by several causal pathways, each with associated assumptions:

Pathway 1: Concessional Financing → Viable Projects → Increased Investment

Concessional financing will make climate-resilient water projects financially viable, leading to increased investment in such projects.

— **Assumptions:**

- The concessional financing provided is sufficient to bridge the viability gap for climate-resilient projects.
- There is a pipeline of potential climate-resilient water projects in target countries.
- Implementing entities can absorb and effectively utilize the concessional finance.
- Macroeconomic conditions in target countries remain stable enough to support long-term infrastructure investments.

Pathway 2: Technical Assistance → Enhanced Capacity → Improved Project Design & Implementation

Technical assistance will enhance the capacity of stakeholders to design and implement climate-resilient projects, leading to improved project outcomes.

— **Assumptions:**

- Recipients of technical assistance are receptive to capacity building efforts.
- Enhanced capacity translates into improved project design and implementation practices.
- There is sufficient institutional stability to retain and apply newly acquired knowledge and skills.

Pathway 3: Demonstration Effect → Private Sector Confidence → Increased Private Investment

Successful demonstration of climate-resilient water projects will build private sector confidence, leading to increased private investment in the sector.

— **Assumptions:**

- Demonstrated projects achieve their intended climate resilience and financial outcomes.
- Private investors are actively seeking opportunities in the water sector and are willing to engage in developing markets.
- Regulatory environments in target countries allow for private sector participation.
- Risk mitigation instruments effectively address key investor concerns.

Pathway 4: Knowledge Sharing → Replication → Scaled Impact

Systematic knowledge sharing will facilitate replication of successful approaches, leading to scaled impact beyond the Facility's direct investments.

— **Assumptions:**

- Lessons and best practices are effectively captured and disseminated.
- There is demand for knowledge products on climate-resilient water infrastructure.
- Other countries and institutions have the capacity to adapt and implement shared approaches.

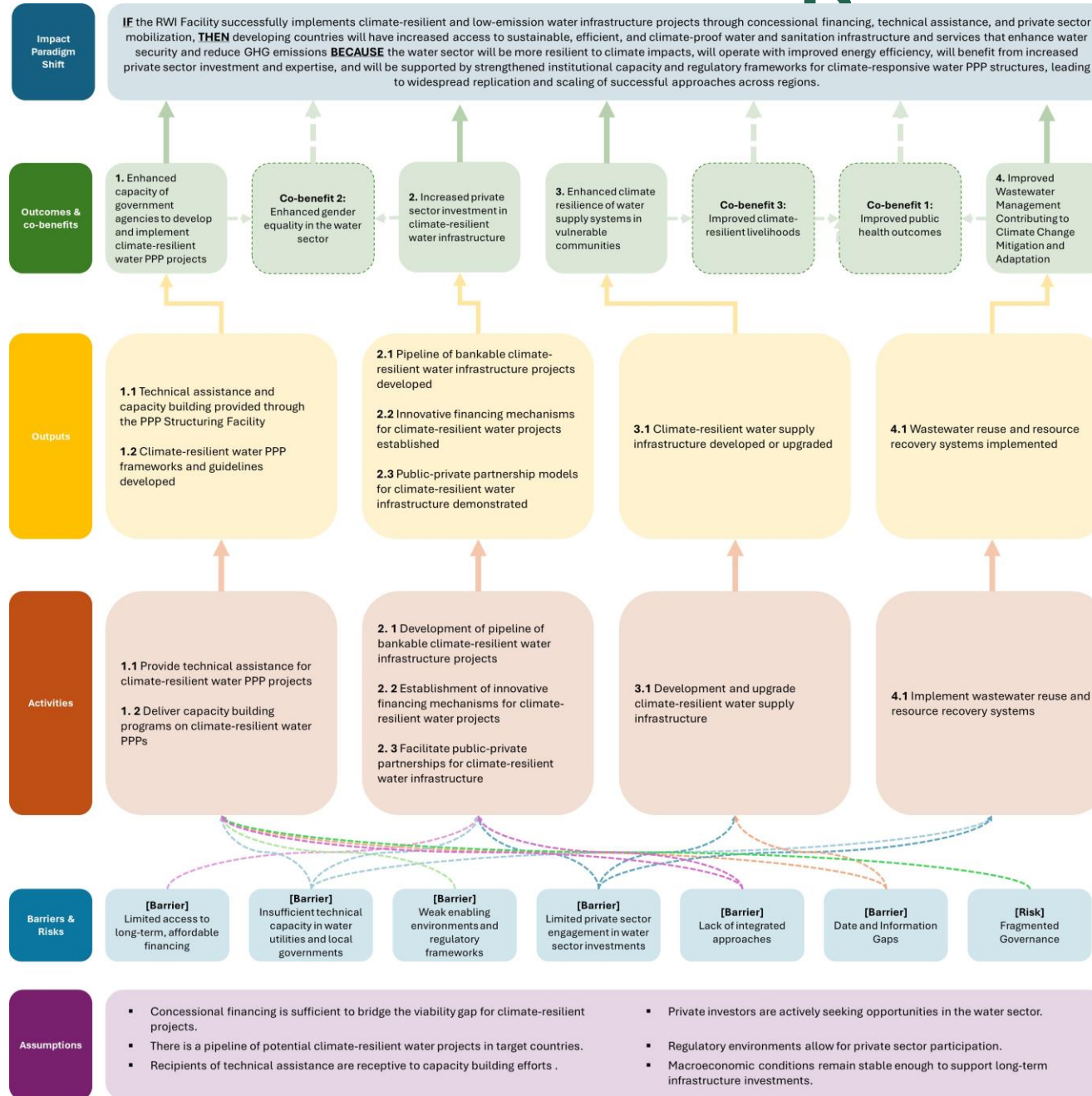
iv. Risks and Mitigation Strategies

The ToC acknowledges several potential risks that could affect the achievement of intended outcomes:

RISK	DESCRIPTION	MITIGATION STRATEGY
1. Political and regulatory risks	Changes in government priorities or regulatory frameworks could impact project implementation.	Engaging in ongoing policy dialogue and supporting the development of robust, climate-responsive regulatory frameworks.
2. Market risks	Insufficient private sector interest or adverse market conditions could limit private capital mobilization.	Developing a diverse pipeline of projects and employing flexible financing instruments to adapt to market conditions.
3. Technical risks	Proposed climate-resilient technologies may not perform as expected in local contexts.	Conducting thorough technical due diligence and pilot innovative technologies before large-scale deployment.
4. Capacity risks	Insufficient local capacity could hinder project implementation and long-term sustainability.	Implementing comprehensive capacity building programs and ensuring knowledge transfer to local institutions.
5. Climate risks	Extreme climate events could overwhelm even climate-resilient infrastructure.	Employing robust climate risk assessment methodologies and designing for multiple climate scenarios.

Theory of Change Diagram

Theory of Change Diagram



B.2 (b). Outcome mapping to GCF results areas and co-benefit categorization

Outcome number	GCF Mitigation Results Area (MRA 1-4)				GCF Adaptation Results Area (ARA 1-4)			
	MRA 1 Energy generation and access	MRA 2 Low-emission transport	MRA 3 Building, cities, industries, appliances	MRA 4 Forestry and land use	ARA 1 Most vulnerable people and communities	ARA 2 Health, well-being, food and water security	ARA 3 Infrastructure and built environment	ARA 4 Ecosystems and ecosystem services
Outcome 1	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outcome 2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outcome 3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Outcome 4	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Co-benefit number	Co-benefit					
	Environmental	Social	Economic	Gender	Adaptation	Mitigation
Co-benefit 1 Improved public health outcomes in project areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-benefit 2 Enhanced gender equality and women's empowerment in the water sector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Co-benefit 3 Climate-resilient livelihoods in project areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B.3. Programme description (max. 2500 words, approximately 5 pages)

Introduction to the GCF-IFC Scaling Resilient Water Infrastructure Facility

The GCF-IFC Scaling Resilient Water Infrastructure Facility is a programmatic approach to develop Resilient Water Infrastructure (RWI) with the objective of addressing water scarcity and reducing GHG emissions in the Target Countries.

Recognizing that the issues, challenges and objectives in terms of water supply and sanitation as well as the climate agenda are different in each country (and also in different regions within a same country), the target countries that are included in the programme are:

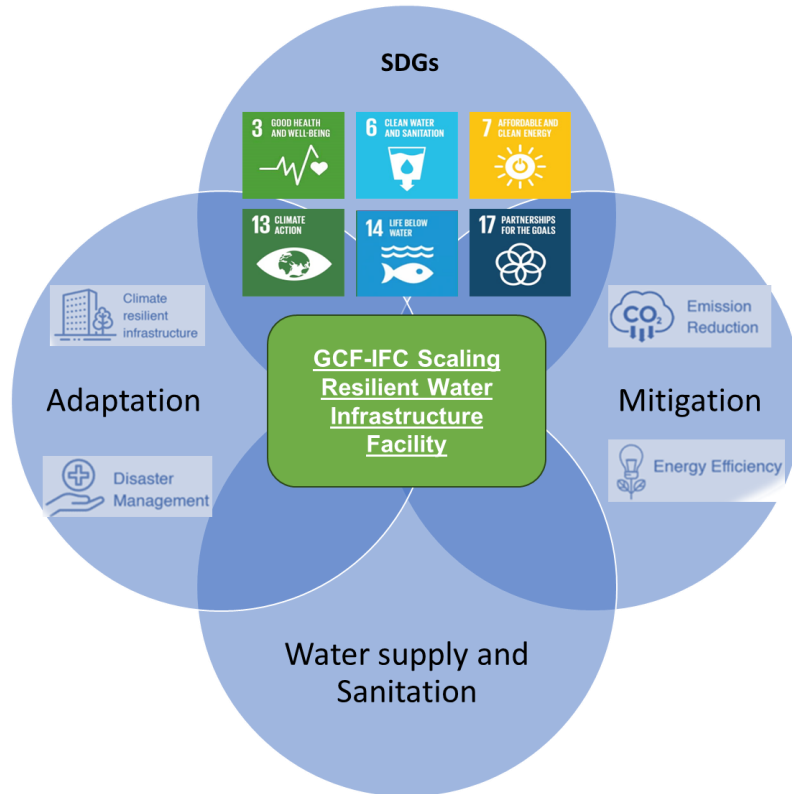
- Africa: Egypt, Gabon, Cote d'Ivoire, Morocco, Tunisia;
- Asia: India, Indonesia, Pakistan, Uzbekistan;
- Latin America: Chile, Peru;

- Europe: Azerbaijan;

The Implementation rationale

This approach will support the development of water supply and sanitation infrastructure as necessary for adaptation and new assets that mitigate emissions. The objective is to scale up cost-competitive and sustainable public and private investments in RWI projects, aligned with the adaptation and mitigation plans of the target countries and actively contributing to the UN Sustainable Development Goals.

RWI Facility's Connection with SDGs, Mitigation and Adaptation



The facility is designed to support projects within its operational parameters and eligibility criteria but integrating flexibility in its design that allows to respond to the changing needs of the target countries (and subsequent regions and water systems). The type of projects included in the programme can be classified into 4 main categories, as described hereunder:

- 1. Conventional water supply**
 - Bulk water supply and storage, groundwater abstraction, water treatment facilities, treated water distribution, conveyance systems, household water connections.
- 2. Wastewater Management**
 - Wastewater collection and sewerage networks, wastewater treatment facilities, methane capture, waste to value facilities.
- 3. Unconventional water supply**
 - Desalination, wastewater reuse.
- 4. Non-Revenue Water**
 - Physical and commercial losses reduction.

Based on IFC's current and future analysis of the water sector in each target country, the facility will prioritize projects that have significant potential to contribute to adaptation and/or mitigation goals, but which are in need of concessional finance for financial viability.

Based on IFC's extensive experience in the W&S sector and private sector operations, the table below outlines the potential nature of these projects and their associated climate benefits.

Note: This table outlines the preliminary mitigation and adaptation benefits associated with different project types. However, the climate benefits will be precisely assessed to determine their contribution to climate resilience and/or GHG reductions. This will be done on a project-specific basis based on the expected impact of each initiative and using tailor-made methodologies.

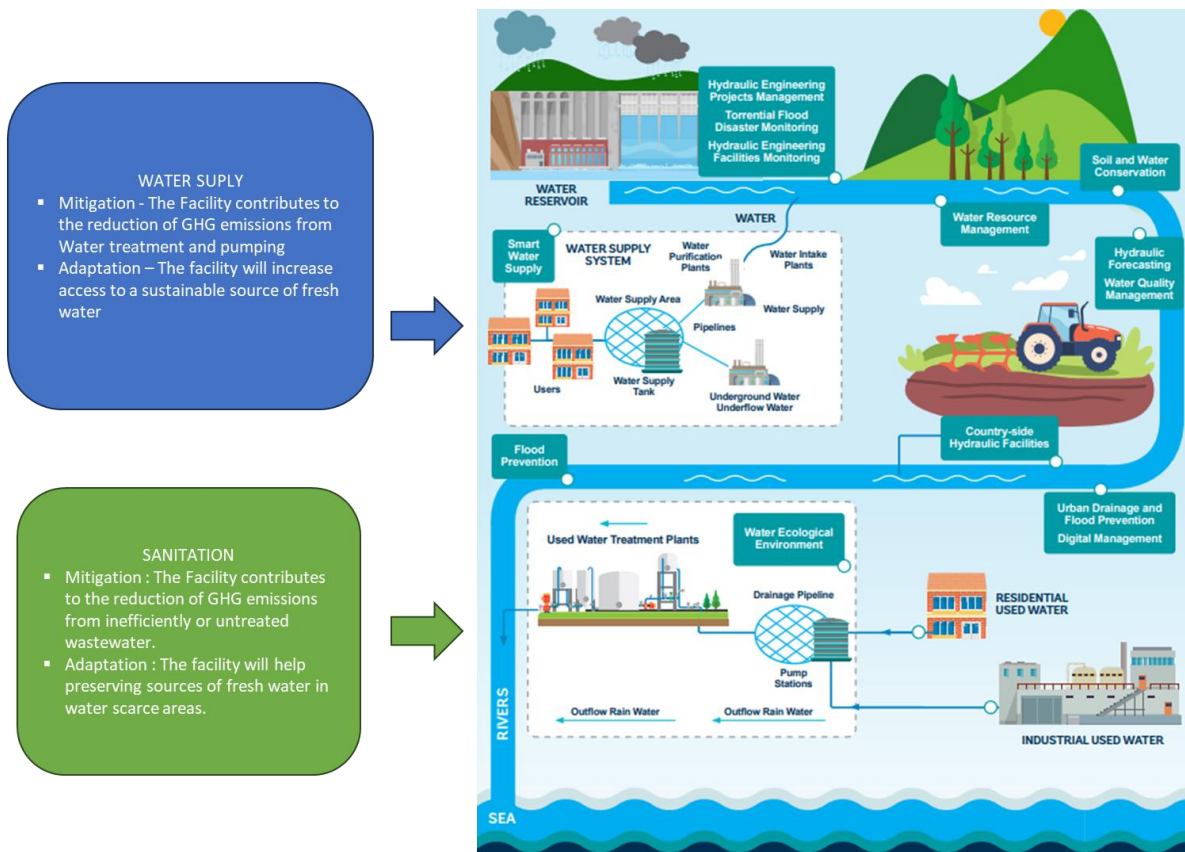
Climate Mitigation and Adaptation Potential

WATER SUPPLY AND SANITATION		CLIMATE MITIGATION AND ADAPTATION POTENTIAL				
Category	Project	MITIGATION (negative net GHG emissions)			ADAPTATION (depends on the intensity of climate drivers)	
		Greenfield	Brownfield	Comments		Comments
Conventional Water supply	Bulk Water Supply	Low	High	Mitigation potential of a greenfield plant depends on the use of gravity-based system and best available technology and whether the project replaces an existing energy-intensive source of fresh water.	Medium	The project can address climate vulnerabilities through the provision of additional sources of fresh water and/or potable water that reduce the dependency on the existing resources that are expected to experience more frequent shortages due to climate change impacts.
	Water Treatment Plant	Low	Medium	Mitigation benefits can be achieved if the system is powered by renewable energy or if a brownfield project brings more efficiency.	Medium	
	Distribution systems for potable water	Medium	High	A standalone distribution project usually replaces high emissions solutions (such as water delivered by trucks or bottled water), and the energy use are usually relatively limited for gravity-based system and best available technology (energy efficient) systems.	Medium	While the project might not create any new source of fresh water, improved distribution systems can reduce water losses and, on a system scale, improve water availability.
Wastewater Treatment	Sewage collection networks	Very High	High	A new/enhanced sewage network element in a project tends to increase the potential for mitigation eligibility as it helps decreasing the volume of pits, latrines, septic tanks and/or stagnant sewer, which are more emission-intensive (mostly methane).	Medium	In the area of influence of the project, when experiencing water scarcity due to climate change, a potential adaptation angle would be if the untreated wastewater or the discharged sludge is actually contaminating an existing body of water that can and will be used as freshwater source but currently unusable due to the contamination.

	Wastewater treatment plant using centralized, aerobic, conventional activated sludge.	Very high	<p>The eligibility of the project for mitigation is defined by assessing the net GHG emissions between the baseline and the project scenario. The baseline is usually defined by using one or a combination of the following cases together with the appropriate Methane Correction Factor (MCF). The MCF is a value which illustrates the potential of a given system to realize its maximum Methane production potential.</p> <ul style="list-style-type: none"> - Latrines (MCF between 0.1 and 0.7) - Sceptic tank (MCF=0.5) - Stagnant sewer (MCF=0.5) - Activated sludge (MCF=0.03) <p>The higher the Baseline MCF and the lower the project scenario MCF, the stronger the potential for climate mitigation benefits.</p>		Medium	In the area of influence of the project, when experiencing water scarcity due to climate change, a potential adaptation angle would be if the untreated wastewater or the discharged sludge is actually contaminating an existing body of water that can and will be used as freshwater source but currently unusable due to the contamination. Treated effluent can be considered as a new source of fresh water if used downstream the discharge point (similar to water reuse approach).
Unconventional Water supply	Wastewater Reuse	Low	Medium	Wastewater reuse projects are capable of generating negative net emissions because the energy requirements for water production, collection, treatment and distribution in the baseline scenario are higher than those associated with the tertiary treatment involved in water reuse. Climate mitigation benefits can also be achieved if the system is powered by renewable energy or if a brownfield project brings more efficiency.	Very High	In the area of influence of the project, when experiencing water scarcity due to climate change, wastewater reuse projects or desalination projects have strong climate adaptation potential as they provide an additional and usually sustainable source of fresh water.
	Desalination	Low	Low	Mitigation benefits can be achieved if the project (brownfield) replaces an existing high emissions system, or if the desalination system is powered by renewable energy.	Very High	
Non-revenue water reduction	Reduction of Physical losses.	Very High	NRW reduction projects have got a high potential for Climate mitigation thanks to a more efficient use of water resources, energy efficiency, which usually translates into lower GHG emissions to satisfy a given demand.		High	In the area of influence of the project, when experiencing water scarcity due to climate change, a NRW project also shows a high potential for climate adaptation as it provides additional volumes of water, for the same volume of raw water abstracted.

The benefits related to water supply and sanitation are briefly described in the figure below.

Climate Benefits of Water Supply and Sanitation



The objective of the facility is to demonstrate viability of new business models attracting private capital with high scalability and replication potential.

Components and underlying (sub)activities of the GCF-IFC Scaling Resilient Water Infrastructure Facility

Leveraging the World Bank Group’s global presence, IFC’s private sector investment and advisory expertise, and GCF’s concessional funding, the programme will combine project structuring support through advisory and technical assistance (Component 1), and concessional finance support (Component 2) to projects aiming at scaling RWI in the target countries.

COMPONENT 1: Public Private Partnerships (PPP) Advisory and Technical Assistance

This facility, funded by a reimbursable grant of USD8 million, will enable IFC to provide systematic advisory support to governments for PPP water infrastructure projects (including advice on early project preparation to governments), helping to bring more projects to the market with private sector participation. It will address key barriers such as lack of public funding for project preparation and inadequate capacity to plan and prepare large-scale water projects. The Reimbursable Grant Funds deployed for each advisory project, will be reimbursable to GCF (in part or in full) to the extent that the relevant PPP advisory projects are successfully implemented (i.e. the agreements providing for the implementation of the project are signed) and IFC receives payment for the services provided, with GCF entitled to receive its proportion of success fees recovered by IFC under the relevant PPP Agreements, calculated as a proportion of the amount of the Reimbursable Grant Funds contributed to the relevant PPP project of the total PPP project costs. At the end of the Component 1 Availability Period, any unused portion of the Reimbursable Grant Funds shall be returned to GCF.

The PPP Structuring Facility will deliver two (2) distinct activities:

Activity 1.1 Provide technical assistance for climate-resilient water PPP projects:

This activity focuses on delivering comprehensive technical support to targeted government agencies for the development and implementation of climate-resilient water PPP projects. The technical assistance may cover the entire project lifecycle, from initial identification and screening of potential projects to transaction preparation and tender

process support. Throughout this process, climate resilience considerations will be integrated, ensuring that projects are designed to withstand and adapt to climate-related challenges. This includes conducting climate risk assessments, identifying appropriate adaptation measures, and incorporating these elements into project structuring and documentation. The goal is to create a pipeline of bankable, climate-resilient water infrastructure projects that are attractive to private sector investment while meeting the long-term adaptation needs of the target communities.

Further, transaction advisory activities / services provided to governments involve the commercial and legal structuring of the transaction (revenues, tariffs, risk allocation) and structuring competitive tenders to identify the most suitable project development partner (content and format of proposals, minimum qualifications, bid evaluation criteria, etc.). The final project engineering design will be the responsibility of the development partner selected through the competitive tender (or their EPC contractor). As part of the structuring of the concession contracts and supporting documentation including RFP/RFQ, IFC will advise its clients to ensure that any climate measures and requirements for the project identified during due diligence are adequately addressed.

Furthermore, while IFC does not act as an advisor on climate matters, it would encourage its clients to take into account considerations such as decarbonization pathways, climate resilience, and adaptive capacity in structuring climate smart PPPs to be tendered to the private sector for investment and finance. The goal is to identify risks and vulnerability as well as measures and options to reduce or mitigate asset loss, damage and/or operational down time due to climate impact, driven by the country context and vulnerability of the project and specific site and informed by various tools and information from internal and external climate risk tools. This work is then translated into measures which impact design options, capex/opex, financial modeling, and tariff/payments. From the government's perspective, this work seeks to address the key question of bankability and viability of the project, including identifying potential viability gaps which may need to be addressed in the capital structure in order for the project to advance in the bidding process before private sector developers demonstrate their interest.

Activity 1.2 Deliver capacity building programs on climate-resilient water PPPs:

This activity focuses on enhancing government agencies' capacity to develop and manage climate-resilient water PPP projects. Through capacity programs, officials will gain expertise in climate risk assessment, adaptation strategies for water infrastructure, and structuring climate-responsive PPPs. The program will include knowledge sharing of best practices and case studies, fostering a community of practice among participating countries and agencies to promote climate resilience in water infrastructure development.

COMPONENT 2: Concessional Finance Facility

This facility will help close critical viability gaps, lower the cost of borrowing, and assist in addressing affordability challenges. Thus, it will improve investment attractiveness to crowd in commercial investments.

The facility will include senior concessional loans and subordinated concessional loans funded with GCF funds which, alongside IFC's loans will help unlock additional commercial investments (senior debt and possibly subordinated loans and other credit enhancement instruments). The concessional co-investments from Concessional Finance Facility will be used alongside IFC's funding own account to finance RWI projects. A typical loan under this facility will have a tenor of up to 23 years with construction phases and grace periods being dependent on specific subprojects. The investment period of the facility will be seven (7) years to deploy the funds, reflecting the nature of water sector including long lead times, lengthy upfront engagements and technical studies, complex contracting structures, and comparatively long tender timelines (timelines from tender issuance to financial close can often take up to 2 years).

The facility utilized to provide financing can invest in both private sector entities and certain public entities. Eligible public sector entities would comprise subnational governments and utilities owned by them as well as entities owned by one or several national governments or their state-owned entities, subject in each case to the financing not being guaranteed by the sovereign government. The proposed programme can be categorized as a 'single entity/multiple countries' programme with a set of subprojects aligned with the overarching objective of scaling water infrastructure for water security, climate change resilience, and mitigation.

The Approach

The facility employs a blended finance approach, combining concessional loans with IFC's own capital and additional co-financing from other investors. This structure aims to de-risk investments and demonstrate the viability of climate-resilient water projects as an investable asset class. By offering patient capital with concessional terms, the facility can support projects that might otherwise struggle to reach financial close due to their innovative nature or perceived high risks.

Key Activities

- **Activity 2.1: Development of pipeline of bankable climate-resilient water infrastructure projects:** This activity focuses on identifying, screening, and developing a robust pipeline of climate-resilient water infrastructure projects that are attractive to private sector investment. It involves business development, concept review, Blended Finance Committee screening, and project appraisal.
- **Activity 2.2: Establishment of innovative financing mechanisms for climate-resilient water projects:** The activity involves designing and deploying innovative financing instruments to attract private capital to climate-resilient water infrastructure projects. This approach combines concessional finance with commercial capital in ways that optimize risk allocation and attract private sector investment. The facility also works on creating new financial instruments, such as resilience bonds or climate adaptation funds, designed to align investor interests with long-term climate resilience goals. It further includes conducting investment reviews, obtaining IFC Blended Finance Committee approval, and negotiating project-level terms.
- **Activity 2.3: Facilitate public-private partnerships for climate-resilient water infrastructure:** This activity supports the structuring and implementation of PPP transactions for climate-resilient water infrastructure projects. It involves supporting project-level negotiations and monitoring project implementation.
- **Activity 3.1: Development and upgrade climate-resilient water supply infrastructure:** The facility will support the design, construction, and rehabilitation of water supply infrastructure with enhanced climate resilience features. It does so by embedding climate resilience in project appraisal, integrating climate resilience measures into investment decisions, and monitoring climate resilience during project implementation.
- **Activity 4.1: Implement wastewater reuse and resource recovery systems:** The activity involves identifying wastewater reuse and resource recovery opportunities in project pipeline, integrating resource recovery elements into investment decisions, and monitoring implementation of wastewater reuse and recovery components.

Overall Program Expected Outputs and Outcomes

a) Outputs

- **Output 1.1: Technical assistance and capacity building provided through the PPP Structuring Facility.** By year 15, the facility aims to provide comprehensive technical assistance for climate-resilient water PPP projects to up to 3 countries. This assistance will encompass project identification, structuring, and transaction support, enhancing the capacity of recipient countries to develop and implement climate-resilient water infrastructure projects through PPP approaches.
- **Output 1.2: Climate-resilient water PPP frameworks and guidelines developed.** The facility targets the adoption or improvement of climate-resilient water PPP frameworks and guidelines in up to 3 countries by year 15. This output will focus on integrating climate resilience considerations into national planning processes, creating a more conducive environment for climate-responsive water infrastructure development through PPPs.
- **Output 2.1: Pipeline of bankable climate-resilient water infrastructure projects developed.** By year 15, the facility aims to develop up to 6 bankable climate-resilient water infrastructure projects. These projects will demonstrate the technical feasibility and financial viability of climate-resilient approaches in diverse contexts.
- **Output 2.2: Innovative financing mechanisms for climate-resilient water projects established.** The facility will deploy up to 4 innovative financing mechanisms by year 15. These mechanisms will be tailored to address the unique challenges of climate-resilient water projects, potentially including instruments like resilience bonds or blended finance structures that effectively leverage concessional funds.

- **Output 2.3: Public-private partnership models for climate-resilient water infrastructure demonstrated.** At least 2 PPP transactions for climate-resilient water infrastructure projects will be closed by year 15. These transactions will showcase how climate resilience can be effectively integrated into PPP structures, providing models for future projects in the sector.
- **Output 3.1: Climate-resilient water supply infrastructure developed or upgraded.** The facility aims to achieve a volume of 850 MLD from climate resilient water supply capacity created or rehabilitated.
- **Output 4.1: Wastewater reuse and resource recovery systems implemented.** The facility aims to achieve up to two (2) wastewater reuse projects by year 15, demonstrating contribution to climate change mitigation and adaptation.

b) Outcomes

- **Outcome 1: Enhanced capacity of government agencies to develop and implement climate-resilient water PPP projects through the PPP Structuring Facility.** By year 25, up to 5 countries will demonstrate improved capacity to develop and implement climate-resilient water PPP projects. This outcome represents a significant scaling of expertise in climate-resilient water infrastructure planning and implementation.
- **Outcome 2: Increased private sector investment in climate-resilient water infrastructure.** The facility aims to mobilize USD 1.000 billion in capital for climate-resilient water infrastructure projects. This substantial mobilization will demonstrate the attractiveness of the sector and pave the way for increased private sector engagement.
- **Outcome 3: Enhanced climate resilience of water supply systems in vulnerable communities.** Up to 4 projects demonstrating more resilient water supply systems will be operational. These Projects will showcase tangible improvements in water security under changing climate conditions.
- **Outcome 4: Improved wastewater management contributing to climate change mitigation and adaptation.** The facility targets up to 2 wastewater reuse projects operational with demonstrated climate benefits.

B.4. Implementation arrangements (max. 1500 words, approximately 3 pages plus diagrams)

Proposed Financing Structure

IFC, in accordance with IFC's policies, procedures and practices, has extensive experience in mobilizing and providing capital to public and private companies in developing countries.

Following the GCF Board approval, IFC and GCF, based on the Accreditation Master Agreement (AMA), enter into a program specific funded activity agreement (the "Funded Activity Agreement" or the FAA) for the implementation of the Programme. The FAA will outline the sectoral, geographical scope and eligibility criteria (Purpose) of the proposed facility. As part of its role as GCF AE and co-financier of the projects to be supported under the Facility, IFC will assess and confirm the eligibility of each such project to be included in the Facility and benefit from IFC and GCF funding. The agreed resources of the GCF will be placed in the GCF account as per the terms and conditions of the AMA and the FAA. IFC will be solely responsible for the administration of the GCF resources and will carry out such administration in accordance with the AMA, the FAA, its own policies and procedures and with the same degree of care as it uses in administration of its own funds. IFC will apply its own standards relating to fraud, corruption and other sanctionable practices and AML/CFT, know your customer and other similar checks, in accordance with its own policies and procedures in relation to individual projects under Facility.

Following signing of the FAA with the GCF, IFC will set up the PPP Structuring Facility and the Concessional Finance Facility through its advisory and blended finance governance processes respectively.

Administration of Component 1

IFC will select PPP projects for advisory support and funding from the PPP Structuring Facility, and may subsequently review its eligibility for financing, in accordance with IFC's policies and procedures for advisory and investment operations as well as IFC's other Policies and Procedures and will use GCF resources for the Facility in line with the

Purpose of the Facility as detailed in the Accreditation Master Agreement (AMA) and Funded Activity Agreement (FAA). During the implementation of the Facility, IFC will follow the Facilities oversight and reporting requirements as provided for under the AMA and the FAA.

The PPP Structuring Facility will be managed by IFC's PPP Advisory department, which offers advisory services to national and subnational clients, including state-owned enterprises and municipalities. The services offered by IFC's PPP Advisory department generally start with the execution of a transaction advisory services agreement (TASA) with Government as the client and ends with tender/selection process for the project. IFC will assign a high level multi-disciplinary team to each project, combining extensive experience in structuring/implementing infrastructure transactions, as well as knowledge of the complex policy, regulatory, institutional and tariff issues related to the sector, for the consideration and ultimate decision of the Government client. For each project, IFC may enter into consultancy contracts with the external consultant teams that are competitively selected in accordance with IFC's procurement rules.

IFC's PPP Advisory department seeks to provide its advisory services on a cost-recovery basis; therefore, the total fees charged should cover IFC's costs, including those of IFC's specialized external consultants. The typical fee structure is composed of two separate fees: "retainer fees" – payable by the client - and a "success fee" - paid by the client or, at the client's instruction, by the ultimate project investor. The fee structure aims to ensure continued client commitment, while minimizing direct payment obligations. It is also designed to share as much risk as possible with the client: only 20% of total fees are typically linked to outputs; the balance (up to 80%) becomes payable only upon achievement of outcomes. Retainer fees are linked to the delivery of outputs, such as reports, draft contracts, etc. Success fees are only payable upon successful completion of the PPP transaction (essentially, implementation of the PPP tender/selection process by the Government).

Under the PPP Structuring Facility, IFC will allocate GCF funds to activities that have a potential to generate fees for IFC. The Reimbursable Grant Funds deployed for each advisory project, will be reimbursable to GCF (in part or in full) to the extent that the relevant PPP advisory projects are successfully implemented (i.e. the agreements providing for the implementation of the project are signed) and IFC receives payment for the services provided, with GCF entitled to receive its proportion of success fees recovered by IFC under the relevant PPP Agreements, calculated as a proportion of the amount of the Reimbursable Grant Funds contributed to the relevant PPP project of the total PPP project costs. At the end of the Component 1 Availability Period, any unused portion of the Reimbursable Grant Funds shall be returned to GCF.

It must be clarified that the reimbursement to GCF of Reimbursable Grant Funds under the PPP Structuring Facility is ultimately contingent on the successful completion of the PPP advisory activities with the government and further on the government's decision to proceed with the bidding for the project, as well as on the successful conclusion of the transaction for the competitive selection of the private partner, signing of the agreements providing for the implementation of the project, and actual payment of success fees to IFC. If all of these do not happen, the return of GCF's fee portion may not necessarily happen. Therefore, this component is proposed to be structured as a reimbursable grant – whatever fees are recovered, to the extent that they reimburse or offset IFC for costs covered by the PPP Structuring Facility, will be returned to GCF but only after receipt of fees. Upon termination of the facility, any unused amounts for this component will also be returned to GCF. IFC has the required internal mechanisms to account for and track any fees in relation to GCF funding provided for the PPP Structuring Facility.

Administration of Component 2

The Concessional Finance Facility will deploy, manage, and supervise the concessional co-investments of GCF funds under delegated authority following its market-leading blended finance governance and principles as approved by IFC Board (see details below). IFC will also undertake comprehensive due diligence (DD) of projects proposed for funding from the facilities in accordance with IFC's policies and procedures for advisory and investment operations as well as IFC's other Policies and Procedures and will use GCF resources for the Facility in line with the Purpose of the Facility as detailed in the Accreditation Master Agreement (AMA) and Funded Activity Agreement (FAA). During the implementation of the Facility, IFC will follow the Facilities oversight and reporting requirements as provided for under the AMA and the FAA.

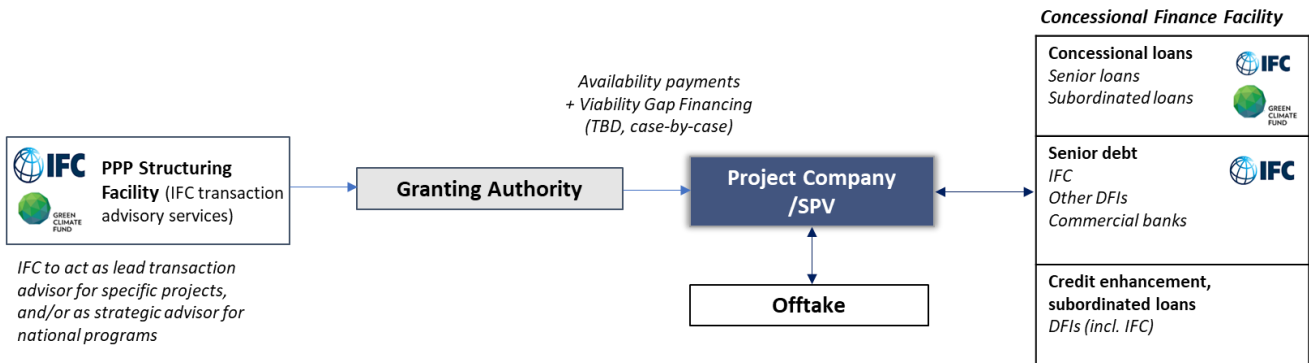
For Concessional Finance Facility, following internal IFC approvals of the individual projects, IFC will seek to sign **Loan Agreements** (transactions) as well as other necessary Subsidiary Agreements with the project EEs (relevant Project Company and/or Sponsor (in case of PPPs), privately, nationally or subnationally owned utilities and, possibly, other

lenders). Such transactions will make available IFC finance, as well as GCF co-finance for the investments in line with the Purpose of the Facility. IFC will provide GCF funds to the beneficiaries as an implementing entity as a separate loan as a lender of record alongside IFC loans in accordance with the terms of the AMA and the FAA. Individual projects to be financed under the Concessional Finance Facility could include project financings (non-recourse financing) or corporate financing. Depending on the type of the structure, IFC may sign additional legal agreements to support its loans, such as typical project support/security arrangements structured based on the appraisal of the individual projects.

The figure below illustrates an indicative project and corporate financing structures and the entities involved.

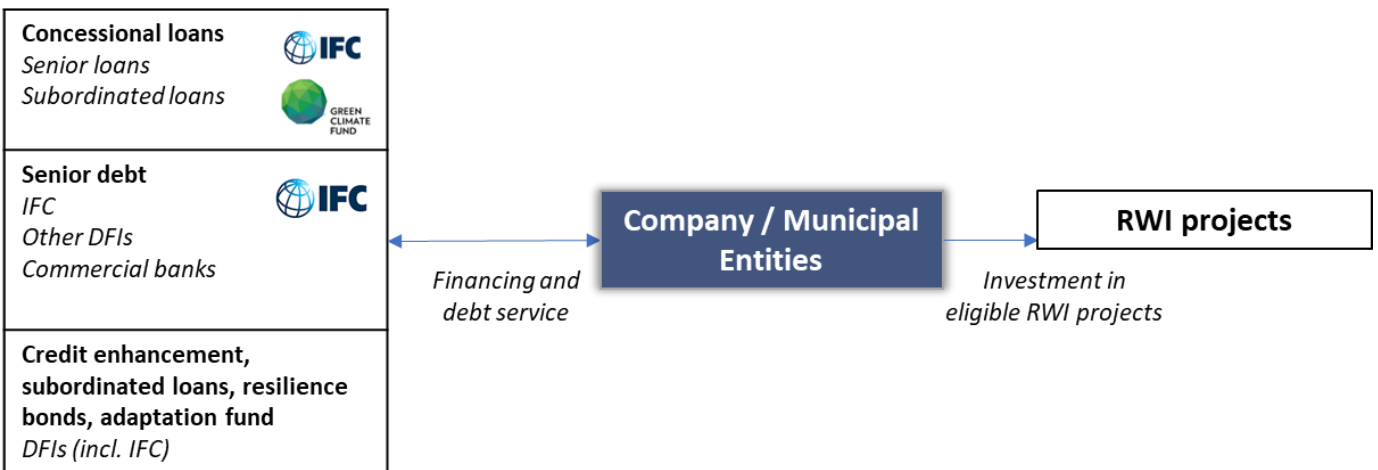
Indicative Financing Structure

A) Project Finance



B) Corporate Finance

Concessional Finance Facility



For each Project, IFC may enter into consultancy contracts with the external consultant teams that are competitively selected in accordance with IFC's procurement rules.

The Concessional Finance Facility will be managed by IFC's Blended Finance department, which has an extensive track record of managing and deploying donor concessional funds since 2010. The blended finance approach at IFC relies on strong institutional governance to manage potential conflict of interest and to provide transparency. This approach includes a Vice President level corporate committee – Blended Finance Committee – that approves the use, structure, and terms of each of the co-investments of concessional funds; and a separate investment team within the Blended Finance department that oversees the structuring of concessional funds within a blended package. IFC's governance for blended finance balances efficiency, accountability, and transparency. Under its current policies and procedures,

which may be updated from time to time, IFC applies the following **Blended Finance Governance and Principles** in the deployment of funds on behalf of all its contributor partners.

Blended Finance Governance:

- **Standard of Care for IFC-Managed Contributor Resources:** IFC policies require it to exercise the same standard of care to invest on behalf of contributor partners (i.e. GCF) as it exercises with respect to the administration and management of its own affairs, including the use of qualified staff and the application of relevant IFC policies and procedures, such as performance standards and integrity due diligence.
- **Managing Potential Conflicts of Interest:** To address concerns around the blending of concessional funds from contributor partners (i.e. GCF) alongside IFC's own account resources, IFC policies and procedures require an effective segregation of funds; separate teams to structure the concessional contributor portion of the transaction; and decision-making by a separate and independent approval body (the Blended Finance Committee) composed of members of IFC senior management, or by the Blended Finance Director under delegated authority from the BFC. The Blended Finance Committee, or the Blended Finance Director, decides on the use, structure, and terms of all contributor-funded concessional investments at IFC. With a focused, measured and disciplined approach to blending concessional funds, IFC is carefully balancing the potential risks inherent in embedding subsidies in private sector projects.
- **Approval Process:** The approval process for concessional funding has been designed to be aligned as closely as possible with IFC's project approval process to create efficiency and ensure the Programme benefits from IFC's well-established risk management procedures, while balancing the need for strong governance. This is possible with the delegated authority from contributors. IFC has the sole responsibility for the selection, supervision and execution of the investments under this Programme, and will report to the Contributor of their progress. IFC will enter into any documentation executed in connection with the utilization of the Contribution Funds in its capacity as the Implementing Entity of the Blended Finance Component of the Programme.
- **Reporting to the Board:** All Blended Finance projects follow the applicable board procedure for the IFC own account investment. Board documentation includes an articulation on IFC's blended finance principles. In addition, IFC reports periodically to Board on its Blended Finance activities.

IFC Blended Finance Principles: IFC applies a disciplined and targeted approach to blended finance, following the Development Financial Institutions Enhanced Blended Concessional Finance Principles for Private Sector Projects, which comprise:

- **Rationale for Concessional Finance:** Contribution that is beyond what is available, otherwise absent from the market, and should not crowd out the private sector.
- **Crowding-in and Minimum Concessional:** Contribute to catalyzing market development and mobilization of private sector resources, with concessional not greater than necessary.
- **Commercial Sustainability:** Impact achieved by each operation should aim to be sustainable and contribute towards commercial viability.
- **Reinforcing Markets:** Addresses market failures effectively and efficiently minimizes the risk of market distortion or crowding out private finance.
- **Promoting High Standards:** Promote adherence to high standards, including in areas of corporate governance, environmental impact, integrity, transparency, and disclosure.

B.5. Justification for GCF funding request (max. 1000 words, approximately 2 pages)

The aggregate financing shortfall needed to achieve global water security has been estimated at US\$6.7 trillion by 2030 and US\$22.6 trillion by 2050 (World Water Council & OECD, 2015). Water sector investments are typically financed by the public sector, but there is consensus that public finances alone are insufficient to cater to the vast investments needed to achieve the SDGs. In many countries, current levels of funding, including revenues from customer fees and public funding from fiscal budgets, are inadequate to meet basic operating and maintenance costs, resulting in significant underinvestment in much-needed water infrastructure, premature deterioration of assets, and inefficient operations.

Constraints to mobilizing commercial and private capital in water include its chronic undervaluation by public and private actors. In most countries, the price of water does not reflect its real economic value nor the cost of provision of multiple water services. Water is often not sufficiently considered in investment, economic planning, and policy making. Water as a resource is commonly taken for granted and regularly wasted, threatening human health, and prompting social, environmental, and economic crises triggered by unsustainable approaches. At the same time, water services are often decentralized at the municipal level and delivered by municipal divisions or sub-sovereign entities, resulting in highly atomized institutional structures. Water service providers are dependent on scarce public and concessional funding and

financing to maintain and expand their services. At the same time, weak enabling conditions at the country level to attract private and public investment, including technical and operational inefficiencies; the slow pace of reforms to policies, institutions and regulations; the absence of supportive governance arrangements; and high transaction costs have traditionally discouraged investment in the water sector.

This leads to weak financial viability and balance sheets of service providers, limiting their ability to access commercial financing. Thus, improvements to W&S infrastructure are urgently needed to address the looming water scarcity crisis as well as to reduce GHG emissions deriving from the sector.

All identified target countries of the RWI Facility are in need of varying levels of fiscal resources and have varying capacities of businesses and households to recover, necessitating a focus on financial enhancement to address potential disaster impacts and strengthen the resilience of people, firms, and assets. Private sector participation can support this urgent infrastructure need to combat the global climate related water crisis if the right incentives and enabling environments are in place. The private sector can play a critical role in providing capital needed to meet the SDGs, operating expertise and innovation needed to lower costs, increase revenues, enhance technical efficiency, promote circular economy solutions, and improve resilience to climate change. The PPP facility will tackle these types of markets. Many markets are ready for immediate private sector solutions. Other markets will require a transition period where a combination of risk mitigation instruments and concessional finance will play a critical role in crowding-in the private sector and commercial financing. Blended finance facilities will be critical in enabling both types of markets with a portfolio of technological solutions.

The RWI Facility with GCF aims to mobilize concessional GCF loans which would be deployed in combination with IFC loans, this would be instrumental to securing more water infrastructure mandates.

IFC applies a disciplined and targeted approach to blended finance, following the IFC Blended Finance Principles (See B.4 on detailed principles including minimal concessionality) and publicly discloses concessionality rationale.

B.6. Exit strategy (max. 500 words, approximately 1 page)

The RWI Facility is expected to help close critical viability gaps, lower the cost of borrowing, and assist in addressing affordability challenges. **The sub-projects are expected to be sustainable in the long run.** The principal investments of the GCF concessional loans are expected to be serviced fully from the Projects' cash flows. The objective is to finance projects that can be sustainable over their lifecycle with stable and predictable operating costs and revenues. Lenders including IFC will be providing long-term commercial financing alongside GCF concessional loans and they are expected to be serviced fully from the relevant sub-project's cash flows and/or sponsor's balance sheet for corporate financings.

As a party to the projects, IFC will foster project sustainability beyond the programme implementation timeline, in particular from technical and financial perspectives. From the technical perspective, it will ensure, through comprehensive structuring and due diligence, that the project design deploys appropriate and adequate solutions and is climate resilient in the long term, and from the financial perspective, reduce the reliance on public sector financing by supporting the design and implementation of bankable projects that can be financed by the private sector affordably, and the projects have long-term potential impact and will be critical to the economic and human development in the target areas.

Furthermore, the sub-projects will be designed considering the impacts of climate change on water supply and demand in the long run, bringing adaptation to climate change and emissions reduction. These projects would also typically include long-term operation & maintenance contracts for supported project companies which will promote conformity with international best practices, sustainability, technical and environmental standards.

Replicability: The successful sub-projects will have a demonstration effect, showcasing their positive impact and enhancing the attractiveness of investments in the water sector in pipeline countries. This, in turn, would help attract commercial investments for similar projects in the future. Additionally, the programme would serve as a demonstration case for scaling sustainable Water PPPs through the utilization of IFC's "Scaling ReWater" approach. This approach includes standardized tender documents and other elements that facilitate rapid replicability and scaling of sustainable water projects. The programme's focus on mobilizing the private sector and creating synergies will contribute to the development of markets in the water sector. Furthermore, IFC is committed to actively sharing the learnings and insights

gained from the implementation of this programme, subject to IFC's Access to Information Policy, encouraging other industry leaders to replicate its design and approach.

C. FINANCING INFORMATION							
C.1. Total financing							
(a) Requested GCF funding (i + ii + iii + iv + v + vi + vii)	Total amount			Currency			
	258			million USD (\$)			
GCF financial instrument	Amount	Tenor	Grace period	Pricing			
(i) Senior loans	150	23 years		<u>Enter %</u>			
(ii) Subordinated Loans	100	23 years		<u>Enter %</u>			
(iii) Equity	n/a						
(iv) Guarantees	n/a						
(v) Reimbursable grants	8						
(vi) Grants	n/a						
(vii) Results-based payments	n/a						
(b) Co-financing information	Total amount			Currency			
	<u>Enter amount</u>			Options			
Name of institution	Financial instrument	Amount	Currency	Tenor & grace	Pricing	Seniority	
IFC ⁸	<u>Senior Loans</u>	<u>400</u>	<u>million USD (\$)</u>	<u>23 years</u>	<u>Enter%</u>	<u>Options</u>	
Other Institutions	<u>Senior Loans</u>	<u>400</u>	<u>million USD (\$)</u>	<u>23 years</u>	<u>Enter%</u>	<u>Options</u>	
IFC and Other Institutions	<u>Subordinated Loans</u>	<u>200</u>	<u>million USD (\$)</u>	<u>23 years</u>	<u>Enter%</u>	<u>Options</u>	
IFC and Client Fees ⁹	<u>Grant</u>	<u>4</u>	<u>million USD (\$)</u>	<u>n/a</u> <u>n/a</u>	<u>Enter%</u>	<u>Options</u>	
(c) Total financing (c) = (a)+(b)	Amount			Currency			
	<u>1,262</u>			<u>million USD (\$)</u>			
(d) Other financing arrangements and contributions (max. 250 words, approximately 0.5 page)	n/a						
C.2. Financing by component							
Component	Output	Indicative cost Options	GCF financing		Co-financing		
			Amount Options	Financial Instrument	Amount Options	Financial Instrument	Name of Institutions

⁸ Amount is indicative and subject to the amount approved by IFC for the potential sub-projects

Component 1: PPP Structuring Facility	All	USD12 million	USD8 million	Reimbursab le grants	USD4 million	Grants	IFC ⁹
Component 2: Concessional Finance Facility	All	USD1,250 million	USD150 million	Senior loans	USD400 million	Senior loans	IFC ⁸
				Senior loans	USD400 million	Senior loans	Other financial institutions (DFI, commercial banks, etc) ⁸
	All		USD100 million	Subordinate d loans	USD200 million	Subordinate d loans	IFC and Others ⁸
Indicative total cost (USD)		USD1,262 million	USD258 million		USD1,004 million		

C.3 Capacity building and technology development/transfer (max. 250 words, approximately 0.5 page)

C.3.1 Does GCF funding finance capacity building activities? Yes No

C.3.2. Does GCF funding finance technology development/transfer? Yes No

Refer to Activity 1.2: Deliver capacity building programs on climate-resilient water PPPs

⁹ This amount is indicative and expected to be sourced from IFC's own resources (in-kind resources such as time and cost)/donor funding as well as success fees to be collected from clients

D. EXPECTED PERFORMANCE AGAINST INVESTMENT CRITERIA

This section refers to the performance of the project/programme against the investment criteria as set out in the GCF's [Initial Investment Framework](#).

D.1. Impact potential (max. 500 words, approximately 1 page)

This RWI Facility is expected to contribute to the Fund's objective of "promote the paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change, taking into account the needs of those developing countries particularly vulnerable to the adverse effects of climate change". It aims to do this in two ways, mitigating emissions from the wastewater treatment process, and supporting climate resilient water supply infrastructure to help target cope with changes in stream flows and variable water availability. It seeks to impact ~17.68 million direct beneficiaries and mitigating ~ 3.64 million tons CO₂e over the life of the facility (30 years)/~ 104,012 tons CO₂e per year. By doing so, it will focus on the following impact areas; i) Enhanced livelihoods of the most vulnerable people, communities, and regions, ii) Increase health and well-being, and iii) food and water security.

Wastewater treatment and discharge account directly for 12 per cent and 4 per cent of global methane and nitrous oxide emissions, respectively. Reducing the release of these greenhouse gases (GHGs) is a major opportunity for climate change mitigation¹⁰. As evidenced in the EU where methane emissions decreased by over 50 per cent, while nitrous oxide emissions decreased by almost 17 per cent¹¹, release of GHGs from wastewater and fecal sludge can be reduced through the improved design, management, and adjustment of operating conditions of wastewater treatment plants (WWTPs). When coupled with energy efficiency measures and improved technologies, they can decrease energy consumption and reduce carbon dioxide (CO₂) emissions. These measures could include i) optimize aeration efficiency to reduce dissolved GHGs in the final effluent, ii) avoid uncontrolled transitory phases in the reactors to reduce direct emissions, iii) Promote low- impact sludge disposal, and iv) implement operational improvements and energy recovery systems to minimize energy use.

Expanding inclusive and reliable water and sanitation services is key to building more equitable communities, resilient livelihoods, and climate-smart economies. While supporting utilities and service delivery agencies implement water supply infrastructure projects, this facility will also strengthen a utility's internal capabilities in operational and managerial processes, as well as in human and leadership skills by bringing in private sector expertise. The projects implemented will focus on long-term sustainability through improved demand management, sustainable tariffs (and subsidies), non-revenue water reduction, and digitalization of water utilities, as well as PSP and commercial financing. This comprehensive approach can create the enabling environment required to adapt to climate change and step closer to achieving universal access to sustainable WSS services, while addressing risks tied to overreliance on short-term financing and external funding. Diversifying capital sources will help in mitigating long-term financial instability and reducing the financial burden on municipal level service providers and utilities.

D.2. Paradigm shift potential (max. 500 words, approximately 1 page)

The RWI Facility is an enabler for target countries to realize their ambitious climate and water goals and leverage scarce public resources to unlock commercial capital and implement private sector solutions. This paradigm shift will go beyond individual project contributions in three ways; i) remove binding constraints to increase the pipeline of bankable projects and creditworthiness of service providers, ii) diversify and expand the spectrum of finance solutions and partnerships, iii) creating synergies between governments and the private sector. It will help shift mindsets to viewing utilities as future borrowers of commercial finance and help in bridging the interests of utilities with those of potential lenders by designing innovative transactions that make commercial borrowing less expensive for utilities and less risky for lenders.

The RWI Facility will focus on delivering a "knowledge and learning into implementation" approach, by leveraging the robust knowledge architecture that the IFC has built through its portfolio of operations and through outputs achieved through GCF financing. This includes systematic deployment of technical expertise, solutions, tools, and global and country diagnostics. This agenda will be designed and executed with key partners – clients and donors – to leverage the comparative advantage of all involved.

¹⁰ The essential drop to reach Net-Zero: Unpacking freshwater's role in climate change mitigation, Ricard Giné-Garriga (Stockholm International Water Institute)

¹¹ EEA 2021 Annual European Union greenhouse gas inventory 1990–2021 and inventory report 2021

The “predictability” of steady financing brought by an established RWI facility will help reduce preparation time, cost, and the lengthy approval process. Each successive transaction or PPP will document key lessons and inform scope and design of components and activities under subsequent phases. It will focus on creating **replicable outputs** that can be tailored to country contexts. The programmatic approaches will provide opportunities to increase speed of project preparation (e.g., making use of standardized documentation like operation manuals, template frameworks for environment and social) and implementation (e.g., PPP agreements, performance-based contracts, TORs, standard bidding documents, etc).

This approach to deliver appropriate and readily accessible knowledge where it is needed and build agile feedback loops to channel experience and evaluation back into the process. The following tools and platforms will be deployed for the successful implementation of the RWI Facility:

[Utilities for Climate \(U4C\)](#) is an initiative designed to offer water utilities access to IFC’s advisory services, investment products and knowledge-sharing partnerships. It is a demand-driven initiative focused on the creation of an enabling environment to build relationships with water utilities as they plan to develop solutions to address climate change and boost commercial water infrastructure investment opportunities. *(USD0.5bn of commercial loans serving ~66 million people in first 2.5 years)*

[IFC Cities Platform](#): The IFC Sustainable Cities programme assists subnational governments and private-sector partners, helping them attract investments and financing for urban infrastructure projects in a range of sectors, including transport, water, wastewater, solid waste, and district energy. The programme helps urban municipalities implement their capital investment programmes and mobilize commercial financing for their infrastructure projects through non-sovereign loans, municipal bonds, and PPPs *(Since its launch in 2018, the programme has facilitated USD393m in financing with around 1.7m people benefitting from improved infrastructure services)*

By integrating green and grey infrastructure—such as wastewater reuse systems, rainwater harvesting, and smart storage solutions—these systems offer a buffer against the uncertainties of climate change. Further, water supply and sanitation infrastructure helps vulnerable communities adapt to rising temperatures and heat levels as well as increasing frequency of shock events including floods and droughts.

D.3. Sustainable development (max. 500 words, approximately 1 page)

The first target under Sustainable Development Goal (SDG) 6, Target 6.1, is, “By 2030, achieve universal and equitable access to safe and affordable drinking water for all”. In the last two decades, investment in drinking water services has led to considerable increases in access, with two billion people globally gaining access to safely managed drinking water services. In 2020, 74% of the world’s population used safely managed drinking water, up from 62% in 2000. Despite this progress, there are wide geographical disparities, and 2 billion people still do not use safely managed drinking water. This facility is expected to contribute to the achievement of SDG 6 through the provision of essential water supply services in an environmentally, socially, and economically sustainable manner. It will also contribute to the good health and well-being (SDG 3); gender equality (SDG 5); clean water and sanitation (SDG 6); decent work and economic growth (SDG 8); climate-resilient infrastructure (SDG 9); and sustainable cities and communities (SDG 11). The Facility will also contribute towards less sector-focused SDGs by promoting climate action (SDG 13) through public and private entities, and help to build partnerships for the goals (SDG 17) between governments, the private sector and civil society.

As per the “Progress on household drinking water, sanitation and hygiene 2000–2022: special focus on gender” report, achieving SDG targets in low-income countries will require current rates of progress to increase sixfold, 13-fold and 16-fold for basic water, sanitation and hygiene, respectively, and 20-fold and 21-fold for safely managed water and safely managed sanitation services, respectively. The 1.9 billion people living in fragile contexts were twice as likely to lack safely managed drinking water and basic hygiene, and one and a half times as likely to lack safely managed sanitation services. This facility targets these issues through the selection of countries, and in ensuring access to those that are disproportionately impacted by lack of safely managed water sources. Provision to water services will help ease the burden of water collection and carriage which remains significantly heavier for women.

D.4. Needs of recipient (max. 500 words, approximately 1 page)

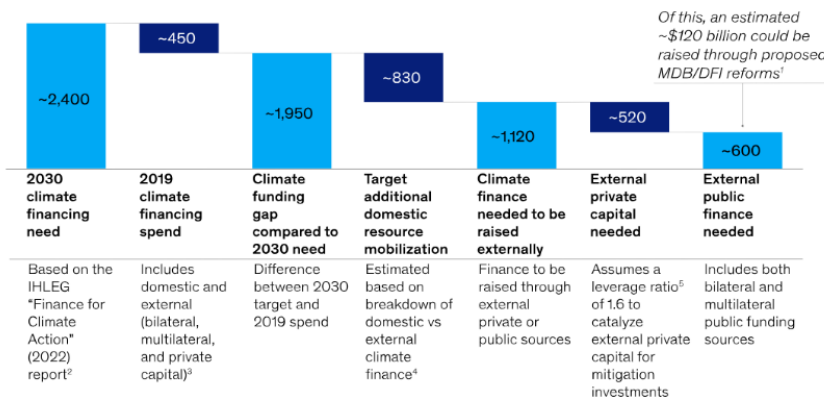
This RWI Facility will focus on meeting the technical, financial, and institutional needs of target countries towards meeting their climate goals.

Developing countries are most vulnerable to climate change

The target countries identified are particularly vulnerable to climate change as they are poised for significant economic and population expansion, however existing systems will not be able to cope with the impacts of climate change. Over the next decade, the economies and populations in developing countries are projected to be among the fastest growing in the world. Between now and 2050, half of additions to the global population will likely be in Africa and about 30 percent in Asia. Further, the International Monetary Fund (IMF) estimates that, compared to 2021, developing countries' GDP could increase by 40 percent to more than \$60 trillion by 2028, a per-capita increase of over 30 percent¹². Without support for mitigation, these countries are likely to continue or further down the path of carbon intensive growth, undermining global progress toward net zero emissions.

Climate Finance and Potential Sources

Climate finance needs and potential sources for developing countries by 2030 (excluding China), 2019, \$ billion per annum



Mobilizing both domestic and international concessional finance will be vital to achieve net-zero emissions by 2050. Climate-development financing needs are larger as a percentage of GDP in countries that have contributed least to global warming, and where access to capital markets and private capital is more limited. Financing needs for climate action average 1.4% of GDP by 2030, but there are large differences across country income classes: 1.1% of GDP, on average, in upper-middle-income countries (UMICs), increasing to 5.1% in lower-middle-income countries

(LMICs) and as much as 8.0% in low-income countries (LICs) (as you can see in figure above). Mobilizing both domestic and international concessional finance will be vital for LICs and LMICs¹³. Research by McKinsey indicates that about \$2 trillion in additional finance is needed per annum by 2030 to cap warming at 1.5°C above pre-industrial levels. This amount includes investments needed to transform the energy system, respond to growing climate change vulnerability, scale sustainable agriculture, and restore natural capital and biodiversity. An additional \$3 trillion per annum is also required to invest in the human capital and broader infrastructure needed to meet the development goals of developing countries.

Raising capital to adopt low carbon pathways in the water sector will require institutional capacity enhancement. PPP projects are complex to prepare, structure and transact, and usually require specialized skills not always available. Successful PPP programmes require strong institutions that can effectively negotiate contracts and manage and monitor their long-term fiscal impact. Service delivery agencies and ministries of finance often lack the expertise and tools needed to safeguard public finances against fiscal risks arising from PPPs. Similarly, they are not always creditworthy or have the ability to leverage large scale commercial needed to finance resilient infrastructure.

The description of interventions which will be supported by the facility will vary depending on each country's context, market maturity and technical know-how. It will be tailored to the needs within each subsector and based on the readiness of the stakeholders.

D.5. Country ownership (max. 500 words, approximately 1 page)

The stakeholder engagement for the RWI Facility will be executed in two phases: (i) initial consultations with the NDAs for GCF, and (ii) the development and implementation of sub-projects. As part of this proposal, IFC has engaged with the NDAs of the target countries to introduce the RWI Facility and it is understood that the programme has the potential to contribute in addressing water scarcity related in these countries and to their ongoing efforts in climate change mitigation and adaptation.

¹² <https://www.mckinsey.com/capabilities/sustainability/our-insights/solving-the-climate-finance-equation-for-developing-countries>
¹³ <https://www.worldbank.org/en/news/feature/2023/03/13/what-you-need-to-know-about-how-cdcs-estimate-climate-finance-needs>

The stakeholder engagement for development and implementation of the sub-projects will be based on IFC's policies and practices as applicable to these sub-projects and in accordance with Annex 6, the Environmental and Social (E&S) Management Framework as well as Annex 8, the Gender Assessment and Action plan.

Please refer to Annex 7 for the summary of consultations and stakeholder engagement plan.

D.6. Efficiency and effectiveness (max` . 500 words, approximately 1 page)

The RWI Facility will support increased access to water supply and adoption of unconventional water sources such as wastewater reuse. It will also focus on reducing greenhouse gas emissions from poorly collected and treated wastewater and reducing non-revenue water. The facility will address water scarcity and climate change impacts in different countries, with a focus on increasing water resilience, protecting water sources, and improving sanitation services. In addition, the RWI facility will support adaptation measures to address these challenges and improve water management practices.

The concessional financing and grants will be instrumental in helping to close critical viability gaps, strengthen local capacities, bring more private sector projects to market, lower the cost of borrowing, and crowd in commercial investments.

E. LOGICAL FRAMEWORK

DISCLAIMER:

The information provided herein is based on an indicative pipeline and is intended for informational purposes only. The outcomes presented are not demonstrative of all macro factors that may come into play during the implementation of specific projects and have impact on the outcomes. Therefore, all values mentioned are estimative and should not be considered as definitive or binding. The estimations provided are subject to change and do not constitute any representation by IFC with respect to any calculations or numbers included therein.

Three main period are considered over the lifetime of the facility:

1. Project development, investment, and implementation period: Year 0 to Year 15
2. End-term: Year 30

For target setting and impact estimation, it is considered that all Project will be operating at the end of the “Project development and investment period” and that being construction of new assets to cover an existing need/demand, most of the impact or benefits are linked to the installed capacity and therefore realized fully at the beginning of the operation periods.

E.1. Project/Programme Focus

- Reduced emissions (mitigation)
- Increased resilience (adaptation)

E.2. GCF Impact level: Paradigm shift potential (max 600 words, approximately 1-2 pages)

Assessment Dimension	Current state (baseline)		Potential target scenario (Description)	How the project/programme will contribute (Description)
	Description	Rating		
Scale	The water and sanitation sector in developing countries faces significant challenges due to climate change, with increasing water scarcity and deteriorating infrastructure.	<u>Low</u>	Develop and implement at least 6 large-scale climate-resilient water infrastructure sub-projects across multiple countries., mobilizing USD 1.000 billion in private capital.	These components will enable the development of a pipeline of bankable, large-scale climate-resilient water infrastructure sub-projects, contributing to ARA1 (Most vulnerable people and communities), ARA2 (Health, well-being, food and water security), and

	<p>Currently, there is limited private sector investment in climate-resilient water infrastructure due to high perceived risks and lack of bankable projects.</p>		<p>The programme will establish two key components:</p> <ol style="list-style-type: none"> PPP Structuring Facility: Will provide systematic advisory support to governments for PPP water infrastructure projects, addressing key barriers such as lack of public funding for project preparation and inadequate capacity. Concessional Finance Facility: Will provide USD 250 million in concessional loans to support climate-resilient water infrastructure projects. 	<p>ARA3 (Infrastructure and built environment).</p>
<p>Replicability</p>	<p>Currently, there are limited examples of successful large-scale climate-resilient water infrastructure projects in developing countries that have attracted significant private investment. The existing projects are generally small-scale, with some exceptions. There is a reluctance to invest in larger projects due to perceived risks and inadequate capacity to manage such projects. Knowledge sharing and technology transfer between projects and countries is limited.</p>	<p><u>Low</u></p>	<p>At least 3 countries adopting and replicating the project models. Widespread replication of successful climate-resilient water infrastructure project models across different municipalities, countries, and regions.</p> <p>The PPP Structuring Facility will:</p> <ol style="list-style-type: none"> Develop standardized tools and approaches (e.g., climate risk assessment methodologies, PPP frameworks) that can be 	<p>These efforts will contribute to MRA3 (Buildings, cities, industries and appliances) by promoting replication of low-emission, climate-resilient infrastructure solutions.</p>

			<p>easily adapted and replicated in different contexts.</p> <ol style="list-style-type: none"> 2. Facilitate knowledge sharing and technology transfer between projects and countries. 3. Create replicable models for project structuring and financing. <p>The Concessional Finance Facility will demonstrate successful blended finance models that can be replicated in other countries and regions.</p>	
<p>Sustainability</p>	<p>While there is growing recognition of the need to address climate vulnerabilities in the water sector, there are significant gaps in institutional capacity and regulatory frameworks to support sustainable climate-resilient water infrastructure.</p> <p>Financial resources for such initiatives are limited, and there is little private sector engagement in the sector. Many water utilities and municipalities lack the technical capacity to design, implement, and operate climate-resilient water infrastructure effectively.</p>	<p><u>Medium</u></p>	<ul style="list-style-type: none"> - While there is growing recognition of the need to address climate vulnerabilities in the water sector, there are significant gaps in institutional capacity and regulatory frameworks to support sustainable climate-resilient water infrastructure. - Financial resources for such initiatives are limited, and there is little private sector engagement in the sector. - Many water utilities and municipalities lack the technical capacity to design, implement, and operate 	<p>These efforts will contribute to long-term sustainability across all targeted results areas (MRA3, ARA1, ARA2, ARA3).</p> <p>Co-benefits:</p> <ol style="list-style-type: none"> 1. Improved ecosystems with decreased pollution from effluents released into rivers and aquatic bodies. 2. Enhanced gender equality through increased participation of women in decision-making and employment opportunities in the water sector. 3. Economic growth through job creation and improved productivity due to better water security.

			<p>climate-resilient water infrastructure effectively.</p> <p>Implementation Period (Year 15): At least 3 countries with strengthened institutional and regulatory frameworks.</p> <p>Final target (Year 30): At least 6 countries with strengthened institutional and regulatory frameworks to better support climate-resilient water investments, with ongoing private sector engagement and investment in the sector. The programme will:</p> <ol style="list-style-type: none"> 1. Work to strengthen institutional capacity and regulatory frameworks to support climate-resilient water projects. 2. Support the development of sustainable tariff structures and improved operational efficiency (e.g., reducing non-revenue water) to enhance the financial sustainability of water utilities. 	<p>Assumptions:</p> <ul style="list-style-type: none"> • Qualified sponsors are interested in investing in RWI projects. • Political will to implement the project remains strong. • Insufficient legal and regulatory frameworks to enable investment in RWI are addressed through the programme's capacity building efforts.
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E.3. GCF Outcome level: Reduced emissions and increased resilience (IRMF core indicators 1-4, quantitative indicators)					
GCF Result Area	IRMF		Baseline	Target	Assumptions / Note

	Indicator	Means of Verification (MoV)		Mid-term	Final	
<u>MRA3 Buildings, cities, industries and appliances</u>	<u>Core 1: GHG emissions reduced, avoided or removed/sequestered</u>	<ul style="list-style-type: none"> ▪ Ex-ante and ex-post analyses (conducted by a third-party contractor). ▪ Annual project performance reports. ▪ verification reports. 	0 tCO ₂ eq	-40.4 thousand tCO ₂ eq	<p>Implementation Period (0 to 15 Years): -1.8 million tCO₂eq</p> <p>Final (Year 30): -3.6 million tCO₂eq</p>	<p>Assumptions:</p> <ul style="list-style-type: none"> • No significant delays in project implementation. • Emission factors remain consistent with initial estimates. • Methodologies used: GHG accounting from World Bank Group. <p>Note:</p> <ul style="list-style-type: none"> • The impact of the facility is evaluated in "net" terms, which involves estimating the difference between a project scenario and a baseline scenario. As a programmatic approach, it is respectively not relevant or feasible to define a country-level baseline or a project-level baseline. Therefore, the baseline (0) is considered as the current status of the sector wherever the project is implemented.

						<ul style="list-style-type: none"> Breakdown by project type will be provided in annual reports.
<p><u>ARA1 Most vulnerable people and communities</u></p>	<p><u>Core 2: Direct and indirect beneficiaries reached</u></p>	<ul style="list-style-type: none"> Project monitoring reports Household surveys (disaggregated by sex, income level, and urban/rural location) Census data Utility customer databases 	0	<p>Direct beneficiaries: 176 thousand (87.9 thousand female)</p> <p>Indirect beneficiaries: 265 thousand (131.9 thousand female)</p>	<p>Implementation Period (0 to 15 Years):</p> <p>Direct beneficiaries: 8.8 million (4.3 million female)</p> <p>Indirect beneficiaries: 13.26 million (6.5 million female)</p> <p>Final (Year 30):</p> <p>Direct beneficiaries: 17.68 million (8.7 million female)</p> <p>Indirect beneficiaries: 26.5 million (13.1million female)</p>	<p>Assumptions:</p> <ul style="list-style-type: none"> The beneficiaries of a given asset are obtained by translating the capacity into a net number of people with enhanced access to water supply or sanitation services. Therefore, the beneficiaries are created at the commissioning of the asset and does not evolve overtime. Population growth rates remain consistent with projections. No major unforeseen migration patterns. Equal access to improved water services across gender groups. <p>Note:</p> <ul style="list-style-type: none"> Indirect beneficiaries calculated as 1.5

						times direct beneficiaries.
<u>ARA2 Health, well-being, food and water security</u>	<u>Supplementary 2.3: Beneficiaries (female/male) with more climate-resilient water security</u>	<ul style="list-style-type: none"> Water utility reports Household surveys. Water quality and quantity monitoring data. 	0	Approximately 373.5 thousand (185.8 thousand female)	<p>Implementation Period (0 to 15 Years): Approximately 18.6 million (9.2 million female)</p> <p>Final (Year 30): Approximately 37.3 million (18.5 million female)</p>	<p>Assumptions:</p> <ul style="list-style-type: none"> Improved water infrastructure leads directly to enhanced water security for beneficiaries. Climate resilience measures are effective against projected climate impacts. <p>Note:</p> <ul style="list-style-type: none"> Water security measured by improved access, reliability, and quality of water supply. Beneficiaries are people who benefits from a project with climate adaptation benefits.
<u>ARA3 Infrastructure and built environment</u>	<u>Core 3: Value of physical assets made more resilient to the effects of climate change and/or</u>	<ul style="list-style-type: none"> Project completion reports Asset valuation assessments 	0	USD 1 billion	<p>Implementation Period (0 to 15 Years): USD 1 billion</p>	<p>Assumption:</p>

	<u>more able to reduce GHG emissions</u>				<p>Final (Year 30): USD 1 billion</p> <ul style="list-style-type: none"> No major delays in project implementation. <p>Note:</p> <p>Includes value of new climate-resilient water infrastructure (as described in section A.21) assets.</p>
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E.4. GCF Outcome level: Enabling environment (IRMF core indicators 5-8 as applicable)					
Core Indicator	Baseline context (description)	Rating for current state (baseline)	Target scenario (description)	How the project will contribute	Coverage
<p><u>Core Indicator 5: Degree to which GCF investments contribute to strengthening institutional and regulatory frameworks for low emission climate-resilient development pathways in a country-driven manner</u></p>	<ul style="list-style-type: none"> Most target countries have basic water sector policies in place but lack comprehensive frameworks for climate-resilient water infrastructure. Regulatory environments are often not conducive to private sector participation in water projects. 	<p><u>low</u></p>	<p>By project end, at least 3 target countries have strengthened institutional and regulatory frameworks that enable climate-resilient water infrastructure development and private sector participation.</p> <p>This includes:</p> <ul style="list-style-type: none"> Updated water sector policies that integrate climate resilience. Improved regulations for PPPs in climate- 	<p>The project will:</p> <ol style="list-style-type: none"> Provide technical assistance to develop and implement climate-responsive water sector policies and regulations. Support capacity building for government institutions on climate risk assessment and management in water infrastructure. Assist in developing PPP frameworks 	<p><u>Multi-countries</u></p>

	<ul style="list-style-type: none"> - Institutional capacity for climate risk assessment and management in the water sector is limited. 		<p>resilient water projects.</p> <ul style="list-style-type: none"> • Enhanced institutional capacity for climate risk management in the water sector. 	<p>that incentivize climate-resilient water investments.</p>	
<p><u>Core Indicator 6: Degree to which GCF investments contribute to technology deployment, dissemination, development or transfer and innovation</u></p>	<ul style="list-style-type: none"> - Limited deployment of innovative, climate-resilient water technologies in target countries. - Barriers include high upfront costs, lack of local technical capacity, and regulatory obstacles. 	<p><u>low</u></p>	<p>Widespread adoption of climate-resilient water technologies across target countries, including:</p> <ul style="list-style-type: none"> • Water-efficient irrigation systems. • Advanced wastewater treatment and reuse technologies. • Smart water management systems. 	<p>The project will:</p> <ol style="list-style-type: none"> 1. Provide concessional financing to reduce the cost barrier for adopting innovative technologies. 2. Support technology transfer through knowledge sharing and capacity building activities. 	<p><u>Multi-countries</u></p>
<p><u>Core indicator 7: Degree to which GCF Investments contribute to market development/transformation at the sectoral, local, or national level</u></p>	<ul style="list-style-type: none"> - Limited private sector participation in climate-resilient water infrastructure. - Lack of bankable projects and perceived high risks deter private investment. - Public sector dominance in water 	<p><u>low</u></p>	<p>Transformed water infrastructure market with increased private sector participation:</p> <ul style="list-style-type: none"> • At least 2 successful PPP projects in climate-resilient water infrastructure. • Established pipeline of bankable climate-resilient water projects. 	<p>The project will:</p> <ol style="list-style-type: none"> 1. Use blended finance to demonstrate the viability of climate-resilient water investments. 2. Develop a pipeline of bankable projects through the PPP Structuring Facility. 3. Build capacity of local financial institutions to assess 	<p><u>Multi-countries</u></p>

	sector with limited market-oriented approaches.		<ul style="list-style-type: none"> Increased private sector investment in the water sector. 	and finance climate-resilient water projects.	
<p><u>Core indicator 8: Degree to which GCF investments contribute to effective knowledge generation and learning processes, and use of good practices, methodologies and standards</u></p>	<ul style="list-style-type: none"> Limited knowledge sharing on climate-resilient water infrastructure across countries. Lack of standardized methodologies for assessing climate resilience in water projects. Insufficient platforms for disseminating best practices. 	<u>medium</u>	<p>Established knowledge sharing mechanisms and standardized approaches:</p> <ul style="list-style-type: none"> Regional knowledge hub for climate-resilient water infrastructure. Standardized methodologies for climate risk assessment in water projects. Regular cross-country learning events and publications. 	<p>The project will:</p> <ol style="list-style-type: none"> Disseminate lessons learned. Develop and promote standardized tools for climate risk assessment in water projects. Organize regular knowledge sharing events and produce publications on best practices. 	<u>Multi-countries</u>

E.5. Project/programme specific indicators (project outcomes and outputs)

Project/programme results (outcomes/ outputs)	Project/programme specific Indicator	Means of Verification (MoV)	Baseline	Target		Assumptions / Note
				Mid-term	Final	
<p>Outcome 1: Enhanced capacity of government agencies to develop and implement climate-resilient water PPP projects through the</p>	Number of countries with improved capacity to develop and implement climate-resilient water PPP projects	<ul style="list-style-type: none"> Capacity assessment reports Government self-assessments 	0	At least 3 countries across target countries.	Up to 5 countries across target countries.	<p>Assumption:</p> <ul style="list-style-type: none"> Political will exists to pursue PPP approaches in the water sector

<p>PPP Advisory and Technical Assistance</p>						<ul style="list-style-type: none"> • Knowledge gained translates into practical application
<p>Output 1.1: Technical assistance and capacity building provided through the PPP Structuring Facility</p>	<p>Number of countries receiving comprehensive technical assistance for climate-resilient water PPP projects.</p>	<ul style="list-style-type: none"> • Technical assistance reports. • Project preparation documents. 	<p>0</p>	<p>Up to 3 countries</p>	<p>Up to 3 countries</p>	<p>Assumption:</p> <ul style="list-style-type: none"> • Governments are receptive to PPP approaches for climate-resilient water projects. • Political stability allows for consistent engagement. <p>Note:</p> <ul style="list-style-type: none"> • Technical assistance includes project identification, structuring, and transaction support
<p>Output 1.2: Climate-resilient water PPP frameworks and guidelines developed</p>	<p>Number of countries adopting or improving climate-resilient water PPP frameworks and guidelines.</p>	<ul style="list-style-type: none"> • Official government documents. 	<p>0</p>	<p>Up to 3 countries</p>	<p>Up to 3 countries</p>	<p>Assumption:</p> <ul style="list-style-type: none"> • Governments are willing to update PPP frameworks to incorporate climate resilience. • No major political shifts that disrupt PPP policy development <p>Note:</p>

						<ul style="list-style-type: none"> Adoption defined as integration into national planning process.
<p>Outcome 2: Increased private sector investment in climate-resilient water infrastructure</p>	<p>Volume of capital mobilized for climate-resilient water infrastructure projects.</p>	<ul style="list-style-type: none"> Financial close documentation. Third-party verification. 	<p>USD 0</p>	<p>USD 1.000 billion</p>	<p>USD 1.000 billion</p>	<p>Assumption:</p> <ul style="list-style-type: none"> Macroeconomic conditions remain favorable for investment. No major global financial crises occur during project period. <p>Note:</p> <ul style="list-style-type: none"> Includes both equity and debt from private sources, excluding development finance institutions.
<p>Output 2.1: Pipeline of bankable climate-resilient water infrastructure projects developed</p>	<p>Number of bankable climate-resilient water infrastructure projects developed.</p>	<ul style="list-style-type: none"> Project appraisal outcomes. Investment committee approvals. 	<p>0 projects</p>	<p>Up to 6 projects</p>	<p>Up to 6 projects</p>	<p>Assumption:</p> <ul style="list-style-type: none"> Sufficient demand exists across different project types. Technical capacity available to develop diverse project pipeline. <p>Note:</p> <ul style="list-style-type: none"> "Bankable" defined as projects approved by investment committee and market-tested with potential investors.

<p>Output 2.2: Innovative financing mechanisms for climate-resilient water projects established</p>	<p>Number of innovative financing mechanisms piloted.</p>	<ul style="list-style-type: none"> Blended Finance Committee approval documentation. 	<p>0</p>	<p>At least 4 mechanisms</p>	<p>At least 4 mechanisms</p>	<p>Assumption:</p> <ul style="list-style-type: none"> Regulatory environments allow for innovative financial products. Investor appetite exists for new mechanisms.
<p>Output 2.3: Public-private partnership models for climate-resilient water infrastructure demonstrated</p>	<p>Number of successful PPP transactions closed for climate-resilient water infrastructure. Projects.</p>	<ul style="list-style-type: none"> Signed PPP agreements. Financial close documents. Independent evaluation reports. 	<p>0</p>	<p>At least 2 PPP transactions</p>	<p>At least 2 PPP transactions</p>	<p>Assumption:</p> <ul style="list-style-type: none"> Political support for PPPs remains stable. Private sector sees value in long-term water infrastructure investments. <p>Note:</p> <ul style="list-style-type: none"> "Successful" defined as reaching financial close and beginning implementation.
<p>Outcome 3: Enhanced climate resilience of water supply systems in vulnerable communities</p>	<p>Number of projects which will allow more resilient water supply systems and therefore reduce the quantity of disruptions due to climate-related</p>	<ul style="list-style-type: none"> Utility performance reports. 	<p>0</p>	<p>4 projects</p>	<p>4 projects</p>	<p>Assumption:</p> <ul style="list-style-type: none"> Implemented resilience measures perform as expected. <p>Note:</p>

	events in project areas.					<ul style="list-style-type: none"> Disruptions measured in terms of duration, frequency, and population affected.
Output 3.1: Climate-resilient water supply infrastructure developed or upgraded	Volume of climate-resilient water supply capacity created or rehabilitated:	<ul style="list-style-type: none"> Technical audits. Investment decision records. Project completion reports. 	0	850 million litres per day total	850 million litres per day total	<p>Assumption:</p> <ul style="list-style-type: none"> No major delays in construction or rehabilitation works. Unconventional sources (e.g., desalination, water reuse) prove feasible in target areas. <p>Note:</p> <ul style="list-style-type: none"> Resilience features include flood protection, drought preparedness, and energy efficiency.
Outcome 4: Improved wastewater management contributing to climate change mitigation and adaptation	Number of operational wastewater reuse projects or systems enhancing resource recovery and promoting zero liquid discharge	Volume of wastewater safely reused and/or resources recovered, contributing to climate resilience and emissions reduction	0	Up to 2 wastewater reuse projects operational	Up to 2 wastewater reuse projects operational with demonstrated climate benefits	<p>Assumptions:</p> <p>Regulatory frameworks continue to support water reuse and resource recovery</p> <p>Market demand for recovered resources remains stable or increases</p> <p>Climate benefits of wastewater reuse and resource recovery are</p>

						effectively quantified and reported. Note: Specific targets for resource recovery and climate benefits (e.g., water savings, energy recovery, GHG emission reductions) will be defined for each project based on local context and technology deployed.
Output 4.1: Wastewater reuse and resource recovery systems implemented.	Number of wastewater reuse projects or enhancing resources recovery and zero liquid discharge:	<ul style="list-style-type: none"> Number of projects approved. 	0	Up to 2 wastewater reuse projects Project specific, could only be defined when underlying projects are identified.	Up to 2 wastewater reuse projects Project specific, could only be defined when underlying projects are identified.	Assumption: <ul style="list-style-type: none"> Regulatory frameworks support water reuse and resource recovery. Market demand exists for recovered resources.
Project/programme co-benefit indicators						
Co-benefit 1: Improved public health outcomes	Reduction in waterborne disease incidence in project areas	<ul style="list-style-type: none"> Public health records. Water quality monitoring data. 	Baseline to be established in Year 1 for each project area	Reduction in water borne disease depends on the project context (urban, rural), the target country and the initial baseline (sanitation coverage mainly).		Assumption: <ul style="list-style-type: none"> Improved water and sanitation services lead directly to health benefits.

				The target will be established for each project individually.	Note: <ul style="list-style-type: none"> Focus on diseases directly linked to water quality (e.g., diarrheal diseases).
Co-benefit 2: Enhanced gender equality in the water sector	Percentage of women in technical and management positions in supported water utilities and government agencies	<ul style="list-style-type: none"> Human resource records from various agencies. 	Baseline to be established in Year 1 for each organization	The target is to achieve parity at the utility/Sponsor level. Depending on the baseline and the size of the considered organization, the implementation period usually takes between 5 and 10 years.	Assumption: <ul style="list-style-type: none"> Sufficient qualified women candidates available. Organizational cultures supportive of gender equality.
Co-benefit 3: Enhanced climate-resilient livelihoods	Number of people benefiting from new climate-resilient livelihood opportunities created by the project.	<ul style="list-style-type: none"> Project reports. Socio-economic surveys. Case studies. 	Baseline to be established in Year 1 for each organization	<p>The target that the facility will aim at greatly depends on the socio-economic context in which the project will be developed and implemented.</p> <p>For each project, the targets will be defined based on the baseline, in order to estimate the number of people benefiting of improved climate-resilient livelihoods linked to an enhanced access to water supply and sanitation services.</p>	Assumption: <ul style="list-style-type: none"> Local economic conditions support new livelihood opportunities. Note: <ul style="list-style-type: none"> Livelihood opportunities include jobs in project implementation, water-efficient agriculture, and water-related businesses.

E.6. Project/programme activities and deliverables

Activities	Description	Sub-activities	Deliverables
Activity 1.1: Provide technical assistance for climate-resilient water PPP projects	Deliver technical support to targeted government agencies to develop and implement	Sub-activity 1.1.1: Identify potential climate-resilient water PPP projects.	Deliverables:

	climate-resilient water PPP projects.	<p>Sub-activity 1.1.2: Conduct initial project screening and structuring.</p> <p>Sub-activity 1.1.3: Support transaction preparation.</p> <p>Sub-activity 1.1.4: Tender process support documentation.</p>	<ul style="list-style-type: none"> • Project identification documentation. • Initial project screening reports. • Transaction structuring documents. • Tender process support documentation.
Activity 1.2: Deliver capacity building programs on climate-resilient water PPPs	Design and implement training programs to enhance government agencies' capacity in developing and managing climate-resilient water PPP projects.	<p>Sub-activity 1.2.1: Develop training curricula on climate-resilient water PPPs.</p> <p>Sub-activity 1.2.2: Facilitate knowledge transfer on climate-resilient water PPPs.</p>	<p>Deliverables:</p> <ul style="list-style-type: none"> • Capacity building materials. • Knowledge products (best practice guides, case studies).
Activity 2.1: Development of pipeline of bankable climate-resilient water infrastructure projects	Identifying, screening, and developing a robust pipeline of climate-resilient water infrastructure projects that are attractive to private sector investment.	<p>Sub-activity 2.1.1: Conduct business development and origination.</p> <p>Sub-activity 2.1.2: Perform concept review.</p> <p>Sub-activity 2.1.3: Undertake Blended Finance Committee concept review.</p> <p>Sub-activity 2.1.4: Conduct project appraisal.</p>	<p>Deliverables:</p> <ul style="list-style-type: none"> • Project pipeline documentation. • Concept review outcomes. • Blended Finance Committee screening results. • Project appraisal outcomes.
Activity 2.2: Establishment of innovative financing mechanisms for climate-resilient water projects	Design and pilot innovative financing instruments to attract private capital to climate-resilient water infrastructure projects.	<p>Sub-activity 2.2.1: Conduct investment review.</p> <p>Sub-activity 2.2.2: Obtain Blended Finance Committee approval.</p> <p>Sub-activity 2.2.3: Negotiate project-level terms.</p>	<p>Deliverables:</p> <ul style="list-style-type: none"> • Investment review outcomes. • Blended Finance Committee approval documentation. • Term sheets.

<p>Activity 2.3: Facilitate public-private partnerships for climate-resilient water infrastructure</p>	<p>Support the structuring and implementation of PPP transactions for climate-resilient water infrastructure projects.</p>	<p>Sub-activity 2.3.1: Support project-level negotiations.</p> <p>Sub-activity 2.3.2: Monitor project implementation.</p>	<p>Deliverables:</p> <ul style="list-style-type: none"> • Negotiation support documentation and Transaction advisory reports. • Project monitoring documentation.
<p>Activity 3.1: Development and upgrade climate-resilient water supply infrastructure</p>	<p>Financing to support the design, construction, and rehabilitation of water supply infrastructure with enhanced climate resilience features.</p>	<p>Sub-activity 3.1.1: Assess climate resilience aspects in project appraisal.</p> <p>Sub-activity 3.1.2: Integrate climate resilience measures into investment decisions.</p> <p>Sub-activity 3.1.3: Monitor climate resilience aspects during project implementation.</p>	<p>Deliverables:</p> <ul style="list-style-type: none"> • Climate resilience appraisal documentation. • Investment decision records. • Implementation monitoring documentation.
<p>Activity 4.1: Implement wastewater reuse and resource recovery systems</p>	<p>Financing for design and implement systems for safe wastewater reuse and recovery</p>	<p>Sub-activity 4.1.1: Identify wastewater reuse and resource recovery opportunities in project pipeline.</p> <p>Sub-activity 4.1.2: Integrate resource recovery elements into investment decisions.</p> <p>Sub-activity 4.1.3: Monitor implementation of wastewater reuse and resource recovery components.</p>	<p>Deliverables:</p> <ul style="list-style-type: none"> • Project pipeline documentation. • Investment decision records. • Implementation monitoring outcomes.

E.7. Monitoring, reporting and evaluation arrangements (max. 500 words, approximately 1 page)

The monitoring, reporting, and evaluation (MRE) arrangements for this program will adhere to the GCF's Integrated Results Management Framework and GCF's Evaluation Policy and IFC's established procedures, ensuring robust oversight and timely assessment of project progress and impacts.

1. Monitoring:

The monitoring will be conducted in accordance with IFC's Accreditation Master Agreement.

2. Reporting:

The program's reporting will be conducted in accordance with IFC's Accreditation Master Agreement.

3. Evaluation:

The program's evaluation will be conducted in accordance with IFC's Accreditation Master Agreement.

4. Special considerations:

- a) **Paradigm shift assessment:** In line with GCF requirements, the mid-term and final evaluations will include a specific assessment of the program's contribution to paradigm shift, using the three-point scale rating for scale, replicability, and sustainability as outlined in section E.2.
- b) **Enabling environment assessment:** Evaluations will also assess progress on enabling environment indicators (section E.4), providing insights into systemic changes facilitated by the program.
- c) **Gender-responsive M&E:** All monitoring and evaluation activities will incorporate gender-disaggregated data collection and gender-sensitive analysis, in line with the program's Gender Action Plan.

F. RISK ASSESSMENT AND MANAGEMENT

F.1. Risk factors and mitigations measures (max. 3 pages)

Selected Risk Factor 1

Category	Probability	Impact
<u>Technical and operational</u>	<u>Medium</u>	<u>Medium</u>

Description

Design and construction of projects. While water and wastewater treatment technologies are established and have a track record of successful implementation, the complexity of operation and maintenance can present unforeseen challenges. In addition, project construction may incur significant delays in completion.

Mitigation Measure(s)

IFC will review potential construction arrangement and take reasonable measures to ensure that risks related to completion are identified and appropriate mitigation measures are applied. Any sponsors selected will satisfy IFC's requirements regarding know-how and their respective management teams will have to meet IFC requirements regarding experience in leading major water infrastructure projects. The Program will endeavor to support technologies that have been proven to be effective at scale, limiting the operational risk.

Selected Risk Factor 2

Category	Probability	Impact
<u>Credit</u>	<u>Medium</u>	<u>High</u>

Description

The sub-projects may be exposed to insufficient revenues to cover debt service potentially as a result of inadequate demand, non-cost reflective tariff and offtaker creditworthiness.

Mitigation Measure(s)

The sub-projects to be supported will be subjected to IFC's analysis of demand risks, which can be mitigated with adequate long-term off-take agreements and/or market studies characterizing supportive demand dynamics. Also, the mitigation measures may include payment mechanisms recognising the potential riskiness and from creditworthy offtakers. In select cases of non-creditworthy off-takers, IFC will explore additional support such as credit enhancement and guarantees to help address risks, particularly where there is a limited track record in a given regulatory regime, or from a public offtaker.

Selected Risk Factor 3

Category	Probability	Impact
<u>Governance</u>	<u>Medium</u>	<u>Medium</u>

Description

Political, Governance, and Social risks: Potential negative impact on businesses or investments due to changes in government policies, regulations, or political instability and other societal factors from host communities where projects will be located. The political landscapes and governance structures across the target countries present a spectrum of challenges and opportunities that may influence the commitment to and governance of project implementations. For example, Egypt has experienced significant political transitions in the past decade, with the potential for political volatility impacting project commitments. However, recent stability and economic reforms have shown Egypt's ability to maintain a focus on development projects.

Mitigation Measure(s)

IFC conducts thorough due diligence to assess the political and social risks associated with a project or investment. This includes analyzing the political stability, regulatory environment, and social dynamics of the country or region where the investment is being made. IFC has established a set of Environmental and Social Performance Standards

that its clients must adhere to. These standards cover a wide range of issues, including labor rights, community health and safety, and environmental sustainability. By requiring compliance with these standards, IFC helps mitigate social and political risks.

In addition to these measures, IFC emphasizes the importance of good governance in project management. This is achieved by adopting principles of transparency, accountability, and participation throughout the project lifecycle. IFC also actively works to address issues of fraud, corruption, and other unethical practices that may arise from government failures. By fostering a culture of integrity and ethical conduct, and by implementing robust monitoring and reporting systems, IFC ensures that projects are managed in a manner that upholds the highest standards of governance. This approach not only mitigates risks but also contributes to the long-term success and sustainability of investments.

Selected Risk Factor 4

Category	Probability	Impact
<u>Other</u>	<u>Medium</u>	<u>Medium</u>

Description

Macroeconomic risks: Potential threats and uncertainties that can impact the overall economy of the target countries and its effects on the sub-projects. This risk encompasses both external and domestic macroeconomic factors that could potentially disrupt the opportunities for implementing the solutions in the target countries.

Mitigation Measure(s)

In recent years, some of the target countries have experienced varying rates of GDP growth. For instance, in the last 3 years, Tunisia has seen modest GDP growth rates of 2 to 4 percent while on the other hand, countries like India have enjoyed higher growth rates, between 6 to 9%.

To address macroeconomic risks, IFC employs a comprehensive approach that involves a detailed examination of the macroeconomic landscape and its potential impact on projects. This analysis scrutinizes various economic indicators, including exchange rate fluctuations, inflation trends, and interest rate movements, to construct a nuanced understanding of the risks present in the target countries. Based on this understanding, IFC devises tailored mitigation strategies.

One such strategy is the use of financial instruments like hedging to manage exposure to currency and interest rate volatility. Additionally, IFC conducts stress testing of projected cash flows under adverse economic scenarios. This practice helps in evaluating the resilience of the project's financial model against potential macroeconomic shocks and in making informed decisions to safeguard investments.

Furthermore, IFC recognizes that the projects themselves can play a pivotal role in bolstering the macro-fiscal stability of the host countries.

G. GCF POLICIES AND STANDARDS

G.1. Environmental and social risk assessment (max. 750 words, approximately 1.5 pages)

The Facility is being considered as Category A. The Facility does not have a known pipeline of projects and the risks and/or impacts associated with them are not known at this stage, and while most projects to be supported under the Facility are expected to have limited environmental and social (E&S) risks and impacts, it is possible that few projects could have significant E&S risks and impacts.

IFC has prepared and duly disclosed an E&S Management Framework (ESMF) for the Facility that provides an overview of the key aspects of IFC's Sustainability Framework, existing E&S management policies and procedures that will guide the project-level due diligence, the identification of E&S risks and impacts, assessment for any potential gaps in accordance with IFC's Performance Standards (PSs), and monitoring and supervision of projects implemented by each project level entity that benefit from the proceeds of the Facility.

The ESMF shall be based on IFC's Sustainability Framework which consists of (a) the Policy on Environmental and Social Sustainability, (b) the Eight Performance Standards, (c) the Access to Information Policy (AIP); related Guidance Notes, Good Practice Notes and other materials prepared by IFC to assist its clients in relation to its E&S policies; the World Bank Group (WBG) Environmental, Health and Safety (EHS) Guidelines; the CAO Policy; and other relevant documents.

The IFC Performance Standards help IFC investment and advisory clients manage and improve their E&S performance through a risk and outcomes-based approach. The desired outcomes are described in the objectives of each Performance Standard, followed by specific requirements to help clients achieve these outcomes through means that are appropriate to the nature and scale of the activity and commensurate with the level of E&S risks and/or impacts. Central to these requirements is the application of a mitigation hierarchy to anticipate and avoid adverse impacts on workers, communities, and the environment, or where avoidance is not possible, to minimize, and where residual impacts remain, compensate/offset for the risks and impacts, as appropriate. Within the scope of an agreed advisory activity, all advice and training will be consistent with the Performance Standards.

IFC has detailed and robust E&S due diligence and supervision procedures that will be applied for assessing project specific E&S risks and impacts and relevant mitigation measures including considering gender differences around risks, impact and mitigation. Project-level environmental and social risks and impacts will be identified during the due diligence phase and monitored during the life of the investment.

G.2. Gender assessment and action plan (max. 500 words, approximately 1 page)

IFC strongly believes that increasing women's engagement and participation in water and sanitation projects can improve the sector's usage, cost recovery, operations, and management, in addition to improving quality of life and reducing vulnerability. Improved understanding of women's and men's different needs, opportunities, and constraints for accessing the water sector is a key prerequisite to developing cost-effective water infrastructure. Better awareness of gender equality issues related to women's roles as consumers and community members improves how projects target consumers, leading to increased use, better cost recovery, and higher potential for expansion. Increasing representation of women in water and sanitation workforces, management, and supply chains improves service outcomes and customer access. Constructing water and sanitation facilities with a gender lens improves safety and reduces gender-based violence and harassment (GBVH), improving sanitation and business outcomes.

IFC has developed a programme-level gender assessment and gender action plan ("GAP"). The GAP was developed based on the gender assessment, which consisted of sector-level research on gaps and opportunities for women's engagement in the water and sanitation sector as well as country-level desk research on the gender and water nexus and national water and sanitation targets in the selected countries. It addresses IFC's approach in supporting its clients to develop and adopt gender-smart solutions for their workforce, supply chain and communities, using a mix of in-house expertise and specific tools and guidance for the sector.

The overall objectives of the GAP under this financing are:

1. Assess, address, and monitor all projects for gender gaps and opportunities in the workforce and supply chain and at the community level.
2. Support project teams to obtain the gender flag for each project.
3. Provide gender advisory services to support projects to close gender gaps and capitalize on opportunities.

4. Prevent and mitigate GBVH in all operations through IFC's new Gender-based Violence Risk Assessment Tool (launched in March 2019).

The GAP reflects these objectives and the IFC approach to gender in terms of carrying out a gap analysis for each project considered under this financing, identifying interventions/actions to close those gaps and considering indicators to measure the effectiveness of such interventions. When all these elements are in place, a project receives a gender flag that is part of the key scorecard indicators of IFC. IFC has in place expertise to support various clients to develop and implement a project-level gender action plan, with a focus on key interventions that help the client adopt and implement gender-smart solutions in their operations. The solutions will be tailored to four Infrastructure categories of the facility and the technical solutions adopted.

The gender assessment and programme-level gender action plan are aligned with the objectives of GCF's Gender Policy and are provided as Annex 8.

G.3. Financial management and procurement (max. 500 words, approximately 1 page)

As a lender to sub-projects under the facility, IFC will conduct a due diligence assessment prior to submitting each sub-project for approval to IFC's management and Board of Directors. This due diligence will cover financial and credit aspects, but also other non-financial matters such as technical, environmental, social, etc. IFC will also follow its standard procedures to ensure that conditions of disbursement have been met prior to disbursing the funds. IFC also expects to be the mandated lead arranger (MLA) in addition to the AE for the GCF concessional funds, and as such, will coordinate with all lenders regarding disbursement as well as supervision and monitoring after disbursement. The loan agreements will contain requirements for regular reporting from the client. This reporting may contain among others quarterly financial statements, project progress reports (during construction), annual audits/annual reports, insurance policies, environmental and social annual monitoring reports (including environmental and social action plan status report), gender action plan implementation status, management letter, compliance certificate, etc. Site visits may also be part of the supervision activities of the Project both during construction and operations. As is customary with all IFC loans, the agreement will include provisions requiring the borrower not to incur in Sanctionable Practices (ie. any Corrupt Practice, Fraudulent Practice, Coercive Practice, Collusive Practice, or Obstructive Practice, in accordance with the *Anti-Corruption Guidelines for IFC Transactions*) and to cooperate in good faith with IFC if there is a concern that a violation has occurred.

Under Component 1, PPP Structuring Facility of the RWI Facility, IFC will deliver the project preparation, structuring and transaction advisory activities, through a combination of internal resources (staff, long and short-term consultants) and specialized external consultants. In line with the AMA, IFC will follow its own procurement policies and procedures for the procurement of external consultants, in compliance with the relevant IBRD/IFC/MIGA Procedure.

When the private or public sector clients procure Goods and Services for IFC's projects, IFC does not impose its procurement policies and procedures. In the context of Component 1, PPP Structuring Facility, IFC's national and subnational government clients carry out their own selection and procurement in accordance with their relevant procurement policies and regulations and in consideration of various factors, including project viability, cost, risk allocation, expertise, available funding sources, and policy objectives, to determine the most suitable approach for delivering infrastructure services to the public. IFC's transaction advisory team may, as part of its services, assess the legal framework (including applicable procurement regulations), provide advice on the structuring and implementation of the procurement process, and develop the relevant documentation and strategy to be consistent with the principles of transparency, objectivity, and competition. Occasionally, IFC may recommend changes to the legal procurement framework, as required to ensure the implementation of a successful transaction that will maximize the benefits for the government client.

G.4. Disclosure of funding proposal

No confidential information: The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence.

With confidential information: The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes:

- full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity's disclosure policy, and
- redacted copy for disclosure on the GCF website.

The funding proposal can only be processed upon receipt of the two copies above, if containing confidential information.

H. ANNEXES

H.1. Mandatory annexes

- Annex 1 NDA no-objection letter(s) [\(template provided\)](#)
- Annex 2 Feasibility study - and a market study, if applicable
- Annex 3 Economic and/or financial analyses in spreadsheet format
- Annex 4 Detailed budget plan [\(template provided\)](#)
- Annex 5 Implementation timetable including key project/programme milestones [\(template provided\)](#)
- Annex 6 E&S document corresponding to the E&S category (A, B or C; or I1, I2 or I3):
[\(ESS disclosure form provided\)](#)
 - Environmental and Social Impact Assessment (ESIA) or
 - Environmental and Social Management Plan (ESMP) or
 - Environmental and Social Management System (ESMS)
 - Others (please specify – e.g. Resettlement Action Plan, Resettlement Policy Framework, Indigenous People’s Plan, Land Acquisition Plan, etc.)
- Annex 7 Summary of consultations and stakeholder engagement plan
- Annex 8 Gender assessment and project/programme-level action plan [\(template provided\)](#)
- Annex 9 Legal due diligence (regulation, taxation and insurance)
- Annex 10 Procurement plan [\(template provided\)](#)
- Annex 11 Monitoring and evaluation plan [\(template provided\)](#)
- Annex 12 AE fee request [\(template provided\)](#)
- Annex 13 Co-financing commitment letter, if applicable [\(template provided\)](#)
- Annex 14 Term sheet including a detailed disbursement schedule and, if applicable, repayment schedule

H.2. Other annexes as applicable

- Annex 15 Evidence of internal approval [\(template provided\)](#)
- Annex 16 Map(s) indicating the location of proposed interventions
- Annex 17 Multi-country project/programme information [\(template provided\)](#)
- Annex 18 Appraisal, due diligence or evaluation report for proposals based on up-scaling or replicating a pilot project
- Annex 19 Procedures for controlling procurement by third parties or executing entities undertaking projects financed by the entity
- Annex 20 First level AML/CFT (KYC) assessment
- Annex 21 Operations manual (Operations and maintenance)
- Annex 22 Assessment of GHG emission reductions and their monitoring and reporting (for mitigation and cross cutting-projects)¹⁴
- Annex X Other references

¹⁴ Annex 22 is mandatory for mitigation and cross-cutting projects.

** Please note that a funding proposal will be considered complete only upon receipt of all the applicable supporting documents.*



AZƏRBAYCAN RESPUBLİKASININ EKOLOGIYA VƏ TƏBİİ SƏRVƏTLƏR NAZİRLİYİ

Az1073 Bakı şəhəri, K. Kazımzadə küç. 100A
E-poçt: info@eco.gov.az

Tel: +99412 538-85-08
Faks: +99412 492-59-07

№ 3 14/2-2629-D-05-08/2024

«28» 06 20 24 il

Beynəlxalq Maliyyə Korporasiyasının
Azərbaycan üzrə ölkə rəhbəri
xanım Aliyə Əzimovaya

29.04.2024-cü il tarixli məktuba

Hörmətli Aliyə xanım,

Yaşıl İqlim Fondu (GCF) tərəfindən maliyyələşdirilməsi nəzərdə tutulan "Dayanıqlı Su İnfrastrukturunun Artırılması" adlı proqram iqlim dəyişmələrinin həm adaptasiya, həm də mitiqasiya elementlərini özündə birləşdirərək ənənəvi olmayan su təchizatı (tullantı sularının təmizlənməsi, dussuzlaşdırma və s.) və tullantı sularının müasir idarə olunmasını ehtiva edir.

Məlumdur ki, fiziki-coğrafi xüsusiyyətlərinə görə Azərbaycan su çatışmazlığından əziyyət çəkən ölkələrdəndir. Son illərdə artan iqlim dəyişmələri su təchizatı sistemində də təsirsiz ötürür. Bu baxımdan, təklif edilən proqramın istiqamətləri ümumilikdə ölkəmiz üçün prioritet məsələlərdəndir.

Proqram çərçivəsində nəzərdə tutulmuş fəaliyyətlərə ölkə üzrə məsul qurum - Azərbaycan Dövlət Su Ehtiyatları Agentliyi sözügedən proqramda iştirakı məqsəduyğun hesab etmişdir.

Proqram çərçivəsində növbəti mərhələdə ölkəmizə münasibətdə hazırlanacaq layihə sənədlərinin imzalanması və təsdiq edilməsi üçün Azərbaycan Respublikası Prezidentinin 2011-ci il 19 yanvar tarixli 373 nömrəli Fərmanı ilə təsdiq edilmiş "Azərbaycan Respublikasının beynəlxalq müqavilələrin bağlanması və ya ləğv edilməsi haqqında təkliflərin mərkəzi icra hakimiyyəti orqanları və dövlətə məxsus müəssisələr tərəfindən verilməsi Qaydaları"na və 2023-cü il 06 oktyabr tarixli 2328 nömrəli Fərmanı ilə təsdiq edilmiş "İcra hakimiyyəti orqanlarının normativ hüquqi aktlarının layihələrinin hazırlanması, razılaşdırılması, qəbul edilməsi və dərc edilməsi qaydası haqqında Əsasnamə"nin müvafiq müddəalarına uyğun olaraq dövlətdaxili prosedurlar keçirilməli və imza səlahiyyəti alınmalıdır.

Bununla əlaqədar, sözügedən proqram çərçivəsində növbəti mərhələdə hazırlanacaq layihə sənədlərində əks olunacaq fəaliyyətlərin icrasına əsas benefisiar qurum - Azərbaycan Dövlət Su Ehtiyatları Agentliyi tərəfindən yuxarıda qeyd olunmuş qanunvericiliyə uyğun olaraq dövlətdaxili prosedurlar keçirildikdən, həmçinin aidiyyəti qurumlar, o cümlədən Ədliyyə, Maliyyə, İqtisadiyyat nazirlikləri ilə razılaşdırıldıqdan sonra başlanıla bilər.

Qeyd olunan şərtlər daxilində "Dayanıqlı Su İnfrastrukturunun Artırılması" proqramına razılıq məktubunu (no-objection) təqdim edirik.

Qoşma: 1 vərəq – razılıq məktubu.

Hörmətlə,

Nazir müavini

Vüqar Kərimov



Az1073 Azərbaycan, Bakı, K. Kazımzadə küç. 100A

Tel: +99412 492-59-07, Faks: +99412 492-59-07

E-poçt: info@eco.gov.az

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E-mail: info@eco.gov.az

№ 3-14/2-2644-2-01-08/2024

«28» 06 2024 il

The Green Climate Fund ("GCF")

Re: Funding proposal for the GCF by International Finance Corporation regarding GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility

Dear Madam/Sir,

We refer to the programme titled GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility in Azerbaijan as included in the funding proposal submitted by International Finance Corporation to us on 29 April 2024.

The undersigned is the duly authorized representative of the Ministry of Ecology and Natural Resources, the National Designated Authority of Azerbaijan.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Azerbaijan has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Azerbaijan;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

Mukhtar Babayev
Minister
Ministry of Ecology and Natural Resources
Azerbaijan

Annex 1 – GCF Programme NOL Template

To: The Green Climate Fund (“GCF”)

Santiago de Chile, 10 July 2024

Re: Funding proposal for the GCF by International Finance Corporation regarding Scaling Resilient Water Infrastructure Facility.

Dear Madam, Sir,

We refer to the programme titled **Scaling Resilient Water Infrastructure Facility** in Chile as included in the funding proposal submitted by **International Finance Corporation** to us on 24 April 2024.

The undersigned is the duly authorized representative of the Ministry of Finance (*Ministerio de Hacienda*), the National Designated Authority of Chile.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

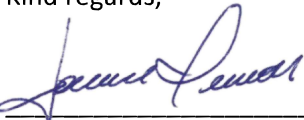
- (a) The government of Chile has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Chile;
- (c) In accordance with the GCF’s environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,



Jaime Tramón
Senior Advisor – Financial and International Affairs
Ministerio de Hacienda
Republic of Chile

**MINISTRY OF THE ENVIRONMENT,
OF THE SUSTAINABLE DEVELOPMENT AND
THE ECOLOGICAL TRANSITION**

**DIRECTORATE OF INTERNATIONAL
COOPERATION AND FUNDING
MOBILIZATION**

**NATIONAL DESIGNATED AUTHORITY
FOR THE GREEN CLIMATE FUND**

000046 /MINEDDTE/CAB/DCIMF

REPUBLIC OF COTE D'IVOIRE
Union – Discipline – Work



Abidjan, the **27 MAY 2024**

To

**Madam Executive Director of the
Green Climate Fund Secretariat
175 Art Center-daero
Yeonsu-gu, Incheon 406-840**

REPUBLIC OF KOREA

**Re: Funding proposal for the GCF by International Finance Corporation regarding
the GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility**

Dear Madam,

We refer to the programme titled **GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility in Côte d'Ivoire** as included in the funding proposal submitted by International Finance Corporation to us on 23 April 2024.

The undersigned is the duly authorized representative of YAO Marcel, the Focal Point of Côte d'Ivoire.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Côte d'Ivoire has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Côte d'Ivoire;



(c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

Furthermore, the initiative will be housed and monitored by the Directorate of International Cooperation and Funding Mobilization.

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,



YAO Marcel

Director of International Cooperation and Funding Mobilization

Focal Point

Côte d'Ivoire

To: The Green Climate Fund ("GCF")

Egypt, 23 July 2024

Re: Funding proposal for the GCF by International Finance Corporation regarding GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility

Dear Madam, Sir,

We refer to the programme titled *GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility* in Egypt as included in the funding proposal submitted by International Finance Corporation to us on 26 May 2024.

The undersigned is the duly authorized representative of Egyptian Environmental Affairs Agency, the National Designated Authority of Egypt.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:


- (a) The government of Egypt has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Egypt;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,



Eng. Sherif Abd. Elrahim
National Focal Point GCF-NDA
Head of Climate Change Central Department
Egyptian Ministry of Environment
Egypt



N° 334 /PR/CNCT/CS/SP.

Libreville, le 14 MAI 2024

*The Special Adviser,
Permanent Secretary of the National Climate Council
To*

The Green Climate Fund (“GCF”)
-Republic of Korea, Songdo-

Object: Funding proposal for the GCF by International Finance Corporation’s (IFC) regarding Scaling Resilient Water Infrastructure (RWI) Facility.

Dear Madam, Sir,

We refer to the programme titled **Scaling Resilient Water Infrastructure (RWI) Facility**, in Gabon as included in the funding proposal submitted by **International Finance Corporation’s (IFC)** to us on **2 April 2024**.

The undersigned is the duly authorized representative **Mr. Davy ONOMORI MBOUMBA**, the National Designated Authority of Gabon.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Gabon has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Gabon;
- (c) In accordance with the GCF’s environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.



Yours Sincerely,

Mr Davy ONOMORI MBOUMBA



राजश्री रे
RAJASREE RAY

आर्थिक सलाहकार
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
भारत सरकार

ECONOMIC ADVISER
MINISTRY OF ENVIRONMENT, FOREST
AND CLIMATE CHANGE
GOVERNMENT OF INDIA

DO No. CC-13008/142/2024-CC

28th August 2024

To
The Green Climate Fund ("GCF")
Songdo Business District
175 Art center- daero
Yeonsu-gu, Incheon 22004 (Republic of Korea)

Sub: Funding proposal for the GCF by International Finance Corporation (IFC)-World Bank regarding "GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility".

Dear Madam/ Sir,

We refer to the programme titled "GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility" in India as included in the funding proposal submitted by IFC to us on 12th April 2024.

The undersigned is the duly authorized representative of Ministry of Environment, Forest and Climate Change, the National Designated Authority of India.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- The government of India has no-objection to the programme as included in the funding proposal;
- The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of India;
- In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Yours sincerely

(Rajasree Ray)

Economic Adviser

Ministry of Environment, Forest and Climate Change, Government of India

GCF Focal Point for India

ए-650, अग्नि विंग, इंदिरा पर्यावरण भवन, जोर बाग रोड, नई दिल्ली-110 003, फोन : 011-20819197, 20819329

A-650, Agni Wing, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110 003, Ph. : 011-20819197, 20819329

E-mail : rajasree.r@nic.in





MINISTRY OF FINANCE OF THE REPUBLIC OF INDONESIA
FISCAL POLICY AGENCY

R.M. NOTOHAMIPRODJO BUILDING 2ND FLOOR JALAN DR. WAHIDIN RAYA NOMOR 1 JAKARTA 10710
TELEPHONE (+62 21) 3441484; FACSIMILE (+62 21) 3848049; WEBSITE www.fiskal.kemenkeu.go.id

Ref. : S-66/KF/2024

7 Agustus 2024

Ms Mafalda Duarte
Executive Director
Secretariat of the Green Climate Fund (GCF)
175, Art center-daero
Yeonsu-gu, Incheon 406-840
Republic of Korea

Subject: Funding Proposal for the GCF by the International Finance Corporation (IFC) regarding GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility

Dear Ms Duarte,

We refer to the GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility Funding Proposal submitted by the International Finance Corporation (IFC) to us on June 21st, 2024.

The undersigned is the Chairman of Fiscal Policy Agency, Ministry of Finance as the National Designated Authority of Indonesia.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the Funding Proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Indonesia has no-objection to the programme as included in the Funding Proposal;
- (b) The programme as included in the Funding Proposal is in conformity with Indonesia's national priorities, strategies and plans;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the Funding Proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the Funding Proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter will be made publicly available on the GCF website.

Chairman of Fiscal Policy Agency



Ditandatangani secara elektronik
Febrio Nathan Kacaribu



To: The Green Climate Fund ("GCF")

Rabat, 23 April 2024

Re: Funding proposal for the GCF by International Finance Corporation regarding GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility

Dear Madam, Sir,

We refer to the programme titled GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility in Morocco as included in the funding proposal submitted by International Finance Corporation to us on 18 April 2024.

The undersigned is the duly authorized representative of Mr Bouzekri Razi, the Focal Point of Morocco.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Morocco has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Morocco;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,



Mr Bouzekri Razi
Director of Climate Change, Biodiversity and Green Economy
Focal Point
Morocco





F.No. 1(12)/IFC-GCF/2024
Government of Pakistan
**Ministry of Climate Change and
Environmental Coordination**
(LG&RD Complex, 2nd Floor, Sector G-5/2, Islamabad)
(Ph: +92-51-9245554)

Islamabad, the 3rd May 2024

Ms. Mafalda Duarte,
Executive Director,
The Green Climate Fund (GCF) Secretariat,
Song Do,
South Korea.

Re: Funding Proposal for the GCF by IFC Regarding: Scaling Resilient Water Infrastructure (RWI) Facility

Dear Ms. Duarte,

We refer to the program titled "**Scaling Resilient Water Infrastructure (RWI) Facility**" in Pakistan as included in the funding proposal submitted by IFC on 21 February 2024.

The undersigned is the duly authorized representative of Ministry of Climate Change and Environmental Coordination, the National Designated Authority of Pakistan.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the program as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Pakistan has no-objection to the program as included in the funding proposal;
- (b) The program as included in the funding proposal is in conformity with the national priorities, strategies and plans of Pakistan;
- (c) In accordance with the GCF's environmental and social safeguards, the program as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the program as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

Mr. Zulfiqar Younas
Addl Secretary, Climate Finance/Focal Point GCF
Ministry of Climate Change and Environmental Coordination
Pakistan



PERÚ

Ministerio de
Economía y Finanzas

Viceministerio
de Economía

Dirección General de Asuntos
de Economía Internacional,
Competencia y Productividad

To: The Green Climate Fund (“GCF”)

Lima, 29 August 2024

Re: Funding proposal for the GCF by International Finance Corporation regarding Scaling Resilient Water Infrastructure (RWI) Facility

Dear Madam, Sir,

We refer to the programme titled Scaling Resilient Water Infrastructure (*RWI*) Facility in Peru as included in the funding proposal submitted by International Finance Corporation to us on 24 April 2024.

The undersigned is the duly authorized representative of Ministry of Economy and Finance, the National Designated Authority of Peru.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Peru has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Peru;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

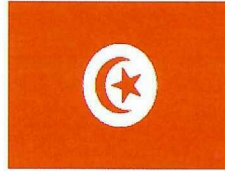
We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,

Mr. Jose Alfredo La Rosa Basurco
General Director, General Directorate of International Economic Affairs, Competition and Productivity
Ministry of Economy and Finance
Peru



Ministère de l'Environnement



République Tunisienne



To: The Green Climate Fund ("GCF")

Tunis, 17 July 2024

Re: Funding proposal for the GCF by International Finance Corporation regarding the GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility.

Dear Madam, Sir,

We refer to the programme titled **the GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility** in Tunisia as included in the funding proposal submitted by International Finance Corporation to us on 29 April 2024.

The undersigned is the duly authorized representative of the National Designated Authority of Tunisia.

Pursuant to GCF Policy B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

- (a) The government of Tunisia has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Tunisia;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme.

We acknowledge that this letter may be made publicly available on the GCF website.

Kind regards,

Dr Chokri MEZGHANI
NFP-GCF
NDA Representative
Tunisia

Chokri MEZGHANI

**National Focal Point for the
Green Climate Fund**



"24" 03 2024

№ 01-09-695

Tashkent

To: The Green Climate Fund ("GCF")

Tashkent, 30 April 2024

Re: Funding proposal for the GCF by International Finance Corporation regarding GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility

Dear Madam, Sir,

We refer to the programme titled GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility in Uzbekistan as included in the funding proposal submitted by International Finance Corporation to us on April 23, 2024.

The undersigned is the duly authorized representative of Mr. Abdulkhakimov, the National Designated Authority of Uzbekistan.

Pursuant to GCF decision B.08/10, the content of which we acknowledge to have reviewed, we hereby communicate our no-objection to the programme as included in the funding proposal.

By communicating our no-objection, it is implied that:

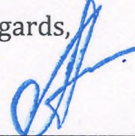
- (a) The government of Uzbekistan has no-objection to the programme as included in the funding proposal;
- (b) The programme as included in the funding proposal is in conformity with the national priorities, strategies and plans of Uzbekistan;
- (c) In accordance with the GCF's environmental and social safeguards, the programme as included in the funding proposal is in conformity with relevant national laws and regulations.

We also confirm that our national process for ascertaining no-objection to the programme as included in the funding proposal has been duly followed.

We also confirm that our no-objection applies to all projects or activities to be implemented within the scope of the programme

We acknowledge that this letter will be made publicly available on the GCF website.

Kind regards,


Aziz Abdulkhakimov
Minister
Ministry of Ecology, Environment Protection and Climate Change
Uzbekistan



Environmental and social safeguards report form pursuant to para. 17 of the IDP

Basic project or programme information	
Project or programme title	GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility
Existence of subproject(s) to be identified after GCF Board approval	Yes
Sector (public or private)	Private and Public
Accredited entity	International Finance Corporation (IFC)
Environmental and social safeguards (ESS) category	Category A
Location – specific location(s) of project or target country or location(s) of programme	Azerbaijan, *Chile, Cote D'Ivoire, Egypt, Gabon, India, Indonesia, Morocco, Pakistan, *Peru, Uzbekistan, and *Tunisia
Environmental and Social Impact Assessment (ESIA) (if applicable)- N/A	
Date of disclosure on accredited entity's website	N/A
Language(s) of disclosure	N/A
Explanation on language	N/A
Link to disclosure	N/A
Other link(s)	N/A
Remarks	N/A
Environmental and Social Management Plan (ESMP) (if applicable)- N/A	
Date of disclosure on accredited entity's website	N/A
Language(s) of disclosure	N/A
Explanation on language	N/A
Link to disclosure	N/A
Other link(s)	N/A
Remarks	N/A
Environmental and Social Management System (ESMS) (if applicable)	
Date of disclosure on accredited entity's website	Friday, March 15, 2024 (English) / Monday, April 15, 2024 (local languages of the target countries)*
Language(s) of disclosure	English, Arabic, Azerbaijani, Indonesian, French, Hindi, Spanish, Urdu, and Uzbek
Explanation on language	These are the official languages of the target countries.
Link to disclosure	<p>English: https://www.ifc.org/en/what-we-do/sector-expertise/blended-finance/climate/green-climate-fund</p> <p>Arabic*: https://www.ifc.org/content/dam/ifc/doc/2024/esmf-gcf-ifc-scaling-rwi-facility-ar.pdf</p> <p>Azerbaijani*: https://www.ifc.org/content/dam/ifc/doc/2024/esmf-gcf-ifc-scaling-rwi-facility-az.pdf</p>

	<p>Bahasa Indonesia*: https://www.ifc.org/content/dam/ifc/doc/2024/esmf-gcf-ifc-scaling-rwi-facility-id.pdf</p> <p>French*: https://www.ifc.org/content/dam/ifc/doc/2024/esmf-gcf-ifc-scaling-rwi-facility-fr.pdf</p> <p>Hindi*: https://www.ifc.org/content/dam/ifc/doc/2024/esmf-gcf-ifc-scaling-rwi-facility-hi.pdf</p> <p>Spanish*: https://www.ifc.org/content/dam/ifc/doc/2024/esmf-gcf-ifc-scaling-rwi-facility-es.pdf</p> <p>Urdu*: https://www.ifc.org/content/dam/ifc/doc/2024/esmf-gcf-ifc-scaling-rwi-facility-ur.pdf</p> <p>Uzbek*: https://www.ifc.org/content/dam/ifc/doc/2024/esmf-gcf-ifc-scaling-rwi-facility-uz.pdf</p>
Other link(s)	https://www.ifc.org/en/what-we-do/sector-expertise/blended-finance/climate/green-climate-fund
Remarks	<p>An Environmental and Social (E&S) Management Framework (ESMF) has been prepared for the GCF-IFC Scaling Resilient Water Infrastructure Facility, which provides an overview of the key aspects of IFC's Sustainability Framework, existing environmental and social management policies and procedures that will guide the project level due diligence, the identification of environmental and social risks and impacts, assessment for any potential gaps in accordance with IFC's Performance Standards (PSs), and monitoring and supervision of projects implemented by each project level entity that benefit from the proceeds of the Facility. Please note that actually, IFC's published policies should prevail as this is just a summary.</p> <p>An ESMF consistent with the requirements for a Category A programme is contained in the E&S Management Framework.</p>
Any other relevant ESS reports, e.g. Resettlement Action Plan (RAP), Resettlement Policy Framework (RPF), Indigenous Peoples Plan (IPP), Indigenous Peoples Planning Framework (IPPF) (if applicable)	
Description of report/disclosure on accredited entity's website	N/A
Language(s) of disclosure	N/A
Explanation on language	N/A

Link to disclosure	N/A
Other link(s)	N/A
Remarks	N/A
Disclosure in locations convenient to affected peoples (stakeholders) -	
Date	N/A
Place	<p>The ESMF is available online for anyone to access at any time, and in addition available at IFC and World Bank representative/country offices at the locations of the target countries, upon request. The current locations as of the disclosure date are:</p> <p>Egypt: Nile City Towers, North Tower, 24th Floor 2005C Corniche El Nil, Ramlet Boulac, Cairo, Egypt</p> <p>Morocco: 7 Rue Larbi Ben Abdellah, Rabat, Morocco</p> <p>Gabon: Immeuble Libreville Business Square (LBS) ex GML - B.P. 4027 Libreville, Gabon</p> <p>Cote d Ivoire: World Bank Group Building, Corner of Booker Washington & Viviane Street 01 BP 1850 ABJ 01, Cocody, Abidjan, Côte d’Ivoire</p> <p>India: 6th Floor, Worldmark 3, Aerocity, 110037 New Delhi, India</p> <p>Indonesia: Jakarta Stock Exchange Bldg, Tower 2, 12th and 13th Fl., Jl. Jend. Sudirman Kav. 52-53, 12190</p> <p>Pakistan: 20 A, Shahrah-E-Jamhuriat, Ramna 5 (G5/1) Islamabad, Pakistan</p> <p>Uzbekistan: International Business Center, 14 Floor, 107 B Amir Temur Street, 100084 Tashkent, Uzbekistan</p> <p>Azerbaijan: 90A, Nizami Street, Landmark III Business Center, 5th floor, AZ1010 Baku, Azerbaijan</p> <p>Chile: Banco Mundial Av. Apoquindo 2929 , of 1.300 , Las Condes Santiago de Chile Box 304</p> <p>Peru: Av Alvarez Calderon 185, Piso 7, San Isidro, Lima</p> <p>Tunisia: Immeuble le Boulevard, Bloc A, 3rd floor; Berges du Lac 2,1053</p>
Date of Board meeting in which the FP is intended to be considered	
Date of accredited entity’s Board meeting	TBD

Date of GCF's Board meeting	Monday, October 21, 2024
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Note: This form was prepared by the accredited entity stated above.

* Subsequent to the disclosure of this form to the Board and active observers on March 16, 2024 (KST), the following updates have been made:

Angola, Bangladesh, Brazil, and Serbia have been removed from the programme. Chile, Peru, and Tunisia have been added to the programme.

Moreover, the translation of the ESMF into the local languages of the target countries (Arabic, Azerbaijani, Bahasa Indonesia, Bengali, French, Hindi, Portuguese, Spanish, Urdu, and Uzbek) have been made available on April 15, 2024.

Independent Technical Advisory Panel's assessment of FP254

Proposal name:	GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility
Countries:	Azerbaijan, Chile, Cote d'Ivoire, Egypt, Gabon, India, Indonesia, Morocco, Pakistan, Peru, Tunisia, Uzbekistan
Accredited entity:	International Finance Corporation
Project/Facility size:	Large

I. Assessment of the independent Technical Advisory Panel

1.1 Summary of the proposal

1. The proposal seeks to establish the GCF-IFC Scaling Resilient Water Infrastructure Facility (RWI Facility) across Africa, Asia, Europe, and Latin America. It is designed to address water infrastructure challenges exacerbated by climate change, as a way to help ameliorate water scarcity, poor sanitation, and greenhouse gas (GHG) emissions arising from inadequate water and sewerage services. This facility aims to enhance the resilience of water infrastructure, contribute to climate adaptation and mitigation, and support vulnerable communities.

2. **Key objectives:**

- (a) Develop resilient water infrastructure;
- (b) Improve access to clean water and sanitation;
- (c) Reduce GHG emissions through improved water-management practices;
- (d) Promote water reuse, desalination, and the reduction of non-revenue water (NRW) or water that is pumped and then lost or unaccounted for; and
- (e) Strengthen public-private partnerships (PPPs) to finance and manage water projects.

3. **Funding and structure:**

- (a) Total target financing: USD 1.262 billion;
- (b) GCF funding requested: USD 258 million (USD 250 million (loan), USD 8 million (grant)); and
- (c) Project size: Large, with an implementation period of 10 years and a lifespan of 35 years.

4. **Expected impact:**

- (a) Mitigation: Reduction of approximately 3.01 million tonnes of carbon dioxide equivalent (Mt CO₂ eq) over 25 years; and
- (b) Adaptation: Directly benefit approximately 14.9 million people through improved water access and sanitation.

5. **Impact investment considerations:**

- (a) **Social and environmental impact:** The proposed project focuses on creating significant climate adaptation and mitigation benefits, particularly in water-stressed

regions. It will enhance the resilience of water infrastructure, benefiting vulnerable populations and ensuring sustainable water access;

- (b) **Scalability and replicability:** The facility seeks to create demonstration effects by providing scalable PPP models and business cases for water infrastructure. This could attract further private-sector investments;
 - (c) **Sustainable Development Goals (SDGs):** Strong alignment with SDGs, particularly SDG 6 (Clean water and sanitation) and SDG 13 (Climate action); and
 - (d) **Financial return:** The project combines concessional finance with co-investments from commercial sources, reducing borrowing costs and enhancing financial sustainability.
6. This proposal represents a high-impact investment opportunity that combines financial returns with measurable social and environmental benefits, focusing on water security in a climate-stressed world.

1.2 Impact potential

Scale: Medium to high

1.2.1. Mitigation impact

7. The RWI Facility is expected to mitigate climate change by reducing approximately 3.01 Mt CO₂ eq over the project's 25-year lifespan. This reduction will be achieved through improvements in water and sanitation infrastructure, which currently contribute to GHG emissions due to inefficient systems, poor wastewater treatment, and outdated water resource management practices.

8. The project will modernize infrastructure in sectors like desalination, water reuse, and water treatment, shifting to low-emission technologies and processes. To the extent that the project avoids locking in high-emission infrastructure and wasteful water use, it stands to contribute to long-term emission reductions in the water sector.

1.2.2. Adaptation impact

9. The project aims to enhance climate resilience by providing access to clean water for 14.9 million direct beneficiaries in regions experiencing acute water shortages due to climate change. These regions are highly vulnerable to water scarcity, flooding, and contamination of water sources.

10. The facility also includes climate-resilient water-management solutions, such as reducing physical loss and leakage, grouped under the issue of NRW. Examples of projects in this area include leakage and physical loss reduction and pipe replacement. In the question and answer (Q&A) session, the independent Technical Advisory Panel (iTAP) suggested also looking into the installation of smart metering as a potentially viable project to contribute to reducing NRW and incentivizing decreased emissions.

11. There are also water infrastructure solutions such as conventional water supply (including bulk supply and storage), wastewater treatment (including wastewater collection and treatment facilities), and unconventional water supply (including desalination and reuse). These water infrastructure solutions have significant potential to enhance water security. Nevertheless, water extraction and transport, water and wastewater treatment, and desalination all demand significant inputs of energy.

12. Moreover, of the climate investment solutions discussed in the funding proposal, RWI Facility Investment Solutions numbers 1–3 (conventional water supply, wastewater treatment, and unconventional water supply, see funding proposal, pp. 33–35) stand out as less climate-resilient than RWI Facility investment solution number 4 (NRW, presented on p. 35). The iTAP

therefore suggests prioritizing investments into solution number 4 before targeting solution numbers 1–3. This would avoid investing in (over)extraction and increased energy use in cases where substantial amounts of water leak from the system. Even reuse is negatively affected by high levels of physical loss, inducing treatment of water for reuse that does not reach water users. The iTAP acknowledges that the International Finance Corporation (IFC) will screen projects based on alignment with the Paris Agreement, which has three major goals: (i) carbon reduction targets: ensure the project has clear and measurable targets for reducing GHG emissions in line with science-based pathways (e.g. the Science Based Targets Initiative), (ii) net-zero alignment: check if the project has a clear pathway to reaching net-zero emissions by 2050; and (iii) climate resilience: assess whether the project incorporates strategies to adapt to and mitigate the impacts of climate change. However, there is no clear water, sanitation and hygiene (WASH) sector specific decarbonization or resilience benchmarks.

1.2.3. Climate-resilient technical designs

13. Climate resiliency is often an additional upfront cost (capital expenditure), which does not always yield higher revenue, and the improved outcomes are counterfactual and difficult to quantify (resiliency minimizes future losses/negative outcomes due to weather-related shocks, which would have been worse without the resiliency costs paid upfront). As such, it is critical that target governments recognize the need to incorporate climate resiliency into project design when awarding concessions through PPPs or other modalities. Unless governments play a proactive role, the pipeline of IFC projects may be weak and private-sector developers will have little incentive to incur incremental and non-revenue-yielding costs to incorporate climate resiliency. Through its advisory arm, IFC will attempt to advise relevant public stakeholders, but this requires that such stakeholders are open to such advice and willing to pay fees for it.

14. These difficulties with incorporating climate resiliency, especially in large-scale water and sanitation, and desalination projects (as opposed to companies) tie into the main risk in the design of the facility, a risk which is not mitigated adequately through the facility's design: there is a high risk of a low number of WASH projects in the pipeline, which are both commercially attractive and innovative enough to incorporate climate and adaptation measures and associated costs. The funding proposal acknowledges in several cases the riskiness of the WASH sector both from a technology and a business-model perspective. However, the design of the facility does not adequately address such a risk as it is mostly aiming to deploy debt-like instruments, an instrument which assumes that the sponsor(s) has/have already designed and developed an adequate WASH project. As such, the iTAP discussed with the accredited entity (AE) that the facility should co-finance through GCF capital, project pipeline-building with local and international developers. It should do so with equity-like instruments for both the development stage and the construction stage of projects. By its nature, equity is more central when working with developers, in ensuring projects adhere to the standards required and adding know-how value in addition to the capital provided, whereas debt is reactive and passive by nature. In other words, equity is often more appropriate for taking calculated risks in less proven business models in riskier sectors such as WASH, whereas debt is better suited to scaling up already existing, established and successful business models. Through the Q&A session, IFC responded that it intends to work closely with IFC Upstream (the project development arm of IFC for all its sectors, which means that IFC Upstream is not a WASH-specialist team), on an ad hoc basis. The iTAP encourages the AE to be bolder by allocating risk-absorbing capital and a WASH-specific team¹ to co-finance and co-develop WASH projects to ensure a high-quality pipeline to achieve the intended resilience impact of this facility.

1.2.4. Impact of climate change on costs of water, sanitation and hygiene infrastructure

¹ With all the adequate governance structures in place to ensure the ethical walls between equity and debt.

15. IFC has mentioned that it has a tool for assessing a given project's investment viability and how any additional capital expenditure occurring due to expected future climate impacts affects the bankability of these investments. However, this assessment was not provided in any of the annexes submitted to the iTAP.

16. IFC has submitted (i) a GHG accounting tool (annex 22 to the funding proposal) that is very detailed; and (ii) the economic and financial annex (annex 3 to the funding proposal) which does not contain any climate adaptation/resilience analysis. However, during the AE-iTAP call, when asked about how IFC conducts its assessment of climate adaptation projects (e.g. climate proofing), the AE described a tool which it uses to assesses the impact of climate (under various scenarios, i.e. business as usual/no stressor, Representative Concentration Pathway (RCP) 4.5, RCP 8.5), and how these impacts affect the materiality of their investments metrics (e.g. net present value, internal rate of return (IRR), debt-service coverage ratio, etc.). It is recommended that such a tool or process be made part of the project administration manual.

1.3 Paradigm shift potential

Scale: Medium

1.3.1. Scalability

17. The RWI Facility is designed to catalyse large-scale investments in water infrastructure by demonstrating viable PPP models that mobilize private-sector finance. By proving the success of these models in the target countries, the facility will enable scaling and replication in other regions with similar challenges. With an emphasis on technologies such as water reuse, desalination, and advanced wastewater treatment, the project aims to demonstrate scalable solutions that can be applied across various sectors and regions, addressing both water scarcity and climate-change mitigation.

1.3.2. Innovation

18. The project brings a wider range of technologies and business models to regions that have traditionally relied on conventional water-supply methods. The integration of unconventional water sources, such as desalination and wastewater reuse, may be suitable for regions facing severe water shortages and access to (renewable) energy.

19. The reduction in NRW² can be considered to be a significant innovation in regions that lack focus on addressing inefficiencies in water systems. The strategy to reduce NRW has multiple benefits. It stands to reduce the water footprint and improve water availability without depleting water resources or increasing energy use. It also stands to improve the profitability of water service providers and can make them more creditworthy.

20. However, in the view of the iTAP, the facility does not go far enough in dealing with NRW or ways to reduce leakage and wastage, before extracting more water for conventional

² [In developing countries, roughly 45 million m³ of water are lost daily](#) with an economic value of over USD 3 billion per year. [A World Bank study](#) puts [the global estimate of physical water losses at 32 billion m³ each year](#), half of which occurs in developing countries. Water utilities suffer from the huge financial costs of treating and pumping water only to see it leak back into the ground, and the lost revenue from water that could have otherwise been sold. If the water losses in developing countries could be halved, the saved water would be enough to supply around 90 million people. This type of water is referred to as non-revenue water, or water that is pumped and then lost or unaccounted for.

The need to manage NRW better and protect precious water resources has become increasingly important. [NRW management allows utilities to expand and improve service](#), enhance financial performance, make cities more attractive, increase climate resilience and reduce energy consumption. In a water-constrained environment, NRW management often offers superior cost-effectiveness compared to supply augmentation. At the same time, revenues from saved water improve a service provider's bottom line while lower water abstraction increases city resilience.

bulk water supply and storage, wastewater treatment, desalination or reuse. It is a notoriously difficult area to work in, and IFC does have minimum safeguards in place to ensure that it does not invest in private-sector projects in countries where the NRW is very high. IFC also informed the iTAP that in the future IFC will adhere to the Paris Agreement standards for both mitigation and adaptation to ensure that projects such as WASH projects do not become maladaptive. Finally, the IFC advisory team will work with target governments, but it is demand driven, meaning that governments have to request support in creating and implementing strategies which deal with NRW. If such governments or government-owned entities do not make such requests, then IFC cannot force the issue of fixing NRW. There is a gap there, which IFC acknowledged and assured the iTAP will be filled through partnerships and working across silos within the World Bank Group, but there is no concrete plan in place.

21. IFC does have very solid and screening tools to ensure that no significant harm is done through the IFC-supported project, but these tools are not ambitious enough to tackle the poor management, wasteful use and water overextraction issue holistically. Once again, the iTAP understands that IFC as a private-sector financier and adviser does not have tools to directly influence public-sector NRW strategies and their implementation (unless directly asked by the target governments), but it could devise ways to prioritize and weigh its pipeline accordingly (see the condition proposed below). The iTAP strongly suggests that IFC uses the incentive of GCF concessional capital to ensure that countries/municipalities/regional systems which are tackling NRW are rewarded with concessional climate finance by GCF and others.

1.3.3. Replicability

22. The facility's success in demonstrating financially viable and sustainable water projects will provide a blueprint for replication in other regions, particularly in low and middle-income countries facing similar water-related challenges. The focus on PPPs may potentially encourage the replication of financing models that balance the consideration of public good with private-sector engagement. The funding proposal would have been stronger had the AE explained explicitly or had it given examples of how these rounds of PPPs are innovative, when they have been around for many decades.

1.4 Sustainable development potential

Scale: Medium

1.4.1. Environmental co-benefits

23. The project will contribute to broader environmental sustainability to the extent that the loan projects contribute to conserving water resources, reducing overreliance on groundwater, and minimizing pollution from untreated wastewater. However, as previously noted, the facility does not make an explicit link between fixing leaks or reducing losses before extracting more water. The facility could have, for example, explicitly included a request for grant capital from GCF to support target governments who were willing to tackle wastage and NRW before or in parallel with giving licences for new water/wastewater and desalination plants.

24. The focus on reducing GHG emissions from water systems will also have ripple effects on other environmental areas, such as improved soil quality, reduced water contamination, and enhanced biodiversity protection, particularly in coastal regions vulnerable to sea-level rise.

25. In countries like Chile and Morocco, the project will address the increasing salinity of water sources due to overextraction and climate change, further protecting ecosystems and agricultural productivity.

1.4.2. Social co-benefits

26. To the extent that the loan projects will go beyond overall water availability and ensure improved access to clean water and sanitation, there will be direct health benefits. These benefits, beyond convenience and quality of life for the people gaining access to water, may help reduce the incidence of water-related diseases such as cholera, and dysentery, which disproportionately affect vulnerable populations. In regions like Bangladesh and Pakistan, where floods often contaminate water sources, any contribution to support climate-resilient access to safe water will have a significant positive impact on public health.

1.4.3. Economic co-benefits

27. The project will stimulate job creation in water infrastructure development, maintenance, and management. These jobs will span various sectors, including construction, engineering, and technology, contributing to local economies.

28. By improving water infrastructure in a balanced and resource-effective manner, the project stands to ensure a stable water supply for agriculture and industry, reducing the economic risks associated with water shortages. This will lead to increased productivity, particularly in water-intensive industries such as agriculture, where reliable water sources are critical for crop yields.

1.5 Needs of the recipient

Scale: High

29. The countries targeted by the RWI Facility are among the most vulnerable to water-related climate risks, with many facing chronic water shortages, poor sanitation, and flooding. Regions such as India, Indonesia, and Egypt are particularly susceptible to water scarcity, while others like Pakistan and Bangladesh face severe flooding and contamination risks.

30. The facility addresses many of these critical needs by providing concessional financing, which is essential for overcoming the barriers to infrastructural investments in developing countries. However, there is also a risk in providing concessional finance to countries and systems where these concessions allow wasteful practices, poor management and continued leakage or NRW to prevail. The condition proposed by the iTAP (see overall remarks below) aims to help alleviate this risk.

31. The needs of the recipients have been very thoroughly researched but not necessarily assessed, analysed and prioritized. Outcomes of studies and analyses (see annex 2 to the funding proposal) are broad and merely conclude that the needs of the participating countries are classified into the following three overall categories (although the needs vary by country): (i) weak regulatory framework; (ii) limited access to finance; and (iii) nascent or immature climate technology and innovation ecosystem.

1.6 Country ownership

Scale: High

32. The project aligns with national climate and water-management strategies in the target countries. For example, Morocco's national water strategy and Bangladesh's comprehensive water-management plan are directly supported by the RWI Facility's focus on water reuse, desalination, and improving water infrastructure resilience.

33. The facility will work with local governments and public agencies in each country to ensure that the projects are aligned with national development priorities and climate adaptation goals. Local ownership of the projects will be supported through capacity-building initiatives aimed at improving water management and governance.

34. In terms of the capacity of the accredited entity and executing entity to deliver under the overarching criterion of country ownership, the iTAP finds IFC to have a significant opportunity

to become a game-changer in the water sector globally. IFC is commended for having included NRW reduction as one of the potential RWI Facility investment solutions. This is an underinvested area and underexplored in terms of private-sector contributions. Again, IFC is commended for considering this area, and also encouraged to prioritize NRW-related investments and NRW companies. Though the ticket size for these types of investments may be smaller and hence it would be organizationally more challenging to deploy capital in the NRW investments, it would have the highest effect in terms of dollar for impact. (In this case, impact is defined as both enabling less energy use and hence improving decarbonization of the sector, and less water extraction and hence climate resilience.)

1.7 Efficiency and effectiveness

Scale: Medium to high

1.7.1. Cost-effectiveness and efficiency regarding financial and non-financial aspects

35. *Financial adequacy and appropriateness of concessionality:* The concessional finance provided by GCF is essential for bridging the viability gap in water infrastructure projects in the targeted regions. The USD 250 million in loans and USD 8 million in grants would ensure that the project could move forward with minimal financial burden on recipient countries, while enabling infrastructure investments that might otherwise be unattainable. The concessional structure is designed to attract co-financing from private investors by lowering risks and costs, making the project more attractive to the private sector.

36. *Demonstration that the proposed financial structure provides the least concessionality needed to make the proposal viable:* The financial structure of the RWI Facility has been carefully designed to offer just enough concessional finance to make the investments viable without distorting the market or crowding out private investment. The use of concessional loans, rather than grants, minimizes the concessionality required, ensuring that public funds are leveraged efficiently to unlock private-sector participation. This strikes a balance between public and private interests, and ensuring financial sustainability, while achieving large-scale impact.

1.7.2. Cost-effectiveness (mitigation only)

37. Proposed financial structure (funding amount, financial instrument, tenor and term) is adequate and reasonable to achieve the proposal's objectives: The facility's combination of USD 258 million in GCF funding with co-financing from private and public sectors (total financing of USD 1.262 billion) ensures that sufficient resources are allocated to meet the objectives of building climate-resilient water infrastructure. The structure includes long-term loans to cover capital-intensive projects and a small portion of grants to address critical needs such as project preparation and transaction advisory services. The 25-year project supervision period and the 35-year lifespan ensure the facility's long-term impact and effectiveness.

38. *Demonstration that GCF support will not crowd out private and other public investment:* The concessional funding is specifically designed to complement private-sector participation, not to replace it. By de-risking projects through concessional loans, the facility encourages private-sector investment that might not otherwise occur in high-risk environments. Public-sector involvement is focused on governance, capacity-building, and regulatory support, ensuring that the project does not displace other potential funding sources but instead fosters a collaborative financing approach.

39. *Estimated cost per t CO₂ eq (mitigation):* The facility's estimated reduction of 3.01 Mt CO₂ eq over 25 years results from improvements in water and wastewater infrastructure that directly reduce emissions. The cost-effectiveness is enhanced by the adoption of technologies like water reuse and desalination. On the other hand, these technologies increase water availability most often by also increasing energy use. IFC in the Q&A session responded that it

does not have an explicit lever to ensure that the increased energy use will come from renewable sources. The facility design which would have included such a component would have received higher marks for effectiveness in mitigation impacts.

40. The project focuses on reducing NRW, which more directly stands to decrease emissions by reducing the energy needed for water extraction and treatment, as it – to the extent that leaks are repaired – uses already treated and transported water which does not require nearly as much energy to extract and treat as “new” water.

1.7.3. Amount of co-financing

41. *Potential to catalyse and/or leverage investment (mitigation only):* The RWI Facility is structured to catalyse significant co-financing from the private sector, leveraging GCF concessional finance to reduce risks and attract investments. The overall financing structure includes both public and private contributions, ensuring that the USD 258 million in GCF funding is used to unlock additional resources, leading to a total financing of USD 1.262 billion. The facility also aims to crowd in commercial investments, demonstrating viable business models in the water sector that can be replicated and scaled.

42. *Co-financing ratio:* The co-financing ratio is significant, with a large proportion of the project’s total financing coming from private and public sources. The GCF contribution of USD 258 million is intended to unlock over USD 1 billion in co-financing, making it a highly leveraged investment. This expected high co-financing ratio highlights the potential efficiency and effectiveness of the facility in utilizing concessional funding to stimulate broader financial participation.

43. *Potential to catalyse private and public-sector investment, assessed in the context of performance on industry best practices:* The project encourages private-sector involvement by using concessional finance to de-risk investments in water infrastructure, which is typically viewed as a high-risk sector in developing countries. The facility applies PPP models but does not dwell further on what type of PPP models and whether these will be developed to improve industry best practice for balancing public and private interests. Yet, by demonstrating viable water infrastructure and efficiency-enhancing projects, the facility has an opportunity to pave the way for future investments that enhance both water security and climate resilience within the target countries and in other regions.

1.7.4. Facility/project financial viability and other financial indicators

44. *Expected economic and financial internal rate of return:* The IRR for the facility is expected to be positive, as it is designed to deliver long-term financial sustainability through improved water efficiency, reduced operational costs, and the introduction of alternative water sources like desalination. Although specific IRR figures are not provided, the project is structured to be financially viable through cost savings and efficiency gains in water infrastructure management.

45. *Financial viability in the long run:* The project’s long-term financial viability is ensured by reducing operational inefficiencies (e.g. NRW reduction) and improving water resource management, which will lower costs over time. By incorporating unconventional technologies like water reuse and desalination, the facility may also create additional revenue streams (assuming water is metered and billed, and revenues are collected) and ensure that water supply remains operated, maintained, and resilient to climate impacts, securing a long-term financial return.

1.7.5. Industry best practices

46. *Application of best practices and degree of innovation:* The RWI Facility proposes four investment solution areas (see above) in each of which industry best practices may be applied. By focusing on increasing sewage collection in combination with advanced wastewater treatment, solar-powered desalination, advancing NRW reduction as a standard practice, or developing PPP models to provide water to the most vulnerable at same standard and price as delivered to the general public, the proposed project also has an opportunity to enhance industry best practices. Many of these practices have been successfully applied in other regions and now stand to be scaled up in water-stressed countries with a high climate change vulnerability.

47. Finally, in the RWI Facility investment proposal, blended finance is integral to the project's structure, utilizing concessional finance from GCF to de-risk investments and catalyse private-sector participation in water infrastructure.

48. There is a separate blended finance team and governance process, which include specialists in concessional finance, development impact, and private-sector engagement. This team operates separately from the IFC account investment teams to ensure independent analysis of the level of concessionality needed, a separate decision-making process (culminating in a detailed review of each investment decision of the concessional tranche for a project by the Blended Finance Committee or Director), and to safeguard and represent the interests of providers of concessional finance such as GCF. The facility and the AE has delineated some key metrics for the use of concessional capital which are clear and structured and in line with the best practices of the Organisation for Economic Co-operation and Development Development Assistance Committee, The OECD DAC Blended Finance Guidance³:

- (a) *Economic rationale:* The project must have a strong development impact, such as addressing climate change, creating jobs, or catalysing new markets. There must be clear development finance institution additionality and blended finance additionality, meaning that the support is needed to overcome market failures and provide climate and societal benefits beyond investor returns.
- (b) *Crowding in and minimum concessionality:* Concessional funds should be used in a targeted and catalytic manner, ensuring only the minimum support necessary to make projects viable is used. The goal is to attract as much private commercial finance as possible.

49. IFC is clearly a leading institution in creating fit-for-purpose systems and processes for implementing blended finance best practices.

II. Overall remarks from the independent Technical Advisory Panel

50. The **GCF-IFC Scaling Resilient Water Infrastructure Facility (RWI Facility)** is a transformative initiative designed to address the urgent need for climate-resilient water infrastructure across multiple regions in **Africa, Asia, Europe, and Latin America**. By targeting water-scarce regions, the facility aims to increase the availability of clean water, enhance sanitation systems, and reduce GHG emissions associated with inefficient water management. The project holds significant promise for attracting private sector finance in this underinvested area, but it also faces critical challenges in that it may invest in additional water extraction before addressing efficiency issues and may in such cases indirectly or inadvertently delay interventions to reduce high levels of leakage and **NRW**.

³ www.oecd-ilibrary.org/development/the-oecd-dac-blended-finance-guidance_ded656b4-en

2.1.1. Increased strain of water extraction globally and in many of the target countries

51. Extracting additional water for systems with high levels of NRW issues can place unnecessary strain on already stressed water sources. Without reducing water losses, further extraction risks depleting natural water reserves faster than they are replenished, exacerbating the water scarcity problem.

52. For example, regions like Morocco and India, where groundwater resources are already heavily exploited, may face long-term environmental degradation, such as aquifer depletion and reduced water quality, due to overextraction. If NRW is not prioritized, the facility could inadvertently contribute to environmental harm rather than sustainability.

2.1.2. Missed opportunities for efficiency gains

53. Addressing NRW is one of the most cost-effective ways to improve water-supply efficiency. By focusing on NRW reduction, water providers can meet demand without the need for further water extraction. However, if projects under the RWI Facility do not prioritize fixing NRW issues before extracting additional water, they risk missing an opportunity to maximize resource efficiency and reduce operating costs.

54. The funding proposal would be improved by placing a more explicit focus on NRW reduction as a first-line intervention. High NRW levels, when caused by leakages and inefficiencies, mean that a significant portion of the water extracted does not reach end users. Fixing these issues would reduce the need for further extraction and make existing supplies go further.

2.1.3. Sustainability and long-term impact

55. From a sustainability perspective, focusing on water extraction without addressing NRW issues first may lead to a short-term solution that does not address underlying inefficiencies in the water-supply system. Over time, this could undermine the resilience of the water infrastructure, leading to higher long-term operational costs and reduced sustainability.

56. While the RWI Facility does include NRW reduction as a focus area, there is no indication that loss reduction or reduced wastage would be treated as a precondition before extracting additional water. To ensure improved climate resiliency outcomes in the long-term, projects should be structured to first optimize existing systems through NRW reduction.

2.1.4. Policy and regulatory gaps

57. The funding proposal does not appear to outline strong policy frameworks or regulatory mechanisms to ensure that wastage, losses, or NRW issues are addressed before additional water is extracted. This raises concerns about whether water extraction will be managed in a sustainable and accountable way, particularly in regions where governance of water resources may be weak.

58. IFC is a leading institution in carrying out holistic water assessments for the target countries, but it seems to lack the tools to directly affect government and utility behaviour. The facility would have been stronger if it had included other executing entities within the World Bank or external partners, which have a direct relationship with target country governments.

59. Still, even within the current design of the RWI Facility, IFC does have a unique institutional opportunity to work with other members of the World Bank Group in a holistic manner to ensure that the solutions are financially and environmentally sustainable. During the Q&A with the iTAP, IFC shared that the World Bank Group will target the water sector as one where all the different arms of the World Bank Group (policy, public lending, advisory,

guarantees, upstream and private financing) will work more holistically and systematically to target financial, regulatory and climate risks, such as NRW. The funding proposal would have been stronger with more details on how exactly the facility fits into these wider World Bank Group plans to tackle the wider water sector holistically, and how all these institutions would work specifically to tackle perennial complex issues such as NRW, in a particular country example.

60. The iTAP recommends that the AE do the following:
- (a) At the end of the investment period of the RWI Facility, produce a tool for screening investments or loans in the four types of water investments that IFC plans to make, to showcase how principles of alignment with the Paris Agreement can be specifically applied to the wider WASH sector;
 - (b) Allocate GCF risk-absorbing capital and a dedicated IFC WASH-specific team⁴ to co-finance and co-develop WASH projects to ensure a high-quality pipeline to achieve the intended resilience impact of this facility;
 - (c) Consider improving the odds that NRW issues are dealt by a given government and utility by modifying the facility's design. IFC could seek to re-allocate GCF concessionary capital to cover costs of IFC advisory's work towards utilities and governments that are keen to improve NRW and improve the utility's finances at the same time. The concessionality would make it possible to minimize the cost/burden of efficiency improvements to governments and utilities, with some counterparty "skin in the game" to ensure alignment.
61. The iTAP recommends that the Board approve this funding proposal conditional on:
- (a) The following covenants being included in the Funded Activity Agreement:
 - (i) Prior to approving each project under Component 2 (Concessional Financing Facility) in respect of conventional water supply, wastewater treatment or unconventional water supply, IFC shall undertake, or cause to be undertaken, a review and assessment of the relevant water system's wastage, losses and non-revenue water (the "NRW Assessment") and shall take into account the findings of the NRW Assessment during its consideration and approval of the project;
 - (ii) IFC shall confirm in each APR that an NRW Assessment was undertaken and taken into account in respect of each conventional water supply, wastewater treatment or unconventional water project approved under Component 2 (Concessional Financing Facility) during the relevant year; and
 - (iii) IFC shall, upon request by the GCF, provide to the GCF a copy of the NRW Assessment in respect of any relevant project approved under the RWI Facility, which NRW Assessment shall be provided within [ten (10) business days] of the date of such request.

⁴ With all the adequate governance structures in place to ensure ethical walls between equity and debt are in place.

Response from the accredited entity to the independent Technical Advisory Panel's assessment (FP254)

Proposal name:	GCF-IFC Scaling Resilient Water Infrastructure (RWI) Facility ¹
Accredited entity:	International Finance Corporation (IFC)
Country/(ies):	Azerbaijan, Chile, Côte d'Ivoire, Egypt, Gabon, India, Indonesia, Morocco, Pakistan, Peru, Tunisia, and Uzbekistan
Project/Programme size:	Large

Impact potential

We appreciate the ITAP's recognition of the RWI Facility's impact potential for both mitigation and adaptation. IFC is committed to maximizing this potential through careful project selection and implementation so that our investments contribute significantly to climate resilience and GHG emission reductions in the water sector.

Paradigm shift potential

IFC acknowledges the ITAP's assessment of the facility's paradigm shift potential. We are keen to develop innovative funding structures in water infrastructure and management (including in addressing non-revenue water (NRW) issues), and scale them across regions. We will keep working across the World Bank Group to support the sector holistically through projects that demonstrate transformative approaches to water efficiency and climate resilience.

Sustainable development potential

We thank the ITAP for recognizing the facility's contribution to sustainable development. We are committed to not only environmental benefits but also social and economic co-benefits to the communities we serve.

Needs of the recipient

We appreciate the ITAP's recognition of the high need for this facility, with the targeted countries being among the most vulnerable to water-related climate risks. We remain focused on both addressing the critical water infrastructure challenges in the targeted countries and addressing local issues and climate priorities.

¹ The ITAP assessment was based on the funding proposal that was submitted on 9 August 2024 and the changes made thereafter were not within the scope of the review.

Country ownership

We are pleased that the ITAP acknowledges the strong country ownership of the facility. We will continue to work closely with local governments and relevant stakeholders to ensure that projects are well-aligned with respective national climate policies, strategies, and development goals.

Efficiency and effectiveness

IFC takes note of the ITAP's assessment regarding the efficiency and effectiveness of the facility. We are committed to optimizing the use of GCF resources and apply the minimum concessionality criteria leveraging IFC's governance and leadership in this space.

Overall remarks from the independent Technical Advisory Panel:

IFC deeply appreciates the thorough review and valuable insights provided by the ITAP. We acknowledge the panel's constructive feedback and recommendations. We are committed to implementing a high-impact program that addresses these concerns and maximizes the facility's potential for transformative change in the water sector.

Gender documentation for FP254

Gender Assessment & Gender Action Plan

I. INTRODUCTION

Gaps in access to water and sanitation have a high economic cost, are unequal, and they disproportionately affect women and children. In lower middle-income countries, the economic costs from poor sanitation affecting health, productivity, and the environment are estimated to be \$260 billion annually, or 1.5 percent of global GDP—and the impact on GDP for large developing countries is even greater.¹ Over half of the world’s urban population (53 percent) has no access to clean on-site sanitation facilities,² and 15 percent do not have clean, readily available drinking water.³ Lack of basic sanitation services affects 31 percent of people in Sub-Saharan Africa, 40 percent in South Asia, and 22 percent in East Asia and the Pacific.⁴ Access to drinking water is similarly limited: in Sub-Saharan Africa, 51 percent of people are without basic access to drinking water, as are 25 percent in South Asia and 16 percent in East Asia and the Pacific.

The higher cost of informal water sources in many urban areas not only exacerbates poverty and gender inequality by forcing households to devote a large portion of their income to pay for these alternatives, but also captures revenue that could have been made by a water utility, constricting their customer base and growth opportunities in unserved neighborhoods. Low-income households are often forced to spend up to 15 times more on water from unreliable, private sources,⁵ exacerbating inequality for the urban poor, of which women and children make up a large share.⁶ In many societies, women are the ones who pay the water bill despite having lower incomes than their husbands, perpetuating household inequality.⁷ Additionally, in female-headed houses in poor urban areas, the women supporting the households are often informal workers; therefore, water-borne illnesses from lack of clean water and sanitation can jeopardize income generation, financial security, and thus, food security.

Vulnerable populations in fragile and conflict-affected situations, refugees, and forcibly displaced persons may be especially at risk of reduced access to water and sanitation, and women may face particular vulnerabilities amid rising demand. Problems with water scarcity and inequality are intensified by population growth, migration to cities, changes in consumption patterns, and climate change. Demand for fresh water is expected to increase to 40 percent above the existing accessible water supply.^{8,9} At the same time, over 90 percent of water and sanitation funding comes from public sources,¹⁰ and tariffs often

¹ WHO, *Global Costs and Benefits of Drinking-Water Supply and Sanitation Interventions to Reach the MDG Target and Universal Coverage*, 2012.

² World Bank Open Data. World Bank, 2020. Improved sanitation facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, composting toilets, or pit latrines with slabs.

³ World Bank Open Data. World Bank, 2020. “Safely managed sanitation facilities” refers to the percentage of people using improved sanitation facilities that are not shared.

⁴ IFC, *Water Supply and Sanitation Deep Dive*, 2018.

⁵ www.citytaps.org

⁶ UNFPA, IIED, *Urbanization, gender, and poverty*, 2012.

⁷ CAP-NET, GWA, *Why Gender Matters in IWRM: A tutorial for water managers*, 2014.

⁸ McKinsey & Company, *Charting our Water Future: Economic Frameworks to Inform Decision-making*, 2010.

⁹ Existing supply that can be provided at 90 percent reliability, based on historical hydrology and infrastructure investments scheduled through 2010, net of environmental requirements.

¹⁰ United Nations Conference on Trade and Development (UNCTAD), *World Investment Report 2014*.

do not even cover basic operational expenses, especially in developing economies. Identifying current constraints on water access and how to address gender issues to improve business and development outcomes is an urgent concern.

Opportunity areas:

Increasing women's engagement and participation in water and sanitation projects can improve the sector's usage, cost recovery, operations, and management. Improved understanding of men's and women's different needs, opportunities, and constraints for accessing the water sector is a key prerequisite to developing cost-effective water infrastructure. This assessment outlines three distinct opportunity areas that make the business case for gender equality in the sector:

- Opportunity area 1: Better awareness of gender equality issues related to women's roles as consumers and community members improves how projects target consumers, leading to increased use, better cost recovery, and higher potential for expansion.
- Opportunity area 2: Increasing representation of women in water and sanitation workforces, management, and supply chains improves service outcomes and customer access.
- Opportunity area 3: Constructing water and sanitation facilities with a gender lens improves safety and reduces GBVH, improving sanitation and business outcomes.

Industry focus and solutions:

The proposed program will ensure a gender focus in all projects across the four elements of Resilient Water Infrastructure: (i) conventional water resources (CWR), (ii) adequate wastewater treatment (WWT), (iii) water reuse and desalination - Unconventional Water Resources (UWRs), and (iv) non-revenue water reduction (NRWR). A gender approach will be designed for each project, tailored to the project and local context, along the lines of the opportunity areas and entry points that follow in the next section.

II. GENDER GAPS & OPPORTUNITIES

Below are business case examples and specific actions that water and sanitation service providers and their partners, such as governments and multilateral institutions, can take to improve the gender-responsiveness of their operations.

A. Opportunity area 1: Better awareness of gender equality issues related to women's roles as consumers and community members improves how projects target consumers, leading to increased use, better cost recovery, and higher potential for expansion.

Given women's traditional domestic roles of cooking, cleaning, and caretaking in many cultures, women are typically the primary users of water within the household and the ones responsible for its collection, storage, and management; thus, it is in the best interest of water and sanitation service providers to target women as primary stakeholders and users of their services. For example, women often have uniquely informed perspectives on the best locations for public taps and toilets to increase usage, and can provide information regarding leaks and nonrevenue water losses. Women also frequently have informal knowledge about water contamination—for example, contamination associated with sanitation—so ensuring their consultation during water and sanitation service design can be critical to safe and efficient planning, and thus use.

Improved cost recovery through gender awareness could help fund needed expansion into unserved areas. Globally, urban water and sanitation services suffer from cost recovery challenges and usually rely

on government subsidies to cover full costs. Water supply deficits commonly force low-income households to utilize more expensive options such as informal water markets, public water taps, delivery services, or chlorine pills. These options can cost up to 15 times more than piped water from a water utility, while often being lower quality and unreliable.¹¹ In Jakarta, Manila, and Nairobi, water costs five to ten times more per unit in the slums than in the cities' high-income neighborhoods—and higher than in London or New York.¹²

Understanding and responding to women's roles in water usage and bill payment can inform policy and pricing decisions as well as better tailor design, marketing, and outreach of water and sanitation services. This can improve the levels of payment and the economic sustainability of services as well as increase user satisfaction, reducing the likelihood of users' unwillingness to pay or conflicts around tariffs. While women may have unique water usage needs, they also frequently have specific financial or other constraints that limit their access to lower cost water. For instance, women often lack the capital to pay the upfront costs of having a water connection at home, or to pay larger monthly bills as opposed to smaller, more frequent payments. They also often have less access to transportation (or ability to leave household duties) than men. These types of barriers can make the difference between a woman becoming a paying customer or continuing to purchase water from informal sources, keeping her in a cycle of purchasing overpriced water and preventing the water company from gaining new clients and revenue. Taking into account the financial capacity and needs of women can help service providers create affordable and practical tariff structures for users, such as allowing for smaller and more frequent payments in locations closer to the home and payment methods using mobile money or smartphone apps.

The below entry points are concrete actions that water and sanitation service providers, governments, and multilateral institutions can take to increase gender responsiveness in their operations, leading to increased use, better cost recovery, and higher potential for expansion.

Entry points:

- To understand the diversity of users, integrate gender into the methodology and analysis of baseline community assessments, social impact assessments, community consultations, compensation, participatory monitoring, and grievance mechanisms.
- Consider monitoring the project from inception (when possible) throughout implementation by collecting gender-disaggregated data on public health and time indicators, and their impacts.
- Ensure that community consultations and consumer support services target the full spectrum of users, including women, ethnic minorities, refugees and displaced people, the disabled, those who speak indigenous languages, and the illiterate. In many cultures or regions, women may not attend or feel comfortable speaking freely in consultations—in these cases, gender-segregated meetings should be held.
- Include women beneficiaries and users in the design of services and tariff structures. For example, survey women about how the service can better meet their daily needs, as well as what tariff structures, payment models (such as mobile money or smartphone apps), and digital engagement methods would increase their ability to make regular on-time payments and receive customer support.
- Train community engagement staff on opportunities and challenges to integrating gender across activities. Employ women as community engagement staff.
- Consider conducting the following studies when appropriate/applicable:

¹¹ www.citytaps.org

¹² World Bank, *Uncharted Waters: The New Economics of Water Scarcity and Variability*, 2017.

- Study innovative payment platforms and tariff structures tailored to serve the needs of low-income households, refugees, and those with irregular incomes. This can include those that follow pay-as-you-go models, allowing users to pay as needed and avoid a large bill each month.
- Qualitative and/or quantitative research to understand the vulnerabilities and risks of vulnerable or low-income groups, including female-headed households (FHHs), with regard to tariff, payment, and mobility issues.
- Mapping users from FHHs in the target service area to integrate this data into a service user database.
- Recognize that women and men may access information differently, due to their often-differing roles and levels of access to information in society. Social circles, coworkers, radio, television, and social media are just some of the sources which may differ for consumers of information depending on their gender, age, or literacy levels. Design behavioral change communications that are gender-sensitive and target women to ensure that both men and women are aware of the new services being introduced.
- Propose training/engaging women as community health educators where appropriate—their unique roles and knowledge as water managers and caregivers in the home can position them well for this role.
- Partner with financial institutions to promote access to financing or funding, such as in the form of sanitation loans, to give borrowers the initial capital they need to pay for water and sanitation products and services.
- Partner with small water enterprises (SWEs) to help meet service mandates while creating jobs and increasing water access in communities.

B. Opportunity area 2: Increasing representation of women in water and sanitation workforces, management, and supply chains improves service outcomes and customer access.

The water and sanitation sector is an overwhelmingly male-dominated industry, yet inclusion of women in workforces and management can improve service outcomes. A World Bank study of 64 water and sanitation service providers in 28 countries around the world found that an average of only 18 percent (fewer than one in five) of their workers are women. While 23 percent of engineers and managers in the utilities were female, 32 percent of the utilities studied had no female engineers and 12 percent had no female managers.¹³ And legal barriers to women’s employment still exist to varying degrees in most countries in the world—for example, 23 countries still have explicit discriminatory restrictions affecting women’s employment in the water sector.¹⁴ Although women make up a small percentage of the water and sanitation workforce, one study found that their inclusion makes projects six to seven times as effective.¹⁵ Because women are key clients for water and sanitation service providers, a more gender-diverse workforce can also help service providers better understand and respond to the concerns and needs of female clients—and lead to more efficient and effective services and improved customer satisfaction.

In addition to ensuring a gender lens is used in employment and relations with communities, infrastructure companies must also consider ways to make their supply chains more inclusive. Supplier

¹³ World Bank, “Women in Water Utilities: Breaking Barriers,” 2019.

¹⁴ Inka Schomer and Alicia Hammond, “Stepping Up Women’s STEM Careers in Infrastructure: An Overview of Promising Approaches,” ESMAP Paper. Washington, D.C.: World Bank, 2020.

¹⁵ WSUP, “Gender balance in the water and sanitation workforce,” 2019.

diversity, including in terms of gender diversity, is known to promote competitiveness, reduce potential for disruptions, and increase innovation. Contracting local, woman-owned and operated businesses is also a way to promote strong community relations and ensure that profits from operations trickle down to diverse members of the community and their families.¹⁶

Additionally, because women make up a significant percentage of entrepreneurs and entrepreneurship is key to women’s economic empowerment, lack of water access for small and medium-sized enterprises (SMEs) can significantly impact women’s progress. Women-owned and women-managed enterprises can be smaller and more disproportionately affected by interrupted access to public infrastructure, such as water and sanitation, than enterprises owned and run by men. Informal microenterprises play a dominant role in low-income countries, accounting for 47.2 percent of GDP.¹⁷ Globally, one in three businesses are women-owned; the number varies by region, with Latin America having the highest number at 50 percent.¹⁸ SWEs turn individuals into water entrepreneurs who can help bring clean water to homes without water connections. Partnerships between utilities and SWEs can benefit utilities while also creating jobs and increasing water access in communities.¹⁹

The below entry points are concrete actions that water and sanitation service providers, governments, and multilateral institutions can take to increase representation of women in water and sanitation workforces, management, and supply chains to improve service outcomes and customer access.

Entry points:

- Review and update HR policies and practices to promote gender equality, particularly those related to recruitment, retention, promotion, a parent-friendly work environment, and gender-based violence and harassment (GBVH) policies.
- Create or support leadership and mentorship programs, training opportunities, and professional networks for women employees.
- Train women as local repair technicians.
- Work with educational institutions to encourage women in the pipeline for water and sanitation service providers and technicians—i.e., as engineers, technicians, mechanics, operators, system architects, and utility managers. Specific mechanisms could include scholarships, internships, and mentorships for girls, exchange programs, and innovation competitions.
- Develop mandatory gender equality and unconscious bias training for all employees—and contractors, when possible. Ensure this training is based on a strong foundation of gender-responsive corporate policies and procedures.
- Take measures to increase opportunities for women-owned business to enter the supply chain.
- Work with communities to increase the participation of women in local water management committees and structures.

C. Opportunity area 3: Constructing water and sanitation facilities with a gender lens improves safety and reduces GBVH, improving sanitation and business outcomes.

¹⁶ IFC, *Unlocking Opportunities for Women and Business: A Toolkit of Actions and Strategies for Oil, Gas, and Mining Companies*, 2018.

¹⁷ ICRW, “Women Entrepreneurs Need More Than Capital,” 2019.

¹⁸ World Bank, “Women entrepreneurs needed—stat!” 2020.

¹⁹ Cyrus Njiru, “Utility-small water enterprise partnerships: serving informal urban settlements in Africa,” *Water Policy*, 2004.

Where women have to go outside or to remote locations to collect water or use sanitation facilities, they are at risk of exposure to gender-based violence, conflict, and other safety concerns. Delaying water collection or use of sanitation facilities can impede women’s daily activities, such as household duties or school attendance, and can be physically and psychologically damaging. Not only would proper sanitation reduce assaults and municipal costs in urban areas, but women would also be safer to engage in business and public life. Seventy percent of sexual assaults in the state of Delhi, India occur when women leave their homes to defecate in the open.²⁰ In a study in South Africa, researchers found that in the township of Khayelitsha, the cost of increasing the number of toilets—including maintenance costs—would more than offset the current costs the city faces from sexual assaults related to poor access to sanitation.²¹

Access to proper sanitation facilities has an impact on employee absenteeism and profit. A World Bank study found that if employees skipped one day of work per month during their menstrual period due to the lack of proper sanitation facilities, the Philippines and Vietnam would suffer from 1.5 to 13.8 million workday absences respectively, causing an economic loss of \$1.28 to \$13 million per year.²² It also impacts education outcomes: in a Plan International survey of 7,000 youth across four regions of the world, one in four girls said they never feel comfortable using school latrines.²³ Another study in India found that one quarter of girls skipped school during menstruation.²⁴

The list below contains actions that water and sanitation service providers, governments, and multilateral institutions can take to integrate a gender lens and decrease GBVH risks in the construction of water and sanitation facilities.

Entry points:

- Design and construct sanitation facilities with the input of the women who will use them. Design that accounts for user needs and local knowledge can lead not only to increased usage, but also can improve maintenance. Menstrual health and hygiene should also be incorporated into the design of facilities to ensure equity and dignity, as well as proper usage of facilities.
- Conduct a GBVH risk assessment for all new projects. As part of the due diligence process, IFC’s environmental and social department carries out such an assessment.
- Perform a safety audit to determine ways to improve safety for men, women, and children, such as by ensuring areas are well lit and that doors lock properly.
- Build the service provider’s capacity to assess, address, and monitor any incidents of GBVH within the workforce, amongst contractors, and towards users of their services.
- Train employees and contractors how to recognize and address GBVH situations.
- Develop systems to report and address GBVH incidents within both the workforce and the community.
- Work with service providers to develop GBVH policies and codes of conduct for all employees.
- Require adherence by contractors and sub-contractors to the GBVH codes of conduct.

²⁰ We are Water Foundation, “Toilets to provide freedom, health and dignity to women,” 2017.

²¹ Gregg Gonsalves, Edward Kaplan, A. David Paltiel, “Reducing Sexual Violence by Increasing the Supply of Toilets in Khayelitsha, South Africa: A Mathematical Model,” 2015.

²² World Bank, Economic impacts of sanitation in Southeast Asia: a four-country study conducted in Cambodia, Indonesia, the Philippines and Vietnam under the Economics of Sanitation Initiative (ESI), 2008.

²³ United Nations Girls’ Education Initiative, Infographic: End School-related Gender-based Violence, 2014.

²⁴ Anna Maria van Eijk, M Sivakami, Mamita Bora Thakkar, Ashley Bauman, Kayla F Laserson, Susanne Coates, and Penelope A Phillips-Howard, “Menstrual Hygiene Management among Adolescent Girls in India: A Systematic Review and Meta-Analysis,” 2016.

- Consider creating or implementing awareness campaigns about GBVH.

III. COUNTRY LEVEL ASSESSMENTS

A rapid desk level review was carried out across the 13 proposed countries to scan for relevant and ongoing works related to gender, water and climate. Initial findings indicate while some countries have made progress or are engaging across this nexus area of gender-water-climate— several countries are just getting started. Further, many examples focus on women’s access to water services and women as beneficiaries – which is typical for gender considerations across infrastructure sectors. However, in recent years there has been an uptick of exploring gender issues beyond access, with projects focusing on women in the water workforce/utility level, or women in water supply and water resource management more broadly. The country level summaries below²⁵ help establish a baseline of existing resources and starting points on which the team can build during the more detailed design and implementation of the Gender Action Plan.

A. Azerbaijan

Gender. [ADB Gender Assessment](#) notes that gender equality challenges persist in the areas of maternal and child health, the gender wage gap and women’s political representation. Women’s share in the labor force is 48.1% compared to 51.9% for men. Of the 82% employed women who work in five sectors, 42.1% are in agriculture, 18.2% in trade, 11.7% in education, 6.1% in healthcare and social sphere, 3.5% in food processing, however, their contribution to GDP is just 27% in these five sectors, which is evidence that women are mostly concentrated in the low-paid sectors, according to the Democracy Monitor.

Water. The government has greatly improved water supply and sanitation service for the population over the past decade. Further investments to upgrade infrastructure and services are planned as the government works toward the Sustainable Development Goal definitions of safely managed water and sanitation systems. By investing in water supply and sanitation, the government is directing resources to a sector that will benefit women, ease the burdens on their time, and contribute to improved health outcomes for women and children.

Climate. Azerbaijan is also experiencing increased environmental migration and disaster risks. Floods, landslides, and earthquakes are the most frequent sudden-onset events. Climate-induced disasters are affecting several settlements, including water scarcity, soil degradation, salinization, rising temperatures, and sea level fluctuation. There has been an increasing rate of exposure to severe weather events and negative impacts on the population such as displacement. Women are more responsible for household tasks, a work that increases when a family is displaced. As a result, resettlement of the family creates a heavy work burden on women. It also can result in a loss of social connections on which women depend for mutual support and in caring for their children when they shift to new areas. Having higher responsibility for domestic tasks, women and girls will be more negatively affected by increased water scarcity that is expected due to climate change. Women are also underrepresented in formal disaster risk reduction processes, including policy and decision-making.

Examples of Programs and Targets: In August 2018, the first set of the national targets under the UNECE-WHO/Europe Protocol on Water and Health was adopted. Targets were adopted by joint decree No. 524-

²⁵ Given the nature of a rapid desk assessment – the data and supporting research are paraphrased or direct citations based on the links provided.

No. 57 of the Ministry of Ecology and Natural Resources and the Ministry of Health. The targets set in 19 thematic areas cover the entire water cycle from access to safe drinking water to quality of discharged wastewater and from quality of bathing water to effectiveness of water resources management.²⁶ [The Guardian](#) notes that Azerbaijan has added 12 women to the previously all-male organizing committee for the COP29 global climate summit.

B. Chile

Gender. According to [UNWomen](#), globally, some progress on women's rights has been achieved. In Chile, 83.3% of legal frameworks that promote, enforce and monitor gender equality under the SDG indicator, with a focus on violence against women, are in place. The adolescent birth rate is 22.6 per 1,000 women aged 15–19 as of 2018, down from 26.4 per 1,000 in 2017. However, work still needs to be done in Chile to achieve gender equality. As of February 2021, only 22.6% of seats in parliament were held by women. In 2018, 5.8% of women aged 15-49 years reported that they had been subject to physical and/or sexual violence by a current or former intimate partner in the previous 12 months. Also, women and girls aged 10+ spend 22.1% of their time on unpaid care and domestic work, compared to 9.9% spent by men. As of December 2020, only 50.8% of indicators needed to monitor the SDGs from a gender perspective were available, with gaps in key areas, in particular: key labor market indicators, such as the gender pay gap. In addition, many areas – such as gender and poverty, physical and sexual harassment, women's access to assets (including land), and gender and the environment – lack comparable methodologies for regular monitoring. A recent [Climate Resilience policy brief](#), women play a central role in domestic and care work in rural areas. Hence, in conditions of water insecurity, they are primarily responsible for accessing and managing water within their households. Water insecurity leads to increased domestic and care work burdens, which impact women's physical and mental health, nutrition, and paid and community work. Women contribute valuable knowledge that must be integrated into climate change adaptation strategies, offering an opportunity to transform traditional gender roles in water management.

Water. According to [Chile's Water Transition pipeline project](#) water has played an important role in Chile's economic growth, particularly due to the importance of mining and irrigated agriculture, as well as hydropower on which was based Chile's industrialization. The conjunction of goods with water-intensive production processes accounts today for more than 20 percent of GDP and employments and more than 80 percent of national exports. This is without considering the service sector which also requires reliable water supply services for its development. Water has also played a fundamental part in the improvement of living conditions predominantly in urban areas. Chile has achieved close to universal access to safe drinking water (99.9 percent of the population) and sanitation (96.7 percent) in urban areas with a rate of wastewater treatment of 99.9 percent. These achievement in urban areas, which are home to 88 percent of the Chilean population, have contributed to significant improvements in the population living conditions, including a reduction of deaths and diseases attributable to water-related diseases and lack of hygiene, particularly among children under the age of 5, the lowest in South America after Uruguay. The expansion of these benefits to rural areas remains a challenge.

Climate. [Chile's Water Transition pipeline project](#) outlines that long term challenges such as climate change are posing an additional threat to Chile's economy. According to the Global Climate Risk Index 2021, the country is in the top 25 of countries most vulnerable from extreme weather changes. Without adequate management of water extremes, future climate change will only exacerbate these impacts. Most

²⁶ <https://unece.org/environment-policy/water/protocol-on-water-and-health/targets-set-parties>

people and economic activities are located from the Metropolitan region to the north where water scarcity is severe and increasing as a result of climate change and increased water demand. Competition over water resources, the effects of climate change and gaps in the management of water resources and the provision of basic services are hindering Chile's socio-economic development. Scarcity and climate change are also increasing the risk to meet water service provision particularly in rural areas where service gaps persist.

C. Côte d'Ivoire

Gender. The [Cote d'Ivoire - Country Climate and Development Report](#). highlights while major reforms and policy initiatives to support women's empowerment have been in place since 2011, women face challenges across multiple domains including economic outcomes, human capital, and voice and agency. While access to financial services and inheritance rights are similar for both men and women, access to land and nonland assets are highly unequal, thus increasing the vulnerability of women. In addition, higher illiteracy rates for women, make it more difficult for women to access information on -disaster risk- prevention. Women are underrepresented at the policy level, occupying only 14 percent of seats in parliament, and comprising just 5 percent of mayors. They are also overrepresented in climate vulnerable employment and prevailing gender norms make it more difficult for them to start green businesses or to obtain green jobs. At the same time, studies show that women's political participation leads to more stringent climate change policies and that women's participation in -climate risk- management improves disaster responses, environmental governance, and reduces carbon emissions.

Water. The [Urban WSS Project](#) notes that the country is blessed with abundant water resources with four major river systems running southwards. However, floods have repeatedly hit Côte d'Ivoire, mostly in the south where the highest amount of rainfall occurs. Additionally, with the combined effect of changing patterns in rainfall and temperatures, droughts are expected to increasingly impact the semi-arid northern savannah region in the coming century. Rising sea level is also likely to affect the coastal part of the country. Addressing this situation calls for improved protection, conservation and management of water resources through new policies, strategies and project designs. Although services have started to recover since 2014, in general reliability and sustainability of service delivery deteriorated substantially during the political crisis due to the lack of investment and effective maintenance. A recent journal article found that in rural Ivorian communities, women are considered as the guardians of water, undertaking an essential role deeply rooted in local cultural values, ensuring the preservation and management of this vital resource. However, the scarcity of potable water places them under significant pressure, exposing them to heightened risks. (Discover Water, 2023).

Climate: Despite good progress over the last decade, recent global economic and health shocks have aggravated existing problems including lack of fiscal space, limited access to concessional and cheap financing, and a fragile political neighborhood. But Côte d'Ivoire now has an opportunity to put its growth on a more sustainable path, both realizing the aspirations of a growing population and better adapting to the growing impacts of climate change. Climate change impacts are already affecting Côte d'Ivoire, as temperatures increase, rainfall and other weather events become more extreme and less predictable, and sea levels rise. Côte d'Ivoire established the National Gender and Climate Change Strategy (2020–2024) with the vision that by 2030, all actions to combat climate change will consider issues related to gender equality and social inclusion.

Examples of Programs and Targets: Cote D'Ivoire has set a goal to guarantee access to drinking water through the Water for All Programme to 97% of the population by 2025 and 100% by 2030 in urban and rural areas, and to reduce the open defecation rate in rural areas by 4% (from 39% to 35%).²⁷

D. Egypt

Gender. According to the [Egypt - Gender Data Portal](#), the labor force participation rate among females is 16.5% and among males is 71.3% for 2023, which has decreased from 1990. In Egypt, women spend 9.2 times as much time on unpaid domestic and care work than men. Women represented 20.5% of those employed in senior and middle management in 2021. The female share of employment in senior and middle management for Egypt falls in the lowest quintile of all countries for which there are data. High population growth and rising fertility rates suggest that creating jobs for youth and women will remain a challenge. The employment rate has declined, with structural impediments to labor demand affecting youth and women most deeply. In 2021, women's formal labor force participation rate was only 16%, compared with men's 74%, with a notable drop during the pandemic, illustrating this group's vulnerability to external shocks. In addition, poor women are one of the groups with the lowest human capital accumulation in Egypt, putting them at a disadvantage in the labor market.

Water. Egypt's [Rural Sanitation P4R Project](#) notes that In the past two decades Egypt has made significant progress in providing direct access to safe drinking water at the household level (96 percent) and basic sanitation services (82 percent). However, geographic and socio-economic disparities remain: an estimated 90 percent of urban households are covered by public sewers, compared to only 18 percent in rural areas. In rural areas, an estimated 77 percent of collected wastewater is currently treated but most treatment plants do not achieve Egyptian effluent standards. Rural areas of the Nile Delta are particularly affected due to high population density, shallow groundwater levels, and the discharge of untreated sewage directly into the water system.

Climate. The [Country Climate and Development Report](#) notes that Egypt has made early efforts to remove fuel subsidies, pioneered the offering of green bonds in the MENA region, and anchored the direction of its climate change policy. The Nile River accounts for about 97% of freshwater resources, and due to the unique hydrology and large size of the Nile Basin, even minor changes in precipitation in the Basin dramatically affect water availability in Egypt. Over 80% of the population in Egypt's 14 major cities—which account for 72% of the total urban population—are exposed to at least one major climate risk, including flooding, heat stress, air pollution, desertification, and sea level rise (SLR). Women are also more vulnerable to climate change due to their low access to income opportunities, higher engagement in the agriculture sector, limited productive assets and access to services, and limited social capital and voice in decision-making. The differential impact on women is also recognized in the NCCS 2050, which includes a sub-goal on helping them adapt to climate change.

Examples of Programs and Targets: Government reports note there is 98% coverage of safely managed drinking water sources in Egypt. Its goal is to reach 100% coverage for safely managed drinking water and 100% and 60% safely managed sanitation for urban and rural areas respectively by 2022.²⁸ To increase women's participation and inclusion in the country's labor force, IFC launched the Egypt Women's Employment project, which aims to increase and/or improve the quality of women's employment in the private sector by supporting private sector clients to pursue EDGE Gender Certification.

²⁷ <https://www.sanitationandwaterforall.org/partners/countries-map/cote-divoire>

²⁸ <https://www.sanitationandwaterforall.org/print/pdf/node/1049>

E. Gabon

Gender. The [Country Partnership Framework 2023-2027](#) notes that though an Upper-Middle Income Country, Gabon faces many challenges, including weak governance and institutions and a low level of human development as compared to other countries in its income group. According to the *Enquête Gabonaise pour l'Évaluation de la Pauvreté (2017)*, 24.1 percent of women aged 15 years and older had no education at all and 21.0 percent of those who have some education did not go beyond primary education, compared with, respectively, 19.7 and 15.0 percent of men. In Gabon, women have a lower participation rate in formal work and are more likely to work in the informal sector or in micro-enterprises. During 2020-21, Gabon granted spouses equal rights to immovable property and equal administrative authority over assets during marriage. It allowed women to open a bank account in the same way as men and made access to credit easier for women by prohibiting gender-based discrimination in financial services. Gabon no longer requires a married woman to obey her husband and allows women to be head of household in the same way as men. Gabon has also enacted legislation protecting women from domestic violence, now allowing women to choose where to live in the same way as men and has allowed a woman to get a job without permission from her husband. Women are represented at the highest levels of Government, including the positions of Prime Minister, President of the Senate and President of the Constitutional Court.

Water. In recent years, many partners have supported Gabon in the provision of water services, for instance the AfDB's engagement in the Libreville Water Supply. However, very few of them support the management of wastewater and solid waste (Sanitation). As a result, water resources, even though abundant in Gabon, could be threatened by human activity. The [Climate Risk profile](#) notes an annual distribution of rainfall is of great interest to the water industry as the distribution of water throughout the year is critical for planning of resources as well as for safety against disasters. While the country is currently listed as a low-risk for water scarcity for drinking, the threat for salinization and coastal flooding remains high.

Climate. Gabon is also vulnerable to climate change and will likely experience coastal erosion, soil degradation, flooding and drought as a result. There are also opportunities. Gabon's women and girls, in particular, have the potential to contribute more to the country's overall development, building on recent advances in the legal framework. The country's tropical forest is a global public good because of its role as a carbon sink and extensive biodiversity with significant economic potential for the country. The [Climate Risk profile](#) notes that Gabon is located along the equator, the country is largely composed of plateaus and hills, covering 3/4 of the country, with the highest mountain reaching 1,000 meters (m). Gabon has an extremely dense hydrological network that feeds two rivers: Ogooué and Nyanga, as well as high basins of small northern coastal rivers. The country has a moist, hot climate of typically tropical regions. Gabon has a high degree of risk to natural hazards and is highly vulnerable to climate change impacts, which are expected to primarily affect the agricultural, water, and energy and oil and mining sectors, through seasonal flooding, changing precipitation, extreme winds and landslides.

F. India

Gender. The [Country Partnership Framework - FY18-FY22](#) notes that India has enjoyed strong growth with decades of commitment to inclusion, but some gender gaps remain, particularly with respect to economic participation. Research finds that, alongside factors such as women dropping out of the labor force when

incomes rise safety concerns and social norms about house and care work lower women's mobility and participation in paid work. Women tend to use microfinance – indeed, more than 90 percent of India's 90 million plus microfinance clients are women – but these small loans are in some cases not sufficient to help women grow their businesses, which would in turn generate more employment. More generally, estimates indicate relatively low levels of female ownership of land and other real property. Women account for nearly 1.4 million elected representatives in rural Panchayati Raj Institutions, or about 44 percent of all such representatives, and similarly 43 percent of gram panchayats (2018 Economic Survey). In addition, India is home to nearly 8.5 million self-help groups of women, which have not only connected women to finance and economic opportunities, but more importantly have given women voice and a sense of agency.

Water. The [Water Supply and Sewerage Project](#) notes WSS services across India are under pressure from rapid population growth, urbanization and climate change impacts. Policy and institutional reforms as well as infrastructure capacity in the water sector have not kept pace with India's rapid development. No city in India receives piped water 24 hours a day, drinking water standards are often not met, and few sewerage treatment plants (STPs) are functional. Groundwater supplies are under stress due to decreasing precipitation rates and increasing extraction rates. The Non-Revenue Water (NRW) due to leakages, unauthorized connections and other inefficiencies is estimated at 40-60 percent, contributing to low Operations and Maintenance (O&M) cost recovery of typically 30-40 percent. The [Water Utilities Women Report](#) notes that Suez India has set up a Constitution of Internal Complaints Committee, constituted at all administrative units and offices, that addresses any sexual harassment complaint as and when it arises; sensitization workshops are conducted regularly to sensitize both men and women on sexual harassment. In South Asia, female employment in WSS utilities is much lower where female labor force participation rates tend to be lower.

Climate. Climate change is impacting several states, with average temperatures projected to rise due to the changing precipitation pattern, causing cycles of extreme weather including droughts and flooding, and many locations will be considerably drier, impacting water sources such as lakes and rivers. Local residents and tourists have a greater exposure to public health threats including waterborne diseases because of an increased frequency and intensity of climate-induced droughts and floods, in addition to the lack of adequate and sufficient water and sanitation services.

Examples of Programs and Targets: The Indian government has implemented several initiatives to work towards achieving SDG 6, which focuses on ensuring the availability and sustainable management of water and sanitation for all. Jal Jeevan Mission, launched in 2019, aims to provide piped water supply to every household in rural areas of India by 2024. It focuses on water source development, infrastructure creation, capacity building, and community participation. The National Urban Sanitation Policy (NUSP) aims to ensure sanitation and waste management in urban areas. It focuses on promoting sanitation practices, constructing toilets, and implementing solid waste management systems.²⁹

G. Indonesia

Gender. As the [Women in WASH](#) assessment states, there has been good progress with increasing numbers of women working in the Indonesian Government Civil Service as well as in other WASH sector organizations, with women being a majority in some positions, such as in Community Sanitarian and

²⁹ <https://www.smsfoundation.org/government-initiatives-to-meet-the-sdg-6-goals-in-india/>

Community Health Worker roles. There has also been a positive trajectory with more women taking up middle management, and some senior decision-making roles in the WASH sector, including in the Ministry of Health Environmental Health Directorate, the Health Promotion Directorate and in the Ministry of Public Works, Sanitation Directorate. But overall, senior decision-makers in government are predominantly male. Barriers to women taking up more senior roles in the WASH sector, include challenges from ensuring work-life balance with family responsibilities, fear of being moved away from the family and sometimes a personal decision to not take up higher positions. Some women may also leave the workforce to have children and may find it difficult to re-enter or to move into senior level positions.

Water. The [Indonesia Vision 2045: Toward Water Security](#) states that the development of water resources and services has been a principal driver of the sustained growth in gross domestic product (GDP) and per capita incomes in Indonesia. Today 9 out of 10 Indonesians have access to improved water and two-thirds have access to improved sanitation. A productive agricultural sector meets food security needs and sustains livelihoods for one-third of the population. Water drives industry, and clean hydropower contributes 7 percent of the nation's electricity. Piped water supply reaches only one-third of the urban population and less than one-tenth of rural households. Despite apparent abundance, water resources are becoming scarce in key urban locations, particularly in the dry season. Wastage, pollution, and uncoordinated development are exacerbating water stress in river and groundwater basins of high economic importance.

Climate. [Climate-Resilient and Inclusive WASH \(CERIA\)](#) report notes that Indonesia is ranked in the top-third of countries in terms of climate risk, with high exposure to all types of flooding and extreme heat, both of which are expected to intensify as the climate changes. Climate change is likely to have impacts on water availability, disaster risk management, urban development — particularly in the coastal zones — and health and nutrition, with implications for poverty and inequality. Indonesia is particularly vulnerable to sea-level rise, with a high proportion of the population inhabiting lower elevation coastal zones. Due in large part to this, Indonesia is also ranked sixth highest in the world for the number of people impacted by floods, with some 464 annual flood events displacing or disrupting approximately 640,000 Indonesians every year. The impacts of climate change are already being felt in Indonesia, with more frequent droughts, heat waves, extreme floods, and large-scale landslides. These impacts have hindered the progress of many development aspects in Indonesia, such as health, water resources, food resilience, housing, infrastructure, and ecosystem.

H. Morocco

Gender. The [Morocco Water Security and Resilience Program](#) notes the female participation rate in the labor force in Morocco is low and declining, with important implications for women's autonomy and the country's economic potential. Despite the parity article of the 2011 Constitution, gender inequalities have rather increased over the past decade: in 2020, Moroccan women accounted for 23 percent of the working population compared to 27 percent in 2010. While Moroccan women perform better than men at school (on average), only 13 percent of Moroccan businesses were led by women in 2019, only 23 percent of managers in the public sector were women. Similarly, women were only represented in 21 percent of regional and local councils. Persistent gender gaps in the workforce remain in the water sector. The share of women in water institutions in technical and leadership positions at central and regional levels is still limited compared to men. In 2022, at the level of the MEE-DGH, out of 909 functionaries, 292 (or 32 percent) were female, and they occupied 37 percent of the available technical positions. Women in

leadership positions in 2019 within MEE-DGH reached 30 percent, while the share at the ABHs level stood lower at 19 percent.

Water. The [Country Climate and Development Report](#) notes that Morocco is one of the most water-scarce countries in the world: it is quickly approaching the absolute water scarcity threshold of 500 cubic meters (m³) per person per year. With a longer-term perspective, the reduction in water availability and the drop in crop yields due to climate change could reduce GDP by up to 6.5 percent. Rainfed agriculture (bour) is particularly vulnerable to both droughts and water scarcity. The deployment of water infrastructure at a massive scale has been a critical contributor to Morocco's recent development. Since the late 1960s, the kingdom has built more than 120 large dams, leading to a tenfold increase in the total capacity for water mobilization—from 2 to almost 20 billion cubic meters. It also expanded drip irrigation, which resulted in an increase of water productivity in agriculture, by far the most important water-consuming sector in Morocco.

Climate. The [Country Climate and Development Report](#) estimates that Morocco could reach a net-zero emissions by the 2050s by taking advantage of its abundant competitive renewable energy resources and implementing its ambitious Reforestation Program. Decarbonizing its economy would also contribute to increase its energy independence and reduce the average cost of electricity generation. Morocco has developed a sophisticated architecture for disaster risk management (DRM) and disaster risk financing (DRF), but the scale of investment in risk reduction and insurance coverage remains insufficient. Floods are the most frequent climate-related natural hazards in Morocco, causing average direct losses estimated at \$450 million per year, with a disproportionate impact on vulnerable households. In addition, given that more than 65 percent of the population and 90 percent of industry is concentrated on the country's coastline, sea-level rise constitutes another long-term stressor, especially for low-lying areas that will contribute to exacerbating the risk of floods.

Examples of Programs and Targets: Morocco has started initiatives of mobilizing unconventional water to meet the increased demand for water, including desalination of seawater and reuse of wastewater practices. Regarding these initiatives, it was reported that the volume of wastewater treated and mobilized for reuse reached 64 Mm³/year in 2019, with an objective of reaching 100 Mm³/year in 2020 and 341 Mm³/year by 2050.³⁰

I. Pakistan

Gender. The [Country Partnership Strategy \(2021-2025\)](#) notes that gender inequities are profound. Pakistan is ranked third from last in the 2020 Global Gender Gap Index. Sociocultural constraints on girls' and women's access to health, education, training, jobs, and mobility persist. The overall literacy rate for women in Pakistan is estimated to be only 52%, compared with an already low 73% for men. The rate is even lower in rural areas—41% for women and 66% for men.¹¹ Likewise, female labor force participation is only 23%, compared with 81% for males (ages 15 and above).¹² Employment for women is mostly in the informal economy, estimated to cover about 71% of women's total employment in the country. Analysis indicates that, if Pakistan can close the gender gaps, its GDP may increase by as much as 30%.

Water. USAID and [Global Waters program](#) notes that Pakistan is among the most water-stressed countries in the world. Only 36 percent of the population has access to safely managed water, a problem that will likely get worse in the coming years due to rapid population growth and urbanization, as well as global

³⁰ <https://sdgs.un.org/basic-page/morocco-24773>

warming, which is rapidly depleting the country's primary water source—seasonal snow and ice melt from the mountains. The threat will have serious implications for food security, domestic and municipal water supply needs, energy production, and industry. Sanitation coverage also remains an issue; only 58 percent of the population has access to basic sanitation. These problems are exacerbated by the fact that Pakistan has no comprehensive water resource strategy or policy or law that defines water rights.

Climate: The [Country Partnership Strategy \(2021-2025\)](#) notes that Pakistan is highly exposed to natural hazards, including floods, droughts, cyclones, and earthquakes, as well as infectious disease outbreaks. From 1999 to 2018, more than 84,000 Pakistanis lost their lives to natural disasters (predominantly floods and earthquakes), and the total reported damage exceeds \$26 billion. 19 Extreme weather events will increase in frequency and severity, with harmful associated effects on agricultural productivity, water availability, and infrastructure reliability. Pakistan estimated its climate adaptation investment needs at \$7 billion–\$14 billion per year, but its ability to adapt and to manage disaster and climate risks remains insufficient.

Examples of Programs and Targets: In 2015, Pakistan met the Millennium Development Goal target of 'halving the 1990 population without access to improved sanitation', by achieving 68 per cent coverage of improved sanitation. This was a morale boost for both the government and its partners in the water, sanitation and hygiene (WASH) sector, inspiring rapid institutionalization of the new SDG targets in 2016. The country also set a national target for 72 per cent of the population to be using safely managed sanitation by 2030.³¹

J. Peru

Gender. The World Bank [Country Partnership Framework](#) notes that despite progress in maternal health and education, female labor force participation remains low (26.5 percent in 2017) and unemployment among women is twice as high as for men. The activity rate of women with no education is particularly low at less than 10 percent, and Tunisian women were more likely than men to have permanently lost their jobs as a result of the COVID-19 pandemic. Factors behind women's low participation in the labor market include overall weak labor demand, restricting gender roles and discriminatory regulations, lack of access to productive assets and the limited availability of affordable childcare services, among others. Around 50 percent of women in Peru have suffered some type of partner violence at some point in their life. Levels of violence against women are similar in all regions of the country, urban and rural areas, and prevalence is high across all educational levels.

Water. [UNOPS](#) states that Peru is a country with vast natural resources and rich biodiversity. Yet years of misuse of water resources by the manufacturing industry, effects of climate change, a growing population and inadequate agriculture practices have increased water scarcity and slowed down efforts towards sustainable development. This is compounded by the fact that country-wide water distribution is uneven due to mismanagement. For example, the Peruvian coast is home to more than 55 percent of the country's population, yet has access to less than two percent of its fresh water supply. A recent [World Bank diagnostic report](#) notes that water is a key driver of economic and social development, and sustainable ecosystems. The country is facing a growing gap between its development demands and the quantity and quality of its water resource endowment. Peru's aging water infrastructure and limited implementation of its water management framework have amplified water security risks.

³¹ https://www.unwater.org/sites/default/files/2023-03/sdg6_acceleration_snapshot_621a_pakistan_feb_2023.pdf

Climate: The [Country Climate and Development Report](#) states that Peru has achieved fast economic growth and poverty reduction over the last two decades, but future development goals could be threatened by climate change if it does not strengthen its foundations for resilience. Informal jobs and illegal activities are costly in terms of gross domestic product (GDP) growth, natural resource overuse, vulnerability to shocks, and greenhouse gas (GHG) emissions. GHG emissions are mostly due to deforestation, but increasing rapidly in other sectors, particularly transport. Peru's growth is largely driven by natural capital, which creates vulnerability to climate change and risks and opportunities linked to the global low-carbon transition. Climate variability has affected economic growth in Peru. Together, Peru's unequal spatial distribution of water resources, unbalanced development patterns, and climate change increase the risks of water scarcity. Future climate change impacts on poverty will mostly be felt in the health sector, with increased prevalence of vector- and water-borne diseases, and heat stress.

K. Tunisia

Gender. The [USAID Gender Analysis](#) highlights that Tunisia has led the region in gender equality measures, but many legal protections lack implementation and other laws need amendment to protect gender-related rights. Gender Based Violence in private and public is common, despite the passage of a comprehensive law in 2017. GBV complaints multiplied fivefold during the first COVID-19 lockdown. Women spend eight–12 hours per day on domestic duties, but safe and affordable local social services are lacking. Men are family heads by law and cultural norm, and they control most household decisions. Women in decision-making roles in the public sphere face resistance and violence, including cyberbullying. Women are active in civil society, which can be a gateway to political roles, especially in local communities. Women are numerically well-represented in elected and appointed governance institutions, including leadership roles, but have limited decision-making and policy-making power. Weak local social services – including transportation and childcare – significantly limit women's ability to invest time in economic, civic, and political activities. However, women have limited access to bank accounts, credit, mentorship, markets, or information about business opportunities. Several donor-funded projects support banking reforms and female entrepreneurs, including a few nontraditional enterprises in technology and energy sectors, but coordination is limited. Women in rural regions have significantly less access to information about opportunities, especially via smartphones and the internet.

Water. The [Stockholm International Water Institute](#) highlights that Tunisia is a lower-middle income country that has reached respectable levels of GDP per capita and has good social welfare, partly evidenced by reasonably good coverage of basic water supply and sanitation access in urban and rural zones. The country has a high level of capacity in the water sector and a structured WASH governance system is in place. Yet, behind the positive figures, worrying trends weaken the resilience of the sector. Inequalities persist between urban and rural populations, and across regions of the country in regard to service availability, water quality, and access. Domestic demand is increasing as the Tunisian population is projected to reach 12.7 million people by 2030, up from 11.2 million in 2019. Competing demands for vulnerable and scarce resources are set to become a major concern, as already now in some regions, water consumption for agriculture is putting the supply of drinking water at risk.

Climate. The [Country Partnership Framework](#) states that Tunisia is one of the Mediterranean countries most vulnerable to climate change, both through climate-related shocks (droughts and floods) as well as long-term stressors (sea-level rise and water scarcity). The main climate risks for Tunisia are temperature increases, reduced precipitation, rising sea levels and saltwater intrusion, and escalating extreme weather phenomena (floods, droughts, and forest fires) affecting key economic sectors. Tunisia is a waterscarce country with existing imbalances in water resource distribution between the north and the semi-arid

south. Reductions in water availability due to climate change will affect agricultural productivity and food security. Coastal and urban areas will also be at the center of climate change impacts, due to high vulnerability to climate impacts (heat waves, sea level rise, floods) combined with a concentration of population and economic activity in those areas.

L. Uzbekistan

Gender: The [Uzbekistan Country Partnership Framework - 2022-2026](#) states that large gender imbalances exist in access to services, economic opportunities, and voice and agency. Groups such as woman-headed households and persons with disabilities are highly vulnerable to social and economic exclusion. The risks of gender-based violence and human trafficking persist. Recent reforms in Uzbekistan have included improvements in laws and regulations that can enhance gender equality. Despite these reforms that eliminate legal and regulatory barriers to gender equality, Uzbekistan continues to lag on key gender equality indicators, such as labor force participation and gender pay gaps, that have also been affected by the COVID-19 pandemic. Violence against women and girls has increased significantly during the COVID-19 crisis. The discrepancy between the progress in gender equality legislation and policies and gender outcomes can be attributed, in part, to the regressive gender norms that are prevalent among men and women. Supporting the implementation of recent policy and regulatory reforms that guarantee nondiscrimination on the basis of sex in employment, electoral candidacy, and access to state resources; expanding and improving programs that promote economic and job opportunities for women and vulnerable groups; shifting norms and incentives in favor of gender equality; requiring equal pay for equal work; and strengthening systems for and issuing, enforcing, and monitoring protection orders for survivors of gender-based violence will ensure that all citizens benefit from Uzbekistan's reforms and economic growth.

Water and Climate: The [Country Partnership Framework - 2022-2026](#) states that Uzbekistan is among the countries in the world that are most dependent on water and gas, and it is highly sensitive to climate change. The country is also one of the world's most unsustainable and inefficient users of water and energy. Driven primarily by inefficient management in agriculture, water withdrawal rates in this sector exceed 90 percent of the total renewable resource in the country. Low access and deteriorating water services are a constraint on economic and social development. Water supply and sewerage infrastructure, largely constructed during the Soviet central planning era, has generally exhausted its useful life and requires extensive rehabilitation and renewal. Public expenditure, while rising substantially in recent years, has not kept pace with requirements in asset replacement, maintenance, and system expansion. Water supply and sewerage infrastructure has therefore deteriorated substantially in many areas. These infrastructure issues, combined with institutional capacity constraints, have resulted in a stagnation or decline in water service quality, which is acutely affecting rural areas, district towns, and small and medium-size cities, where most of the population resides. Women and school-age children, who are responsible for collecting water for consumption, bear these burdens the most. The [Water Services Project](#) notes women are underrepresented in WSS sector staff at all levels. When employed, women in Suvokovas are typically assigned to domains traditionally considered for females such as accounting, finance, customer relations, and laboratories.

Examples of Programs and Targets: By 2030, the country reportedly aims to increase coverage by centralized water supply from 67.8% of the population (in 2019) to 91.2%, increase the coverage of the

population with a centralized sewage system from 15.6% to 31.4%, and improve the efficiency of cleaning wastewater from 55% to 80%.³²

³² <https://sdgs.un.org/basic-page/uzbekistan-24786>

Relevant Gender, Water and Climate Resources

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IV. IFC'S OBJECTIVES FOR THIS PROGRAM

Overall Objectives:

1. Assess, address and monitor all projects for gender gaps and opportunities in the workforce, supply chain, and community level.
2. Support project teams to obtain the gender flag for each project.
3. Provide gender advisory services to support projects to close gender gaps and capitalize on opportunities.
4. Prevent and mitigate sexual harassment and gender-based violence in all operation through IFC's new Gender Based Violence Risk Assessment tool (launched in March 2019).

This section explains why gender is important for IFC projects and what IFC does in this space, beyond compliance with the PSs. The experience and approaches to support clients in this sector are illustrated by the points of entries for gender explained earlier in this annex and the proposed tools and instruments IFC developed to address gender at firm-level.

IFC uses a gender flag at the phase of project design and explores opportunities with clients to closing gender gaps through gender advisory during implementation. Below is a summary of the guidance for the application of the investment gender flag. Project-specific gender objectives will be designed after each project gender assessment.

Why IFC focuses on closing gender gaps?

IFC's commitment to advancing gender equality across projects and in particular in the water and sanitation sector is anchored in a [strong business case](#) and in client demand for gender-smart solutions, which have significantly grown over the past several years. It has long taken a comprehensive approach to reduce gender inequality – by creating partnerships to encourage hiring of women and improving their working conditions, by helping expand access to financial services for women, by investing in innovative technologies that expand choices of female consumers, and by working with partners to provide business skills and leadership training to women entrepreneurs. IFC supports companies with gender-specific advice and investment, with clients across a range of industries. Gender is one of IFC's key cross-cutting strategic themes under the [IFC 3.0 strategy](#). IFC recognizes the importance of gender and includes gender-related commitments under the capital increase,³³ the Strategy & Business Outlook, the Corporate Scorecard, the AIMM framework, the Board Paper Template, amongst other key outlets.

What guides IFC's strategy in closing gender gaps?

In December 2015, the World Bank Group launched a [Gender Strategy \(FY16-23\)](#), for the first time jointly committing the institutions of the WBG (including IFC) to support public and private sector clients in closing gaps between men and women. A new [Gender Strategy 2024-30](#) will be formally launched this year, shaped by [extensive and inclusive engagement](#) with public and private sector clients, development partners, civil society and other key stakeholders. The proposed [WB Gender Strategy 2024-30](#) puts forward the bold ambition to accelerate gender equality for a sustainable, resilient, and inclusive

³³ IFC's corporate commitments on gender: (i) quadruple the amount of annual financing dedicated to women and women-led SMEs; (ii) 50% share of women directors IFC nominates to Boards of companies where it has a board seat; (iii) \$2.6 billion in annual commitments to financial institutions specifically targeting women by 2030; (iv) Flag all IFC projects [investment and advisory] with gender components [as applicable] by 2020

future in alignment with the [World Bank Evolution Roadmap](#). The Strategy responds to the global urgency, fundamentality, and complexity of achieving gender equality. Building on implementation of the WB Gender Strategy 2016-23, the new strategy proposes to engage with greater ambition – approaching gender equality for all as essential for global development – and to engage differently. The [WB Gender Strategy 2024-30](#) proposes a focus on innovation, financing, and collective action to end gender-based violence, elevate human capital, expand and enable economic opportunities, and engage women as leaders. Through the firm-level gender assessments, gender gaps will be identified and actions/interventions to close those gaps will be recommended, including indicators for monitoring the implementation of those interventions. All of this will consider the main areas of focus of the WBG strategy and WBG corporate indicators, customized for specific clients.

What do our clients gain from closing gender gaps?

Project leaders of IFC projects are expected to integrate gender in all sectors. Clients see clear benefits from reducing gaps between women and men in the workforce, supply chains, leadership and/or customer base, as this can improve business outcomes such as increased productivity, recruitment and retention of talent, and innovation as well as financial performance, and possibly help gain greater competitive advantage. Closing gender gaps could also potentially help clients gain more visibility, particularly in a competitive environment.

Under this program, as the focus is of integrating gender at firm level, we will rely on the work of WB and other MDBs that are mandated to work with governments and prepare country assessment. IFC is mandated to work at firm-level and engage with utilities/private sector companies and discuss the importance and impact of closing gender gaps. Gender will be integrated through the gender flags and gender assessments at firm level for all projects under this program.

Guidelines for tagging a project with the Gender Flag

To trigger the Gender Flag for a project, the project needs to be intentionally designed and implemented with explicit focus on closing gaps between women and men. The project and its related project cycle documents (IRM, Board Paper, etc.) therefore need to:

- 1) **Incorporate a gender gap analysis** – identify gap between men and women in terms of the relevant stakeholder groups (i.e., leaders, employees, entrepreneurs, consumers, community stakeholders) that the project can help reduce. Usually this analysis includes a gender diagnostic/assessment and collection of data from public sources such as sustainability or annual reports; understanding of the compliance requirements at the country and sector level and perception of staff around the gender approach of client.
- 2) **Define at least one specific gender intervention** – explain how the project will address the gender gap identified, highlighting what activity/ies will be specifically undertaken. Activities need to show intent in applying gender-smart solutions. Activities could either be undertaken by the client directly (pre- or post-disbursement), where the client would report back to IFC, or by the client in partnership with the IFC (such as through an Advisory engagement).
- 3) **Include sex-disaggregated indicators to be measured as part of the project results framework** – ensure appropriate gender-related indicators are being included and tracked. These gender-related metrics/objectives should also be reflected in the reporting requirements in different project legal or reporting documents with the client to ensure accountability.

These three dimensions should be reflected in the Board Paper, in particular in the strategic context, the project description, additionality or the development impact sections. Where exactly the gender gap

write-up will be featured most prominently will depend on the type of intervention, degree of impact or the additionality that can be associated with it. (Please note that Board Paper guidance includes gender-related questions.)

Projects that do not include the above three components and do not demonstrate the **intent** to close gender gaps will **not** qualify for the Gender Flag. For example, a project where gender-related work is circumstantial (e.g., client base/beneficiaries are already majority women, employee base happens to include women, etc.), rather than intentional and reflected in its project design, does not qualify for the Gender Flag. The Gender Flag should be used for projects that intend to close gender gaps through specific intervention/activities included in project design, implementation, and monitoring. Under this Program, firm level projects will be screen and the elements for the gender flag will be identified.

V. GENDER ACTION PLAN AT THE PROGRAM LEVEL

Each project under this program will have a gender flag through carrying out a gender assessment and develop its own gender action plan that defines concrete interventions, baseline data and targets based on a project-level gender diagnostic at the firm level.

IFC will work with companies that benefit from this program to reduce firm-level gender gaps as described in the program action plan below and tackling gender-based violence.

Based on an initial company gender diagnostic/assessment, gender gaps will be assessed and presented to the company together with a set of recommendations on how to address these gaps. A gender assessment includes:

- Data collection using multiple sources such as internal information of the company on workforce, management, suppliers, communities and GBVH; public sources – country context, sector status in the country and globally, sustainability reports, other public information available.
- Interviews with the heads of various departments within the company – HR, CSR, Procurement, Communication, Diversity, equity and inclusion (if any)
- Separate Focus Group Discussions (FDG) with staff women, staff men and management if the focus is on workforce; with suppliers both women and men owned/led business if the focus is on supply chain; with community women and men if the focus is on communities and with customers women and men if the focus is on consumers/customers.
- Analysis of data and findings and report back to the top management of the company with recommendations for improvement in key areas.

The gender assessment is led by IFC and conducted with client input and collaboration. As part of the gender assessment, IFC supports clients to prepare the gender action plan based on the recommendations prioritized by the company. Trainings and capacity building for the client on how to carry a gender assessment may be included as part of the assessment process. In addition, if requested, IFC will provide support to the implementation of the gender action plan through gender advisory. IFC has developed gender-smart solutions to reduce gaps within these different stakeholder groups as briefly described below.

Interventions will be tailored to the technical solutions pillars, the country context and the capacity of the client to deliver. To support the client action plan implementation, tools and guidance have been developed for water and sanitation sector companies to use to implement such solutions through the IFC's interactive, digital Gender & Infrastructure toolkit [Engineering Inclusivity: Infrastructure for Everyone](#). The toolkit provides practical steps that infrastructure companies can take to make their businesses more gender-inclusive and achieve measurable results.

Corporate leadership gaps: IFC, through its corporate governance team, delivers women on board trainings, undertakes company-specific research on increasing female senior talent in pipelines and provides management with concrete actions on how to develop a company-wide diversity and inclusion compact.

Workforce gaps: IFC works with companies to get EDGE (Economic Dividends for Gender Equality) certified, to conduct childcare needs assessments with the goal to design employer supported childcare solutions and to develop a broader set family friendly policy. Check [Tool suite 1](#)

Supply chain: IFC conducts a gender diagnostic of the supply chain to identify barriers and opportunities for women-owned/led companies to become part of the supply chain. Based on the outcome of the diagnostic, IFC recommends the company to focus on various aspects, including capacity building of suppliers, setting procurement targets, increasing supply chain financing for women entrepreneurs, etc. Check [Tool suite 2](#)

Community engagement: IFC engages with communities to ensure gender equal participation throughout the project both in consultation and in decision-making processes. Designing infrastructure projects to meet the needs of community members is nothing new, but having a measurable positive impact means making sure that both women and men are consulted and benefit from activities. Check [Tool Suite 3](#)

Gender-based Violence and Harassment: IFC works with the client to address sexual harassment and domestic violence through research on the impact of gender-based violence on the company, and/or by developing a safe workplace policy and program tailored to the context. Check [Tool suite 4](#)

Resourcing of gender work:

Staff: IFC has a dedicated gender team focusing on infrastructure and gender: 3 core team staff and 14 gender focal points, the majority based in the regions, covering all 14 countries of this program. The client-facing gender work could be done in-house or through a mix of in-house expertise and consultants. Finally, IFC will collaborate with gender and water experts at the World Bank to connect firm-level interventions with wider upstream policy and community issues, bringing to bear the complementarity of the World Bank Groups' expertise.

Funding: The estimate cost of the gender component is between \$160k-200k for the duration of the program for ensuring that each project have been screened for gender/had a gender assessment and developed an action plan. Each gender assessment and action plan at firm-level will cost about 20,000 USD/project, based on our experience with similar projects. The cost includes travel costs and time of the relevant gender specialists, assuming at least one visit to the project company to conduct the gender assessment and preliminary findings. The cost of implementing the interventions will be set up client by client and will be covered by the company or if gender advisory involved, will be cost shared with IFC.

The implementation of gender-specific measures may be covered by the company itself, or through a cost share arrangement with IFC (from the previous experience, at around 10% contribution). If the company asks for IFC's ongoing advice – or, for example, EDGE gender certification – that will require that the company pays an advisory fee to IFC. This is important to ensure that the company has ownership over the outcomes. We are considering about 8-10 projects for the duration of this program. As IFC works with private sector, we will rely on the existing information/country gender assessments from the World Bank and other MDB and organizations, which are mandated to do country gender assessments. Water sector is a priority for both WB and IFC, focusing on different type of clients. From the country assessments, you can see how much information and work has been already done at country level, so we expect to have access to information from the WB. More than this, under the new leadership of WBG, in the water space we work very close together.

Risks of companies' lack of engagement:

IFC has longstanding experience working with the private sector to embed gender-smart solutions and thereby driving company benefits and closing economic gender gaps. IFC has built a wealth of evidence around the business case for firm-level engagement (www.commddev.org), which helps to convince companies to address gender gaps.

IFC is confident that based on its deep gender knowledge in this sector, the firm-level gender gap assessments and the framing of gender equality as a core business concern, firms will be engaging with IFC in enhancing women's economic participation. In addition, shareholders and institutional investors are increasingly recognizing that gender diversity and inclusion is a key performance indicator for companies, and they expect increased attention to gender equality from the company's management. We expect that most clients that IFC will work with under this program will be keen to work with IFC to tackle gender gaps in the water and sanitation sector. IFC will also be embedding sex-disaggregated mandatory indicators in its loan agreement with all clients, namely % of women on boards, women in senior management, and % of women in the workforce. This will be complemented by additional project-specific indicators depending on the type of gender intervention, as for example: indicators related to development of gender policies and procedures, or put in place a Respectful workplace, or develop a gender strategy or set up specific programs (mentoring for example) or include more women owned or led businesses in their supply chain. This other type of indicators will be monitored through Annual monitoring reports or through advisory services where the case may be.

Gender Action Plan

Activities	Indicators and Targets	Timeline	Responsibilities	Budget
Impact Statement: Increased economic participation of women in climate resilient water infrastructure through the private sector by integrating more women as company leaders, decision-makers, employees, suppliers, consumers, and community members.				
(i) Private sector client companies adopted gender-smart solutions and contribute to closing gender gaps in water sector.	(i) #/% of women employees (ii) #/% of women in senior leadership (iii) #/% of women on boards	(i) Tracked annually (ii) Tracked annually (iii) Tracked annually	IFC Development Impact teams	
Outcome Statements: Client companies are enabled to adopt gender-smart solutions to close gender gaps re women participation in workforce and leadership positions, as suppliers, consumers and community members				
(i) Support project teams to obtain the gender flag for each project. (ii) Prevent and mitigate sexual harassment and gender-based violence in all operation (iii) Women and men have a better understanding of sexual harassment and gender-based violence prevention and mitigation	(i) # of projects gender flagged – all (ii) # of projects with actions to mitigate GBVH risks – [40 %*] (iii) % of women and men with better understanding on GBVH prevention and mitigation (75%)	(i) At commitment stage (ii) Before project approval	(i) IFC gender teams (ii) E&S teams	
Outputs Statement: Provide gender support for projects/clients to close gender gaps and capitalize on opportunities. Provide them with tools that will enable them to reduce harassment and gender-based violence, increase women’s participation as leaders, employees, suppliers, consumers and community members.				
(i) Projects under the facility are screened through a gender diagnostic/assessment to identify gaps. Interventions and indicators for the projects to be gender flagged and action plans prepared. (ii) projects under the facility are screen for gender -based violence and harassment (GBVH) risks (iii) projects under this program may receive gender advisory support in having a more systematic, structured and strategic approach to gender.	(i) # of projects under the facility screened for gender, with gender diagnostics/assessments and action plans – all (ii) # of projects under the facility screened for GBVH risks – all (iii) # of projects with gender advisory – potential 4* under the facility (as the case may be) (iv) # of case studies/lessons learned/new tools developed in	(i) Appraisal stage (ii) Part of DD, at appraisal stage (iii) After project commitment (iv) towards the end of the program under facility (v) as per demand (if not included in	(i) IFC gender teams (ii) E&S teams (iii) IFC gender Teams (iv) IFC communication and knowledge teams, with input from gender, investment, client	(i) \$160-200K (program level) (ii) included in DD cost (iii) depending on the gender action plans for individual clients and cost cover by clients or cost share with IFC (separate funding)

<p>(iv) lessons learned from projects under this facility will be codified in case studies or new tools and methodologies</p> <p>(v) trainings and capacity building on various tools and approaches. Training time, content and facilitation should be tailored to women's and men's needs(usually part of the implementation stage of the action plan interventions, but may be part of the gender assessment to transfer skills to the client to carry out the gender assessments in their in other operations)</p>	<p>each country – 4-5* knowledge pieces for the program</p> <p>(v) # of trainings and capacity building interventions – at least 7* trainings/capacity building delivered</p>	<p>the gender assessments)</p>	<p>(v) IFC gender teams</p>	<p>(iv) cost cover by IFC or cost share with the client under this program</p> <p>(v) included under the gender assessments or separately cover by the client or cost share with IFC.</p>
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*Targets are indicative – they will be confirmed with the program's GAP updates.

Note: After the clients are identified and their GAPs prepared, the program's gender action plan will be updated, and shared with GCF for information and feedback.
