Ministry of Foreign Affairs - Department for Green Diplomacy and Climate

Meeting in the Council for Development Policy on 22 September 2022 Agenda Item No. 10

1. Overall purpose:	For discussion and recommendation to the Minister
2. Title:	Framework Programme for Urban Water Resilience under the Strategic Sector Cooperation (SSC)
3. Presentation for Programme Committee:	2 May 2022
4. Previous Danish support presented to UPR:	No, this is the first presentation to UPR

Framework Programme on Strategic Sector Cooperation Urban Water Resilience with Municipality of Aarhus (2023-2026)

Framework Programme Document

Key results:

- Strengthened framework conditions and institutional capacity

to promote climate resilient urban water management - Increased potential for water use efficiency across the 3

countries and at least one demonstration project showing up to 10% reduction is achievable

- Increased potential for raised share of wastewater treated in at least one country and demonstration project showing that up to 10% increase is achievable

- Comprehensive water management planning introduced to partner cities and potential demonstrated for optimizing by 10% through use of digital solutions

Justification for support:

More than half of the world's population live in cities.
Another 2.5 million urban dwellers will have been added by 2025. Responsible for primary service delivery, cites are continuously more important for delivering on the SDGs
Many cities at the forefront of the climate crisis, directly confronted by water scarcity, pollution and floods. Vulnerable communities are particularly exposed to water risks, and their existing safeguards are weaker and they lack the means to

recover from disasters. -Danish city planning, knowhow and technology has shown in phase 1 that they can make a significant contribution to the enabling environment and framework conditions for climate change adaptation and enhancing a long term climate resilient just green transition.

-Contributes to delivering on ambitious Danish water priorities, namely to ensure new and improved water resource

management and access to water in Africa, as well as priorities to strengthen biodiversity and promote nature-based solutions as stated in the Strategy for Development Cooperation.

- Collaboration with C40 in target cities as well as sharing experience and results with a broader subset of cities

Major risks and challenges:

- Partner political priorities and commitment to implementing climate adaptation measures change

- City of Aarhus staff are available on demand and/or restricted by new Covid

- Danish private sector does not respond as expected

Objectives for stand-alone programme:

Strengthen framework mechanisms and institutional capacity of partner authorities to promote climate adaptation and resilience in cities through climate responsive urban water management by building on Danish expertise and solutions with a focus on water related challenges.

Environment and climate targeting - Principal objective (100%); Significant objective (50%)

	Climate adaptation	Climate mitigation	Biodiversity		Other green /environment
Ghana	100				100
South Africa	100				100
India	100				100
Total green budget (DKK)	56 million				
Framework programme bud	lget	Partner		Total	thematic budget in mill. DKK
Ghana		City of Aarhus/Tema	and GWCL	15.0	
South Africa		City of Aarhus/Tshwane		16.5	
India		City of Aarhus/Rajas	than	16.5	
		Programme suppor	t (inc. unallocated)	8	
		Total		56 m	illion

File No.	2022	2022-8539				
Country	Ghar	na, Sou	ıth Afr	ica, Inc	lia	
Responsible Unit	GDK	ζ.				
Sector	4303	0 Urba	ın dev.	and m	anagem	ient
DKK million	2023	2024	2025	2026	20xx	Total
Commitment	12	13.75	15.5	14.75		56
Projected	12	13.75	15.5	14.75		56
Duration	4 yea	rs				
Finance Act code.	06.38.02.14					
Head of unit	Karin Poulsen					
Desk officer	Tine Anbæk					
Reviewed by CFO	Katja Thøgersen Staun					
Relevant SDGs [Maximum 5 – highlight with grey]						

1 Haur HŵyfH No Poverty	2 Hull No Hunger	Good Health, Wellbeing	4 Harris Quality Education	Gender Equality	Clean Water, Sanitation
Affordable Clean Energy	8 tet at an Consult and Decent Jobs, Econ. Growth	9 WINTER AD WINTER AD Industry, Innovation, Infrastructure	Reduced Inequalities	Sustainable Cities, Communities	Responsible Consumption & Production
Climate Action	Life below Water	Life on Land	Peace & Justice, strong Inst.	Partnerships for Goals	

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Abbreviations

AMG	Aid Management Guidelines
AfDB	African Development Bank
APR	Annual Progress Report
DFC	Danida Fellowship Centre
DGBP	Danida Green Business Partnerships
DSIF	Danida Sustainable Infrastructure Finance
EIB	European Investment Bank
FP	Framework Programme
GWCL	Ghana Water Company Limited
HRBA	Human Rights Based Approach
ICLEI	Local Governments for Sustainability
IFU	Investment Fund for Developing Countries
MEAL	Monitoring, Evaluation and Learning Plan
MoU	Memorandum of Understanding
NRW	Non-Revenue Water
PD	Project Document
PMG	Program Management Group
QA	Quality Assurance
RFI	Results Framework Interface
SDGs	Sustainable Development Goals
SMG	Strategic Management Group
SSC	Strategic Sector Cooperation
TMA	Municipality of Tema
ToC	Theory of Change
WTP	Wastewater Treatment Plant

Explainer – Strategic Sector Cooperation and SSC 2.0

As this represents one of the first Strategic Sector Cooperation (SSC) Framework Programmes presented, Box A and B explain what constitutes SSC and the main elements of a SSC Framework Programme under SSC 2.0:

Box A: What is a strategic sector cooperation?

- A peer-to-peer, long-term cooperation between a Danish sector authority or municipality and an authority in a developing country, mainly through technical assistance
- Tackles select institutional and legislative capacity weaknesses of the partner country which the Danish authority's core competences are relevant for addressing but may not tackle all partner capacity constraints
- Consists of 1) project-cooperation between the Danish and partner authority, and 2) a Sector counsellor stationed at the Danish Embassy to facilitate the project and ensure linkages and synergies between partners and agendas of sustainable development, climate diplomacy and green private solutions
- Use primarily instruments such as study tours, seminars, workshops, training courses, and direct engagement of experts for drafting regulations, policies, guidelines, or processes
- Inputs mainly consist of Danish authorities' staff time, travels, consultancies, and expenses for workshop/seminars, studies, trainings
- Projects run in phases, each with a 1-year inception phase (DKK 1 million) for in-depth needs assessment and project design with the peer authority, followed by up to three 3-years phases; each phase with a max. budget of DKK 9 million.

Box B: What is a SSC 2.0 Framework Programme?

- A framework programme underpins an agreement that gives the Danish Authority responsibility for developing and managing a portfolio of projects over a 4-year period, based on agreed objectives, outcomes, budget, and governance and management structures. A shift away from management based on single-project agreements
- Aims to provide stronger strategic, programmatic, and development focus as well as improve cross-learning and ensure a more lean administration
- Is founded on the needs and demands of the recipient countries matched with the Danish Authority's international strategy and core competences; political dimensions and bilateral interests; SSC management capacity; commercial interests and opportunities; the Embassies engagement and interests in the recipient country; ect.
- Defines objectives, project selection criteria, results, budgets, and governance mechanisms for the Authority's development and management of its project-portfolio
- Gathers all SSC projects under a single agreement with one consolidated work plan, annual progress report, accounting and contact point in Ministry of Foreign Affairs (MFA)
- Builds from the start on existing projects and develops and adds new project phases and new projects during the 4-year period, always having projects at various stages
- Places the primary operational implementation of the SSC projects with the Authority and boosts synergies to the Danish climate diplomacy at the Embassies and private sector investments.

1. Introduction

This document outlines the Framework Programme (FP) of Municipality of Aarhus and its partners under the Strategic Sector Cooperation (SSC). The SSC instrument was launched in 2015 for engaging Danish authorities in cooperation with partner authorities in developing countries to improve framework conditions for a green, inclusive transition and key development priorities. The FP covers the period 2023-2026 with a budget of DKK 56 million. It is the first FP with Municipality of Aarhus under the 2021 SSC guidelines, replacing single-project agreements between Danish authorities and the Ministry of Foreign Affairs (MFA) with 4-year strategic framework agreements. The funding is subject to annual Parliamentary approval (as described in section 6. Budget).

The FP is guided by Danish government policies, in particular the Strategy for Development Cooperation, the Global Climate Action Strategy, the Action Plan for Economic Diplomacy, the Export Strategy for Water, and by the international strategy of Municipality of Aarhus and its partner Aarhus Vand A/S^1 . The FP focuses on just green transition with a focus on climate responsive urban water management, targeting areas where City of Aarhus through its core competencies can contribute to important positive change within areas that are prioritized by local partners (see Box 1).

Building on lessons and results from on-going phase 1 projects – in Ghana, South Africa and India – and responding to specific challenges, priorities and demand in each of the three countries, the FP will mobilise the core

Box 1 City of Aarhus and Aarhus Vand A/S - core competencies mobilized under this FP:

- a) Inclusive holistic planning of water resources and climate adaptation at municipal level
- b) Protection and management of municipal water resources
- c) Enhanced municipal water resource efficiency including distribution systems and reduction of non-revenue water
- Municipal wastewater management including sewage planning, waste to energy and sustainable sludge management
- e) Cross-cutting public-private partnership approach, and citizen and stakeholder engagement
- f) A SSC composed of both regulator and operator functions

competencies of City of Aarhus (Box 2) to contribute to climate adaptation and resilience in cities through climate responsive urban water management. The core competencies will be mobilised to promote the change in the enabling environment, to elevate ambitions for a just green and climate resilient transition and to foster engagement of the private sector.

In line with the 2021 SSC Guidelines, the FP also supports Denmark's green diplomacy efforts through country level bilateral initiatives on urban water resilience– and an enhanced role for the Danish private sector's engagement in dialogue, green solutions, and investments in tackling partner countries' challenges across the broad area of climate responsive urban water management. Further, the FP builds synergies to and enhances ongoing bilateral and multilateral engagements in the countries, including the ongoing partnership with C40 and, in the two countries in Africa, also to engagements with the African Development Bank.

¹ Aarhus Vand A/S is Municipality of Aarhus's water utility. Hereafter, the term "City of Aarhus" refers to Municipality of Aarhus <u>and</u> Aarhus Vand A/S when used in this document.

This document describes the focus, guiding considerations, and management mechanisms for the FP. It includes projects in three countries. In South Africa and India phase 2 will start at the beginning of this FP in January 2023, whereas implementation of the phase 1 project in Ghana continues with expected start of a phase 2 project in 2024².

2. Context and strategic considerations and justification

2.1. Urbanization, climate and water challenges

Urbanisation is an integral part of the development process and well-functioning cities contribute directly to economic growth and poverty reduction. More than half of the world's population live in cities and by 2025, another 2.5 billion people will have been added to the world's urban areas. Countries in Sub-Saharan Africa and some parts of Asia experience the highest urban growth rates. Responsible for primary service delivery to urban dwellers, cites are continuously more important for delivering on the Sustainable Development Goals (SDGs) while engaging in just green transition.

At the same time, many cities are increasingly challenged by the effects of climate change. They are directly confronted with water scarcity, water pollution and floods. Climate change impacts on water systems are severely felt in urban centres in a context where rapid urbanisation has already increased pressures on infrastructure and water services. Vulnerable communities are particularly exposed to water risks, as their existing safeguards are weaker, and they lack the means to recover from disasters.

The FP targets specific areas where SSC can relevantly contribute to improve municipal systems. Based on political support and institutional demand from pertinent partners in the three countries, the FP targets climate related challenges to urban water resources and systems, in relation to which City of Aarhus' core competencies can contribute to important positive change (see Box 1).

First, the combined effect of population growth and climate change puts water resources under pressure. This calls for holistic water planning including climate adaptation. With accelerating urbanization, it is particularly important to adapt an inclusive holistic planning approach addressing effects on different water systems and different needs. This includes water for economic sectors (agriculture as well as industry at different scales) and household water, including for populations in prolific unmanaged settlements (see box 2). Yet, many developing countries and growth economies do not have a tradition for holistic planning at municipal level (and often not at national level either). Weak governance systems and limited data availability are often met obstacles. These weaknesses are magnified at city level, where administrations are faced with far more serious capacity and resource constraints. City of Aarhus' competencies in inclusive holistic planning and climate adaptation can add important value to city administrations in the three partner countries.

Second, water-related hazards like floods and stormwater are increasing in frequency and intensity due to population growth and the effects of climate change. In a context where most cities are confronted with water scarcity, it becomes increasingly urgent to control urban water flows to protect ground water from contamination from surface water flooding. River restauration and

² As a framework programme, this document does not include detailed descriptions of individual projects, but succinct project briefs are included in Annex 1.

establishment of rainwater basins are part of the solutions and can further contribute to protecting exposed urban dwellers from the effects of flooding and erosion. This is particularly important for vulnerable urban communities in informal settlements and slums, where pollution from uncontrolled sewage is an additional challenge. Cities in the three partner countries – Ghana, South Africa and India – have not yet established sufficient mechanisms to address the growing challenge. The experience and expertise of City of Aarhus can contribute to enhancing approaches to protection and management of municipal water resources, including stormwater management.

Third, growing demand for water imposes efficient use of resource. It is particularly important to address the challenge in the fast-growing cities where distribution systems are stretched and mostly insufficient. Over 700 million people live in high and critically water stressed countries and a growing number are threatened by displacement due to water shortage. But, if wisely used, the planet has sufficient water for all. By some estimates, more than 70 countries have low water efficiency levels. Research conducted by the International Water Association estimates that if world's volume of non-revenue water was reduced by just one-third, the savings would be sufficient to supply 800 million people³. This would also serve to reduce the climate vulnerability of many more. Reducing water losses contributes to alleviating poverty as it will improve water service reliability and water supply to the urban poor who are the most poorly served. City of Aarhus contributes with extensive experience and Danish knowledge on water resources efficiency, distributions systems and reduction of non-revenue water.

Fourth, current practices in urban wastewater management are unsustainable. Globally, more than 2 million tons of sewage are dumped everyday into water bodies. Improving wastewater management will significantly improve not only human health but also environmental sustainability and secure valuable water resources. Further, intelligent investments in blue-green solutions can transform urban wastewater management into a source of energy, while sludge may be turned into an additional income stream. City of Aarhus is a leader in this area and can bring strong additional value to urban wastewater management in the three partner countries.

Further, City of Aarhus has built a strong culture of public-private partnership approach and of citizen and stakeholder engagement. This will be integrated across all targeted action areas of this FP.

The urban poor are disproportionally affected by the effects of climate change and the severe vulnerability of urban water systems. Most urban population growth is added to informal settlements and slums, without access to municipal piped water and sewage systems. These communities are particularly exposed to water risks, as their existing safeguards are weaker, and they lack the means to recover from disasters. At the same time, the lack of access to piped water systems forces households to purchase water from private vendors at prohibitive costs – by some authors referred to as a "poverty penalty" whereby poor households pay more for less⁴. The lack of affordability of water is a crucial barrier in residents' ability to access adequate quantities for health and security. This burden has even stronger implications for women, who are typically responsible managing the household's basic needs including water. See overview of poverty and water management linkages in box 2 below.

³ <u>https://iwaponline.com/ws/article/19/3/831/41417/Quantifying-the-global-non-revenue-water-problem</u>

⁴ Water Resilience in a Changing Urban Context, WRI 2021

The FP contributes to inclusion and poverty reduction in partner countries by strengthening the effectiveness and integrity of municipal public systems and regulations for sustainable, climate responsive urban water management, which in particular urban poor and women depend on to protect their basic livelihood resources, opportunities and voice. As the poor rely disproportionally on natural resources for their livelihoods, the FP's results are expected to benefit the poor directly. Section 2.6 sums up the FP's approach to poverty reduction.

Box 2 - poverty and water management

Poverty is exacerbated by poor water management- the poor generally live in settlements that are informal and/or situated in poorly served and flood prone areas, often in close proximity to open drains and untreated wastewater – improved water management can contribute to poverty reduction:

- Enhanced livelihood security water is a key input to various livelihood activities and a prerequisite for the health and productivity of ecosystems,
- Reduced health risks e.g. water-borne diseases
- Reduced vulnerability e.g. from floods and droughts
- Pro-poor economic growth e.g by providing access to affordable water infrastructure
- Gender equity
- By mainstreaming the human rights based approach (HRBA) through focusing on the rights holders and their perspective and needs as well as those of the duty bearers

By addressing causes of poor service delivery, the project will target those longer and shorter term interventions that provide better conditions for the poor.

Source: UN water and ADB

2.2. Key Danish policies and priorities

The FP is guided by the Danish government's deep commitments to climate action, including enhanced action for adaptation to climate change.

It directly responds to Denmark's Strategy for Development Cooperation's, *The World We Share*, in particular Objective 1 (Contribute to ensuring climate-resilient infrastructure, with a focus on water supply and sanitation in rapidly growing urban centers affected by climate change) and 3 (Increase mobilization of finance and promote green Danish solutions within climate, nature and the environment). The FP implements the focus of *A Green and Sustainable World*, Denmark's long-term strategy for global climate action on addressing climate change and promoting a just green and climate resilient transition, including the goal to strengthen strategic sector cooperation in the area of climate adaptation in developing countries, supporting Danish climate diplomacy efforts and green strategic partnerships and collaboration in relevant countries. Finally, the FP contributes to the implementation of the Action Plan for Economic Diplomacy and emphasizes the role of Danish private sector's green solutions and investments.

With its focus on climate responsive urban water management, the FP delivers on the Government's intention for SSC to be a core instrument in achieving the priorities on just green transition. As such, it forms part of Denmark's climate diplomacy and is tailored to match long-term needs of partners in the three partner countries and to engage the Danish private sector in green solutions

and investments. It focusses on just green transition with a focus on climate responsive urban water management, where Denmark – through City of Aarhus' core competencies, the private sector, NGOs, green investors – is well placed to promote change by contributing with special knowledge and technology. It supports partners in developing countries and growth economies to tackle their own legislative, regulative, and policy challenges and needs. The FP has climate change adaptation as a principle objective and thus is a Rio marker 2. In line with <u>EU practice</u> and based on research of typical development cooperation programs a hundred percent of the budget is considered relevant for determining the contribution to the Rio convention on climate change adaptation.

The Sustainable Development Goals (SDGs) set the global framework that guides the present framework programme. The program directly targets SDG 6 (Water) and SDG 11 (Cities) and SDG 13 (Climate Action). Through actions targeting these SDGs, the program will contribute to SDG 1 (Poverty Reduction) and is expected to have positive effect on other goals including SDG 3 (Good health and well-being). The table 1 below illustrates how the programme will address the targeted goals:

Table 1 Contribution to SDGs (core goals 6,11,13, 1 and 3)			
Goal	How addressed		
Goal 6 on clean water and sanitation	 by improving water supply efficiency [target 6.4] by improving water quality by treating wastewater and improving management of stormwater [target 6.3, 6.6] through capacity development [target 6.a] 		
Goal 11 on making cities and human settlements inclusive safe, resilient and sustainable	 by improving safety of basic services [target 11.1] by increasing resilience against water related disasters through improved urban water planning and institutional capacity for wastewater treatment [target 11.5] by reducing untreated wastewater [target 11.6] by contributing to improving integrated urban water planning on adaptation to climate and resilience [target 11.b] 		
Goal 13 on climate action	• by strengthening resilience and adaptive capacity to water related climate hazards [target 13.1]		
Goal 1 on poverty reduction	 by improving access of poor and vulnerable to basic service [target 1.4] by reducing exposure of the poor to climate related extremes [target 1.5] 		
Goal 3 on good health and well being	• by reducing death and illness from water pollution and contamination [target 3.9]		

2.3. Municipality of Aarhus and Aarhus Vand A/S international strategies and core competences

In its 2017 International Strategy for Growth, Municipality of Aarhus lays out its vision for a vibrant and international perspective. It sees a city where all the citizens, private enterprises and the public sector adopt an outward looking and international mindset. A mindset that strengthens cultural diversity, builds relations between people and contributes to growth and employment. The strategy presents several initiatives including water security and active engagement in export orientated international cooperation. Aarhus and the Greater Aarhus Area have become a strong water tech hub and are set to play a major role in the Danish government's efforts to make Denmark a world leader in intelligent, sustainable and efficient water solutions for the energy-neutral, zero-carbon water sector of the future.

Through the SSC projects, the City of Aarhus aims to enhance sustainable development in accordance with the SDGs, including goals to ensure availability and sustainable management of water and sanitation for all, make cities resilient and sustainable and revitalize the global partnership for sustainable development. The massive challenges presented by global warming and climate change can only be solved by means of international cooperation and through the exchange of knowledge. In this regard, the City of Aarhus is acutely aware of the special responsibility and major role it plays in combatting climate change and helping partners in developing countries tackle these challenges.

The SSC is recognized by Municipality of Aarhus as an important engagement instrument. Over the past couple of years, City of Aarhus has progressively focused its SSC engagements in Ghana, South Africa and India on climate responsive urban water management and climate adaptation. Municipality of Aarhus aims at engaging with SSC by drawing on its core competencies (see Box 1) building on Danish strengths in water management in close collaboration with partners such as Aarhus Vand A/S, the Water Valley Denmark and the wider objectives of the "Business Region Aarhus"⁵. The City of Aarhus has great expertise in holistic and sustainable planning of the whole water cycle including water supply, wastewater, stormwater and climate adaptation with the consideration for nature and citizens. As an example, floods tend to occur in areas where people live, and better urban planning can help prevent flooding caused by cloudbursts. In developing countries, informal urban settlements with weak infrastructure are particularly exposed to flooding and improved planning and prevention is capital. The City of Aarhus works to help identify where problems may occur and to support planning to reduce or prevent flooding.

A key element common for all three SSC projects included in this FP is working on better dataflow and planning to support the dialogue and cooperation internally in the partner municipality and among external stakeholders. Cooperation between the municipality and utility provides coherence in both planning, construction and operation and is an important element to demonstrate to partners. Also, it strengthens the importance of having a planning unit (municipality) and an operating unit (utility).

Further, City of Aarhus has built a strong culture of public-private partnership approach and of citizen and stakeholder engagement. This will be integrated across all targeted action areas of this FP.

Box 1 City of Aarhus and Aarhus Vand A/S (repeated from section 1. Introduction) Core competencies mobilized under this FP:

- a) Inclusive holistic planning of water resources and climate adaptation at municipal level
- b) Protection and management of municipal water resources
- c) Enhanced municipal water resource efficiency including distribution systems and reduction of non-revenue water
- d) Municipal wastewater management including sewage planning, waste to energy and sustainable sludge management
- e) Cross-cutting public-private partnership approach, and citizen and stakeholder engagement
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Aarhus Vand have an active and complementary international vision that aims at creating export opportunities and attractive jobs with the utility itself. Aarhus Vand has identified substantial reasons for the utility company to look beyond its local and national borders and participate in international cooperation. Principle among these is the aim to enhance the export of Danish water technology in close cooperation with Danish export companies and companies working in the sector. Aarhus has active

⁵ A formalised partnership comprising 12 municipalities in East Jutland.

collaboration with partners in the USA, Singapore, Zambia as well as Ghana, South Africa and India. Aarhus Vand see its role as providing know-how and showcasing demonstration of innovative and economically attractive technologies and approaches. The utility recognizes that an international dimension makes the company more attractive as a workplace and helps to enlarge and expand the skill base. In summary, Aarhus Vand's international objective is to perform the role of water ambassador, water innovator and water supplier in collaboration with others.

Both Municipality of Aarhus and Aarhus Vand work closely with Water Valley Denmark, an alliance between Danish and international universities, research institutes, startups and global Danish Water Tech companies. Water Valley Denmark aims to create a platform for developing and disseminating groundbreaking water technology that accelerates green growth and leads to resource efficient and cost-effective water and wastewater management. The vision is to double Danish export of water technology to DKK 40 billion by 2030 and to contribute to over 4000 jobs. The organization has four focus areas: research and development, start-up and incubation, demonstration and scaling up, global collaboration. These areas complement and reinforce the SSC programme. Water Valley Denmark engages actors to co-creation of meaningful water innovation which complement and reinforce the SSC programme.

2.4. Results and lessons from previous phases

The FP builds on results and lessons from City of Aarhus' ongoing SSC engagement. In all three countries, City of Aarhus, and the sector counsellors stationed at the Danish Embassy in each country, have established positive relations and productive cooperation with local authorities. While ties are strongest at municipal level, relationships are emerging at regional and national levels as well. The positive relations and productive cooperation with partners is in itself a significant result, providing a platform for further achievements through the FP.

Tangible results are produced across several technical areas. Investment opportunities are under development, private sector is engaged in various activities, and insights and relations emanating from SSC projects are actively enriching Danish climate diplomacy in the three countries. These results are exemplified in table 2 showing specific results from ongoing projects linked to global SSC 2.0 outcomes.

The overall lesson learnt from ongoing phase 1 projects is that it is important to set the right ambition level, have a clear focus of the engagement and align the project clearly to the priorities of the partner authority. A key lesson from the South Africa and Ghana phase 1 projects has been the benefit of a narrower focus on the water sector rather than engaging across a wider range of municipal planning functions. In India, it has become clear that stronger commitment and potential for replication would arise if the project was integrated into the national and state level – and specifically the Amrut 2.0 program, which is a national urban drinking water initiative driven at state level. Another key lesson from India and elsewhere is the importance of involving different kinds of partners in order to bring change (policy, academia, companies, civil society and citizens). The Covid-19 has shown that it is possible to hold virtual meetings and thereby the knowledge exchange and planning of activities can be conducted without the physical meetings while still resulting in strengthening the collaboration. However, regular physical visits to and from the partner are important to keep the momentum and to experience profound knowledge exchange and understanding.

Table 2 Results obtained during phase 1 according to the three global outcomes					
00	City, Countries				
	Tema, Ghana	Tshwane, South Africa	Udaipur, India		
Strengthening partners' authorities' capacity to <u>develop</u> and <u>implement</u> conducive legislative and institutional mechanisms for just green transition	 Continuous work on the Tema Climate Adaptation and Wastewater Management Plan Tema Metropolitan Assembly has performed survey of a newly constructed waste water treatment plant for optimal operation DFC financed capacity building leading to close relations (ex. Chief Director of EPA) To reduce the amount of NRW in the water supply system of Ghana Water Company Limited, data-driven methods for locating pipe bursts and NRW management is introduced to GWCL staff. 	 Well advanced collaboration on a new Non-Revenue Water Business model for City of Tshwane Tools and planning procedures on developing and optimizing City of Tshwane's Pipe Replacement Prioritization (PRP) almost finalised. 	 River rejuvenation concept for Gumania Nalla developed Template developed for Comprehensive Water Management Planning for Indian Cities under AMRUT programme Demonstration of ability to use Geographical Information System (GIS) as a planning tool Training course for improved wastewater management 		
Danish climate ambitions and the green transition via <u>SSC relations</u> and green diplomacy	 SSC has played important role in rebranding of Sustainable Water Denmark, in the process moving the Danish engagement in Ghana from a focus on development cooperation to a trusted strategic and commercial partnership, delivering inputs to the green transition and climate adaptation in the water sector. Using the close collaboration with DSIF and the EIB (Tema waster water system rehabilitation), the Danish Embassy has played a crucial role in the roll out of the Team Europe strategy on Urban Service Delivery in Ghana. Covid-19 response together with UNICEF in a context of WASH, leading to a new overall focus on cities in the UNICEF country strategy. 	 Aarhus Water presentation of the Danish Water model at African Utility Week in Cape Town Ongoing engagement with DSIF on large green infrastructure investment in City of Tshwane SSC cities programme part of the green strategic partnership agreement between Denmark and South Africa Participation of City of Tshwane mayor and Member of Mayoral Committees in C40 summit in Copenhagen 2019 and IWA conference 2022 	 Participation in the development of Green Strategic Partnership Agreement and Action Plan Upscaling knowledge exchange by contributing to Vibrant Gujarat 2019 and Urban Living Lab, Goa Rajasthan State Level Minister Mahesh Chandra Joshi visited Aarhus August 2022 and met with Danish Minister of Environment Lea Wermelin 		
Danish private sectors' engagement in sustainable and green solutions and investments	 DSIF projects about a new drinking water system (Aveyime) and rehabilitation of waste water treatment plant and sewer systems in Tema are under preparation. This includes large components of TVET, digitalisation, improved revenue collection and involvement of informal and private sector. Digital sewer registration by Danish land survey company LE34 is promoted Joint activities and coordination between The Municipality of Aarhus' Business Department and TC 	 Technology demonstration project with Danish metering company Kamstrup is up and running in City of Tshwane. Kamstrup is contributing with hardware. This will continue in phase 2. Completed feasibility and design study for Salvokop Conduit Hydro (green energy) and raised R9 mill (City of Tshwane 2021 budget) for construction in 2022. Commitment from AVK to contribute with valves for Technology demonstration project. Currently going to tender. Commitment from AVK to participate in a pressure management technology demonstration project in phase 2 and introducing training facilities for City of Tshwane staff. 	 Webinars and other joint activities and coordination between The Municipality of Aarhus' Business Department and TC. Danish water sector – Copenhagen University, DHI et.al – is engaged in Udaipur in a water research project financed by Danida Window 2 development research grants, occasioned by the SSC project 		

2.5. Alignment with SSC guiding principles and global results

The FP is designed to align with SSC's Guiding Principles, including its global vision to promote a socially just green transition and to contribute to sustainable growth and resilient development for people in partner countries. The FP's objective supports **SSC's global intermediate objective**, through its focus on contributing to climate adaptation and resilience in cities through climate responsive urban water management.

In line with the Guiding Principles, the FP focusses on **areas where Denmark has special strengths** and shows international best practice, by building on City of Aarhus' core competencies in overall inclusive holistic planning of water resources and climate adaptation at municipal level (with a focus on stormwater management, water resources efficiency through non-revenue water reduction, and wastewater management). Moreover, the FP works towards three programmatic outcomes (specified in section 3) which flow directly from SSC's three global outcomes and results framework, and reflect areas where City of Aarhus is best placed to contribute to poverty reduction through results in partner authority legislative and capacity development, climate diplomacy and bilateral relations, and Danish private sector engagement – all focused on climate adaptation and resilience in cities through climate responsive urban water management.

With an enhanced focus on the water sector, the FP aims to deepen gains and enhance potential impact through vertical integration at country level and by replicating approaches to a wider set of cities in collaboration with C40 and other pertinent partners, building pathways for South-South-North exchange and cooperation. Through this approach, the programme will seek to enhance potential impact to the benefit of vulnerable urban dwellers, and at the same time consolidate Denmark's green diplomacy efforts and bilateral relations – and promote the Danish private sector's engagement in dialogue, solutions, and investments.

Based on the above the FP supports the following SSC global results:

The FP addresses **SSC 2.0's Outcome 1** (*strengthening partner authorities' capacity to develop and implement conducive legislative and institutional mechanisms for just green transition*), through sharing experience on policies, laws, regulations and institutional arrangements within climate responsive urban water management. With a focus on water efficiency, water resource planning, wastewater treatment and storm water management, Danish experience, both what has worked and what hasn't, on inclusive holistic city planning and administration, standard operating procedures and collaboration with citizens, civil society and the private sector will be shared. The FP will base its **approach to capacity development** on lessons learnt from ongoing projects, international best practice, with integration of HRBA and non-government actors. Annex 5 describes the main elements of the approach to capacity development.

The FP addresses **SSC 2.0's Outcome 2** (*climate ambitions and the green transition via bilateral relations and green diplomacy*) by providing examples that can inspire how urban climate adaptation and water resilience can be enhanced. It does this by helping present and showcase the feasibility and cost benefit of sustainable urban water management including water resource planning, water use efficiency, wastewater management, and enhancing resilience to flooding in particular through storm water management. All of which has the potential to contribute to enhancing climate resilience beyond the focus cities by linking

these examples to Denmark's wider initiatives on policy and technical cooperation, development assistance, and climate diplomacy, including at city level. Annex 1 highlights how the FP forms part of such wider Danish country-level priorities and engagements. Embassies and sector counsellors will play the main roles in transfer of knowledge and relations. Embassy and SSC initiatives supporting Danish climate diplomacy and bilateral relations will be reflected in the Embassy and SSC work plans, and reinforce efforts under the global SSC outcome 1 towards SSC's shared vision of a socially just, inclusive and green transition and adaptation in partner countries.

The FP addresses **SSC 2.0's Outcome 3** (*Danish private sector's engagement in sustainable and green solutions and investments*), *first*, by promoting framework and market conditions that enable a level-playing field in markets for "green" solutions for climate responsive urban water management, where Danish firms can offer best-practice solutions; *second*, by show casing Danish knowhow and technology and where relevant demonstrating these on site in the partner country (or in Denmark); and *third*, by actively promoting country-level dialogue, networking, investments and sharing of knowledge, opportunities and lessons between the SSC, Danish firms and business associations. Sector counsellors will be anchor-points for this transfer of information, knowledge and networks between projects, Embassies, Trade Councils, and relevant business- and development instruments (such as Danida Sustainable Infrastructure Finance (DSIF), Danida Green Business Partnerships (DGBP), Investment Fund for Developing Countries (IFU), etc.) These initiatives promoting Danish private sector engagement in green solutions will be reflected in SSC and Embassy work plans, and will interact with the green institutional framework strengthening under SSC's global outcome 1 towards SSC's vision of a socially just, inclusive and green transition and adaptation in partner countries.

2.6. Alignment with Danish cross-cutting priorities

The FP will integrate a focus on poverty in all projects, using the multidimensional poverty concept. It is the poor who are most vulnerable to water scarcity, flooding, polluted water resources and untreated wastewater and the ones first in line to benefit from climate responsive urban water management. People living in informal settlement and slums are particularly exposed to water risks, as their existing safeguards are weaker and they lack the means to recover from disasters. At project level, the multidimensional poverty concept will contribute to shaping the dialogue and collaboration with national partners. Across activities, City of Aarhus will in particular seek to influence approaches to integration of poverty considerations in planning, procedures and regulations while simultaneously building institutional capacity, the latter particularly at city level.

Issues of rights, participation, and discrimination are highly present when dealing with the use of water resources, and typically the urban poor and marginalized population suffer the most direct and highest costs from e.g. water scarcity or flooding. The FP will address **the human rights approach** by integrating the principles of participation, accountability, transparency and non-discrimination ("PANT") in initiatives with partners for strengthening their legal frameworks, and institutional and management systems for water, wherever relevant and possible (see also Annex 5).

Similarly, City of Aarhus will integrate **gender** concerns in the inputs and dialogue with partners to increase focus on gender equality. Gender issues are significant in relation to water in the three partner countries, as women and girls are the primary providers, managers and users of household water. City of Aarhus will build on extensive Danish experience and integrate gender concerns in the inputs and dialogue with partners to increase focus on gender equality. Steps will be integrated in project preparation and implementation processes to ensure consideration of these issues (see box 3 to the right).

The FP will 1) introduce steps in their project preparation and quality assurance (QA) process to ensure assessment

Box 3. Gender equality approach

The projects will:

- Review the gender equality policies and framework in the three cities;
- 2. Identify challenges and opportunities relevant for the projects to address;
- Engage with Aarhus <u>Committee on</u> <u>Diversity and Gender Equality</u> in working with counterparts and when visiting Aarhus to inspire and point to benefits and opportunities to change.

The programme will report on actions taken and progress made.

of relevant HRBA issues and opportunities and define initiatives to address these, 2) apply relevant HRBA screening tools (to be developed based on Aid Management Guidelines), and 3) develop City of Aarhus' capacity and partnerships on HRBA with Danida Fellowship Centre (DFC). New project documents will have sections describing approach to poverty, gender, and HRBA.

Aid effectiveness of the FP is promoted by the three included projects' direct focus on strengthening local/(regional)/national legislative and institutional systems, ensuring country leadership. Moreover, all projects are based on partner authorities' demands and ownership. The project work plans and engagement by City of Aarhus experts will be based on partners' needs and requests. City of Aarhus will ensure dialogue, agreement, and transparency on plans and inputs to ensure projects are based on accountability and mutual trust. Ownership and partner involvement will be enhanced in phase 2 projects by aligning the SSC project workplan as closely as possible to the partner workplans, budgets, indicators and top management incentives/goals. Table 3 below show how the projects are aligned with the partner's strategies.

Sector advisers in each country will further support aid effectiveness and especially as they are full time in country, they will provide a channel of communication that can serve to deepen ownership and understanding of partner priorities. Further, they will assist cities in outreach to partners engaged at city level to promote a culture of dialogue and coordination in view of an efficient use of city capacity.

Table 3 Alignment to partner strategies			
Country	Partner	Partner strategy alignment	
Ghana	City of Tema and Ghana Water Company Limited (GWCL).	 GWCL has the objective of reducing NRW by improving the network efficiency and service standards. A five-year strategy has been launched to reduce non-revenue water annually by 3%. The strategy has a focus on the Greater Accra Metropolitan Area, including Tema. Reducing physical losses will make more water available and enable GWCL to increase coverage, including to poor communities. A special NRW unit has been established at GWCL HQ, and NRW focal staff have been appointed at each GWCL regional office. TMA wishes to restore the wastewater system. This includes operational plan for rehabilitation, proper institutional setup for operation and maintenance of wastewater. Restoring the wastewater system will benefit the flood prone affected vulnerable households, and reduce the health risks for the poorest population. Fiscal framework should be developed to achieve the desired change and development of good and safe water services for the citizens including the poor. Better access to affordable water infrastructure can enhance pro-poor economic growth. 	
South Africa	City of Tshwane	 Key performance indicators for the City of Tshwane within water, wastewater and storm water management and their relevance to the SSC: Improve percentage of wastewater samples compliant to water use license conditions -> Directly linked to the wastewater treatment track. This will benefit the rightsholders, as they can better claim and exercise their rights and hold the duty bearer accountable. Improve number of water sample tests complying with SANS 241 requirements -> Directly linked to the wastewater treatment track and indirectly linked to the water resource optimisation track. The poor and most vulnerable people are disproportionately affected by poorly treated wastewater, as they live in the flood prone areas, and hence will be positively affected by wastewater compliant with requirements and regulation. Percentage non-revenue water -> Directly linked to the water available and enable City of Tshwane to increase coverage, including to poor communities and minimize tariff increases. 	
India	City of Udaipur and state of Rajasthan	 In Rajasthan, there are 210 cities under the national AMRUT 2.0 programme, including Udaipur. The programme includes: Universal coverage of tap water in all households in all cities Sewerage/septage management and recycle/reuse of treated used water in 29 towns Rejuvenation of water bodies (including urban wetland) and creation of green spaces. Community Participation with focus on woman self-help groups Low economic and informal settlements are included in State Water Action Plan Water Balance Plan and Water Action Plan for all cities 	

3. Framework programme objectives and Theory of Change

The **overall long-term objective** of the FP is to promote a socially just, inclusive and green transition and contribute to sustainable growth and resilient development for people in partner countries through Strategic Sector Cooperation in the area of urban water management and resilience.

The **immediate objective** of the framework programme is:

Strengthen framework conditions and institutional capacity of partner authorities to promote climate adaptation and resilience in cities through comprehensive urban water management by building on Danish expertise and solutions with a focus on water related challenges.

The FP is guided by the below **Theory of Change** (ToC), which aligns with the SSC's global ToC:

If MFA/City of Aarhus/ Embassies select countries for the SSC where City of Aarhus' core competences, supplemented by Danish climate diplomacy and Danish private sector, can contribute importantly to tackling challenges related to climate change and poverty reduction with a focus on urban water management in areas of water resource planning, greater water use efficiency, greater wastewater treatment and better storm water management;

And if City of Aarhus and relevant Embassies in these countries identify relevant partner authorities with commitments to address these challenges in order to work towards inclusive climate adaptation and enhanced resilience of the water sector, yet with framework and institutional capacity weaknesses that hamper them in leading such transitions;

And if outputs are supported that	And if outputs are supported that	And if this is done through carrying
relate to improving the potential for	enhance approaches for replicating	out targeted demonstration projects
greater water use efficiency, greater	green and climate resilient transition	that demonstrate the potential;
water resource planning, greater	measures,	
wastewater treatment and better storm		
water management;		
And if, City of Aarhus use its core	And if the Danish embassies in the	And if private sector and investors
competences, best practice knowledge,	three countries engage in active city	can offer green transformative
and learning-based capacity	climate diplomacy bringing lessons	solutions related to urban water
development approaches to address	and best practice solutions to the	management and urban climate
partners' weaknesses and gaps in	national level, while also engaging	adaptation and resilience with a focus
policies, regulations, and systems	with C40 to enhance knowledge	on water related challenges in these
	sharing with other C40 member cities	markets and have interests in engaging
	allowing that the replication strategy	
	will be different in the three projects	
And if, this is done through sharing		And if, City of Aarhus, Danish
experience on medium and long-term		Embassies, Trade Council, and sector
inclusive and climate resilient urban		counsellors collaborate and share
water resource planning		knowledge and networks on green
		market issues and opportunities for
		green investments and commercial
		solutions in water efficiency, water
		resource planning, wastewater
\sim	\sim	treatment and stormwater
		management in the countries

Then, the outcome of strengthened framework conditions and institutional capacity to promote climate adaptation and resilience in cities with a focus on water related challenges, will be

achieved.

resilience approaches and bring the change created at city level to the regional and national level. In this way, higher and well founded inclusive climate related ambitions at country level will be enhanced on paper and in practice.

Then, Danish bilateral technical and

diplomatic initiatives will enhance the

replication of climate adaptation and

Then, the exposure of green and sustainable solutions provided by Danish private sector actors in the climate resilient transition of the trban water sector that can tackle critical green transition challenges will have expanded in the partner markets

And then the water sector will have moved forward on climate adaptation and enhanced resilience through stronger framework conditions and institutional capacity of partner entities to adapt to climate change through urban water management in areas of i) water resource planning, ii) greater wastewater treatment and iii) better storm water management.

And then, the water utilities will have improved their governance to act as duty-bearers, and the rightsholders will have access to information to better claim and exercise their rights.

And then a long-term contribution has been made towards a socially just, inclusive and green transition and to sustainable growth and resilient development for people in partner countries in areas of water resource planning, greater wastewater treatment and better storm water management

And then Denmark and partner countries jointly will contribute to the fulfilment of the SDGs and the Paris Agreement, for a green transition and sustainable development, and strengthening the global cooperation climate adaptation.

The **critical assumptions** moving from inputs to outputs are:

- City of Aarhus and Aarhus Vand A/S are able to deliver flexible and timely support to meet partner authority needs
- Partner authorities and others are ready and able to absorb and make best use of expertise and support from Denmark
- Partner authorities and others are able to access and procure Danish knowhow and technology that they find relevant and competitive

The main driver moving from inputs to outputs is:

• Danish exporters of knowhow and technology promote their solutions and establish working commercial relations with partner authorities and others

The critical assumptions moving from outputs to outcomes and impacts are:

- There is institutional and political stability in the relevant partner authorities to ensure that capacity transferred is made use of and sustained
- There is a continued policy commitment at national level and in the relevant partner authorities to achieving the targeted climate and SDG goals
- Larger scale investment financing is mobilised, where required, to complement institutional strengthening and demonstration projects.

The critical drivers moving from outputs to outcomes and impacts are:

- Management and governance incentives to improve service provision and comply with the environmental regulation
- The FP inspires and catalyses good governance and institutional strength
- Opportunities for export provide incentives for Danish companies to invest time and resources in responding to market opportunities.

4. Results framework

Monitoring and reporting of the FP will be based on the results framework below, in which some results are joint responsibility of City of Aarhus and Embassies. The FP indicators, approach to aggregating project level results, and roles will be finally developed in a Monitoring, Evaluation and Learning Plan (MEAL) for approval by the Program Management Group (PMG). To supplement the monitoring based on indicator, outcome harvesting will be carried out in the second year of the FP to capture broader results related to e.g. poverty, climate action, a green inclusive and just transition, and green commercial contributions (these will inform the mid-term review of the FP). Further details of the outcome harvesting will also be defined in the MEAL Plan. The results framework and targets will be revisited in the mid-term review.

Programme Objective		Strengthen climate ada building or	framework conditions and institutional capacity of partner authorities to promote aptation and resilience in cities through comprehensive urban water management by a Danish expertise and solutions with a focus on water related challenges		
Outcome (1)		Strengthened framework conditions and institutional capacity to promote urban water management and climate adaptation and resilience in cities with a focus on water related challenges			
Outcome indica	ltor	Key policy, water effici have been	, regulatory or procedural obstacles for enhancing urban climate resilience through lency, water resource planning, wastewater treatment and stormwater management addressed		
Baseline	Year	2022	Each partner authority is facing institutional obstacles for climate resilience in the water sector		
Target	Year	2026	At least one prioritised institutional obstacle suitable for SSC intervention has been addressed in each of the 3 partner authorities as reported and evidenced in the annual report for 2026		
Outcome (2)		Enhanced climate ada	Danish green diplomacy engagement in support of urban water management and uptation and resilience in cities with a focus on water related challenges		
Outcome indica	ltor	Number of linked to th challenges	f Danish diplomatic outreach activities that successfully use knowledge or networks ne FP's work on urban climate change resilience with a focus on water related		
Baseline	Year	2022	Limited activities		
Target	Year	2026	10 additional activities of which at least 3 engaging authorities outside the 3 partner cities or countries - as reported and evidenced in the annual report for 2026		
Outcome (3)		Platforms l to showcas adaptation	have been created for enhanced exposure and engagement of Danish private sector be knowhow and technology related to urban water management and urban climate and resilience with a focus on water related challenges		
Outcome indica	ltor	Number of possibility adaptation	f additional initiatives, linked to the framework partnership work, created with the for Danish companies to showcase knowhow and technology related to climate and water related challenges		
Baseline	Year	2022	Limited initiatives		
Target	Year	2026	8		
Output 1.1		The potent	ial for water use efficiency has increased across the 3 countries		
Output indicator		The non-revenue water percentage in targeted pilot areas Target: demonstration project showing that up to 10% reduction is achievable			
Output 1.2 The p citiv		The potent citiy	The potential for an increased share of wastewater treated has increased in at least 1 partner citiv		
Output indicator The Tar		The share of Target: der	The share of wastewater that is treated in accordance with the regulatory standards Target: demonstration project showing that up to a 10% increase is achievable		
Output 1.3		Comprehen increased f	nsive water management planning has been introduced to the partner cities with ocus on climate adaptation and sustainability		
Output indicator		The potential for optimizing urban water planning by use of digital solutions by 10 % has been shown achievable			

Output 2.	A strategy for replication of climate adaptation and resilience measures in urban water sector
	has been implemented and led to increased outreach and exchange on tackling challenges
	related to urban water management and climate adaptation and resilience in cities with
	a focus on water related challenges
Output indicator	A replication strategy is developed and knowledge and results related to climate adaptation
	and resilience measures piloted at project level have been introduced to at least tree replication
	target groups
Output 3.	Awareness of Danish know how and technology in the water sector in partner countries has
	increased, including through targeted demonstration projects piloted at city level.
Output indicator	Focused workshops held with participation of Danish private sector
	Target:
	- more than 5 workshops with total participation of at least 5 Danish companies;
	- at least 3 demonstration project implemented and results showcased to potential customers

5. Programme portfolio and design features

The FP builds on a portfolio of three individually tailored projects that will evolve over the FP period, as new phases develop. The projects share certain features with respect to contexts and designs, and all draw on several of City of Aarhus' core competencies (Box 1 in section 2.3), as relevant and demanded by the partner authorities to address critical challenges related to climate responsive urban water management.

The FP is aligned to the national partners' plans and will work closely with the Danish embassies and other development partners to ensure a harmonized approach. This with an aim to lift potential impact, enhance ownership, and minimize transaction costs.

All three focus countries are countries with a relatively high influence on regional and global commitments to climate change and sustainable development. The Indian sub-continent, western and southern Africa are some of the areas most affected by climate change and challenged both by drought and floods. The three countries are opinion leaders in each their region and in a position to influence the perspectives and approaches to green transition and climate adaptation at a regional level and well beyond their own boundaries. The climate diplomatic aim would be to promote a constructive and developing world consensus around the opportunities for green transition based on solid evidence of the benefits on the ground.

All three countries are emerging and medium income countries that have economies increasingly ready to engage with and benefit from advanced Danish knowhow and technologies. The countries have growing populations ranging from 30 million in Ghana to over 1.4 billion in India. Rapid urbanization and concentration of resource use is taking place in an expanding number of their urban settlements. Many of these face similar climate change adaptation and water sector challenges. This together with an increasing purchasing power suppressed in the past by obstacles in the enabling environment presents future opportunities for Danish know how and expertise in the sector, not least those located in the Greater Aarhus Area. The Danish embassies and trade councils in the countries are aware through the first phase of cooperation of the potentials and also the challenges in promoting Danish export.

Across the programme, the second phase will narrow down to areas where concrete achievements can be realized and lifted up from a city to a countrywide level. Based on lessons

learnt from the first phases of cooperation, the main challenges and opportunities that the projects will address have been narrowed down to areas where the demand is high and where concrete improvements are possible through learning from Danish experience. In practice this means a focus on using Danish water resource and city planning, know-how and technology. This will be harnessed to improve institutional collaboration, digitalize water sector management, reduce non-revenue water and improve stormwater and wastewater management. An overall aim will be to enhance climate resilience. The main actors from the Danish side will be Municipality of Aarhus, Aarhus Vand a/s, the Danish Water Valley alliance and relevant private sector enterprise. From the partner countries the main actors will be the city authorities as well as civil society and the private sector. To bring lessons learnt to a higher level, the programme will engage with C40, ICLEI (Local Governments for Sustainability) and others in the three target countries and beyond to help ensure dissemination and replication of approaches.

A focus will be made on contributing to system-strengthening capacity develop. This will be done by evaluating the bottlenecks and underlying challenges to making the systems function as intended. Developing a joint understanding based on this evidence with the management and human resources functions within the partner organisations and other relevant bodies. Integrating an agreed approach into the SSC plans as well as the partner plans. Box 4 elaborate how institutional strengthening will be addressed.

Box 4 Institutional strengthening

The FP recognizes that for the changes to take root and be sustained, institutional strengthening of the partner authorities will be needed. The challenges and opportunities are different for partners in each of the 3 countries. But broadly across the FP the approach will be guided by:

- Building on areas where the partners are already politically committed and there is strong ownership at the institutional level. And, where this is not fully in place, seeking to inspire and trigger great ownership.
- Understanding the political economy and root causes of dysfunctional practices
- Seeking allies and joining with wider coalitions (such as C40) which have a long track record of inspiriting institutional strengthening.
- Distinguishing between issues that are institutional and require changes in the framework conditions and those that are organizational and where training and capacity development at individual and organizational level can be effective.

Project title	Country	Phase (Period)	Partner authority	Objective	Climate change adaptation (%)	Planned adjustments
Strategic Sector Cooperation on Climate resilience and water management	South Africa	Phase II (2023- 2026)	City of Tshwane	The climate resilience of Tshwane and other South Africa urban areas is enhanced through climate responsive water management	100	PD to be approved late 2022
Strategic Sector Cooperation on Urban Water	Ghana	Phase I (2020- 2023)	Tema/ GWCL	Tema's citizens and businesses are resilient against climate change though improved water management with replication in other urban areas in Ghana	-	Ongoing with planned extension to end 2023
Strategic Sector Cooperation on Urban Water	Ghana	Phase II (2024- 2026)	Tema/ GWCL	Tema's citizens and businesses are resilient against climate change though improved water management with replication in other urban areas in Ghana	100	PD to be approved late 2023
Sustainable Urban Water Management	India	Phase II (2023- 2026)	Rajasthan State	Rajasthan State has enhanced resilience through climate responsive urban water management	100	PD to be approved late 2022

Projects under Municipality of Aarhus SSC framework programme

6. Budget

Figures in the indicative budget below are preliminary and subject to Parliamentary approval. This budget overview reflects the expected support as indicated in the 2022 Finance Act and approved by the Danish Parliament in December 2021.

Budget City of Aarhus SSC framework								
project title (phase)	Country	period	total	2023	2024	2025	2026	
Tema urban water sector (phase 1)	Ghana	2020-2023	3.000.000	3.000.000				
Tema urban water sector (phase 2)	Ghana	2024-2027	12.000.000		3.500.000	4.000.000	4.500.000	
Rajasthan urban water sector (phase	India	2023-2026	16.500.000	4.000.000	4.000.000	4.500.000	4.000.000	
Tswane urban water sector(phase 2)	South Africa	2023-2026	16.500.000	4.000.000	4.000.000	4.500.000	4.000.000	
Projects total			48.000.000	11.000.000	11.500.000	13.000.000	12.500.000	
Communication			1.000.000	250.000	250.000	250.000	250.000	
Reviews, learning, outcome harvesting	B		2.000.000	250.000	500.000	750.000	500.000	
Unallocated (9%)			5.000.000	500.000	1.500.000	1.500.000	1.500.000	
Total			56.000.000	12.000.000	13.750.000	15.500.000	14.750.000	

Unallocated funds will be used as reserve to adapt to new situations for the individual project phases. These funds will in particular be allocated to support relevant exit activities to be identified under each individual project based on an agreed outline strategy for transition that ensures sustainability of main project results after project completion (see section 10 on closure and exit).

7. Governance and management arrangements

The FP is subject to Guiding Principles⁶, Administrative Manual ⁷ and Financial Annex⁸ relevant Danish Government policies/strategies and MFA's Aid Management Guidelines⁹. City of Aarhus will be overall responsible for implementing the FP, working in close collaboration with Danish Embassies and MFA. An operational handbook will be prepared to supplement the guidelines and provide practical guidance on FP governance/management, including criteria for funds allocation/re-allocation, closure/continuation of the FP, and project continuation, request for transfer of funds, repayment of unspent funds in the current financial year, and other gaps and lessons identified during the formulation process of the pilot SSC 2.0 framework programmes.

Municipality of Aarhus and MFA will engage at two levels in the governance and management of the FP:

1) Strategic Management Group (SMG), with mandate for guiding on the FP's strategic direction, address sector developments, and issues emerging in regard to objectives, and approve use of unallocated funds (subject to AMG procedure), new projects, new project phases, and phasing out. New phases and

 $[\]label{eq:lines-for-strategic-sector-cooperation/mynsam-2-guidelines-for-strategic-sector-cooperation/the-guiding-principles.ashx$

⁷ https://amg.um.dk/-/media/country-sites/amg-en/bilateral-cooperation/mynsam-2-guidelines-for-strategic-sector-cooperation/the-ssc-manual-for-administration.ashx

⁸ https://amg.um.dk/-/media/country-sites/amg-en/bilateral-cooperation/mynsam-2-guidelines-for-strategic-sector-cooperation/the-financial-annex.ashx

⁹ Guidelines for Country Strategic Frameworks, Programmes and Projects (Updated: February 2022) and the Financial Management Guidelines (version 1.0)

new projects will be assessed and decided based on the focus and considerations defined in this FP document. The SMG will also guide and advise to maximize the impact of Denmark's international engagement (bi- and multilateral) in the sector and related matters and ensure all stakeholders are adequately informed and guided. The SMG is composed of senior representatives from Municipality of Aarhus and MFA, with the Chair rotating between the two institutions. The SMG will meet annually in April/May. Terms of Reference for SMG to be developed based on guidance in the operational handbook.

2) Programme Management Group (PMG) responsible for overseeing overall FP implementation and progress, review project progress with respect to results, compliance, and challenges in implementation. The PMG does the first screening of proposed new phases and projects and proposes their approval to the SMG (based on project documents formulated in accordance with AMG, including description of objectives, results frameworks, risks, ToC, budgets, work plans, etc.). The PMG is composed of Municipality of Aarhus and MFA senior staff involved in FP management and implementation with Municipality of Aarhus as Chair.

The PMG meets bi-annually, as follows: In February/March, to review the annual progress report and financial expenditure report, and address deviations and challenges in implementation of individual projects; in October/November, to review and approve next years' programme planning and budget and to review the capacity and contributions of all involved stakeholders. Terms of Reference for PMG will be developed based on guidance in the operational handbook.

Municipality of Aarhus will organize and facilitate all meetings and follow-up of the SMG and PMG. Meeting documentation will be circulated by Municipality of Aarhus 14 days in advance of the meeting and summary of meetings will be circulated within one week and finalized within 2 weeks from the meeting.

Preparation of new phases and new projects will be discussed in the SMG well in advance. Proposals for such must be agreed upon in the Project Steering Committee (see below) and submitted for initial screening, discussion, and recommendations for approval from the PMG, before submission to the SMG. New and adjusted outcomes will be discussed with partners and a new project document and work-plan agreed upon. The new phases or new projects must be described in project documents aligned with the requirements in the AMG.

As defined in SSC's Administrative Manual/Guiding Principles, **Project Steering Committees** for the individual projects are composed of Municipality of Aarhus, Danish Embassy, partner authority and Sector Counsellor as Secretary, co-chaired by the Danish Ambassador/ Deputy and a high-level partner representative. Municipality of Aarhus is responsible for operational management, and administration of the individual projects. National non-public stakeholders may participate as relevant in project steering committees.

A mechanism (a task force and meeting structure) will be established at embassies to jointly monitor, share lessons, and coordinate activities for the projects to contribute to each of the FP's 3 outcomes. This mechanism will be responsible for monitoring progress, agreeing, and coordinating activity plans, and compiling monitoring data for results reporting relevant to the three FP outcomes at project/country

level. It will be chaired by the Embassy and include Municipality of Aaarhus, Sector Counsellor, Secretary, Trade Council, relevant Embassy diplomatic/development staff and other relevant members identified. It will meet on a needs-basis that ensures timely input to annual progress reports and work plans.

Annual FP planning, budgeting, and reporting cycle: Municipality of Aarhus will submit a consolidated FP workplan and budget for the coming year in October/November for discussion and approval in the PMG. The work plan and budget will describe planned FP-level activities and highlight significant project-level activities that impact on overall FP progress and expected results, priorities and budgets, and main deviations from plans. Proposed new phases and projects will be reflected in the work plans.

In February/March, Municipality of Aarhus will submit to the PMG the annual FP progress report and financial expenditure report, highlighting deviations and challenges in implementation of individual projects with significance for overall progress and results of the FP. The annual progress and expenditure reports will be reviewed as basis for directions on adjustments or approval by the PMG. Based on the annual progress report, financial expenditure report and work-plan and budget subsequent annual transfer of funds from MFA to MFAF will be decided. Guidance for annual planning and reporting will be developed in the operational handbook. The format will include reporting on HRBA and poverty focused activities, incl. stakeholder engagement.

The FP will establish processes for systematic sharing of knowledge and lessons. There will be regional meetings (virtual) between Municipality of Aarhus, MFA and relevant Embassies with focus on sharing information and knowledge on issues, challenges, and opportunities, across all three FP outcome areas. Generally during implementation, Municipality of Aarhus will facilitate relevant opportunities for Embassies to engage at high-level with partner authorities; and in connection with Danish high-level visits to the countries, MFA/Embassies will engage with Municipality of Aarhus early-on regarding relevant opportunities in connection with such visits; all will explore opportunities through DFC to enhance learning outcomes. The sessions will also cover sharing of lessons regarding integration of HRBA, stakeholder engagement, poverty reduction and mainstreaming of gender.

8. Financial management, planning and reporting

Municipality of Aarhus will provide an **Annual Progress Report (APR)** that assesses the FP's progress, developments, risks, and lessons in relation to the FP Results Framework, Theory of Change. The report will further contain a synthesis of progress across the outcomes and outputs in the individual projects, structured in terms of outcomes and main areas of work defined under the FP (a template for APR will be provided in the operational handbook). The report will address assumptions to the Theory of Change, risks, and learning, as basis for any adjustments to individual projects. The narrative FP annual reports are prepared by Municipality of Aarhus in close cooperation with Sector Counsellors and Embassies. The Annual Progress Report is the main basis for discussion of progress in the PMG and SMG and for reporting on MFA's Results Framework Interface (RFI).

Municipality of Aarhus will follow the MFA Guidelines for Financial Management and the SSC Annex on financial implications for a Danish Authority engaging in Danish public financed Development

Assistance. Budgeting and financial accounting and reporting to MFA will be at program level in similar format as the FP budget (see section 6) and at project-level, including output-based reporting at project level. Guidance for financial reporting will be developed in the operational handbook. Municipality of Aarhus should be able to provide accounting for use of inputs including staff time at output-level. The funds will be disbursed by MFA to Municipality of Aarhus annually in one tranche based on approved reporting. Standard best-practice accounting procedures apply.

9. Monitoring, learning, and risk management

Municipality of Aarhus is responsible for **monitoring** of the projects under the FP based on the three FP outcomes, the project specific results frameworks, risks matrix, and guided overall by Danida Aid Management Guidelines (AMG). Municipality of Aarhus will ensure internal quality assurance systems for preparing project documents, annual and mission reporting on new and on-going SSC projects and others. Municipality of Aarhus will establish an outcome/output-based monitoring system adequate for meeting the monitoring, learning and reporting requirements across the SSC projects and FP results framework. Municipality of Aarhus will be responsible for reporting on the RFI. Monitoring will be based on the MEAL plan, which will be developed by Municipality of Aarhus and include final results frameworks, roles, and approach to aggregating project level results for the FP.

The QA system, learning, and competence development will include a focus on the HRBA and poverty reduction (see section 2.5), including based on the FP's annual reporting on HRBA related activities.

MFA will commission a **mid-term review** of the FP in 2025 with focus on progress towards results, lessons learned; organizational management capacity of Municipality of Aarhus and partner authorities; lessons on cooperation and dialogue with main relevant private sector actors; and implementation of programme MEAL Plan; and operationalisation of the HRBA and poverty reduction in capacity development efforts. The mid-term review will also revisit the results framework and targets. Municipality of Aarhus will adequately in time for the mid-term review undertake an outcome harvesting- and lessons learned study across the projects of the FP. The outcome harvesting will focus on capturing broader results on climate responsive urban water management including with regards to poverty and effect on beneficiaries; on bilateral relations and climate diplomacy; and green commercial effects.

Annex 3 describes the **main risks** facing the FP. Municipality of Aarhus will annually review and update the risk assessment in annex 3 for discussion in the PMG and SMG meetings. Risks will be identified and monitored at the level of the individual projects, based on the project documents.

Municipality of Aarhus and the Embassies will collaborate with **Danida Fellowship Centre (DFC)** to maximize results of the FP and support joint identification of needs, co-creation of opportunities, and coordinated evaluation of results. Municipality of Aarhus and the Embassies will collaborate with DFC to ensure that learning opportunities, research-to-policy support and networking initiatives offered by DFC, and research project funding managed by DFC, and research project funding managed by DFC, are leveraged by and remain supportive of the individual projects, including by integrating relevant DFC initiatives as part of these projects. Such learning initiatives will include the human-rights base approach.

To this end, Municipality of Aarhus will ensure that possibilities for relevant collaboration are considered under the individual projects and discussed across the FP annually in the PMG, and that DFC is included as relevant in the formulation of new phases under each project, and the evaluation of such phases upon their conclusion. Decisions on collaboration are made at project level, with sector advisors as initiators. City of Aarhus and DFC will strive to have an annual meeting for information and lessons sharing.

Risk Factor	Likeli-	Impact	Risk response	Residual	Background to
	hood			risk	assessment
Partner political priorities	Unlikely	Major	Monitor and adjust	Minor	Experience from
change					phase 1 (see annex
Covid lock down	Unlikely	Significant	Remote work	Minor	for details)
City of Aarhus staff	Likely	Major	Consult with management	Minor	
availability	-	,			
Partner commitment	Likely	Minor	Advocate with partners	Minor	
weakens	-		-		
Danish private sector does	Unlikely	Major	Intensify advocacy	Minor	
not respond					
Duplication with other	Unlikely	Major	Coordinate and map	Minor	
development partners		,	-		
Challenges for the involved	Unlikely	Minor	Management support and	Minor	
Danish stakeholders in			incentives and increase		
reaching outcomes 2 and 3			awareness		

Summary risk analysis and risk response

10. Closure and exit

The process for closure and exit will follow the procedures defined in the SSC guidelines and Danida's AMG. All projects are expected to end no later than at the end of phase 3, normally corresponding to 10 years, but can be ended any time decided by the SMG.

Any project entering phase 3 should include, as part of the project documentation for approval, an outline strategy for transition that ensures sustainability of main project results after project completion. The strategy should describe how results are planned to be sustainable within the partner authority systems, for instance, through focus on particular partner reform processes that the partner is committed to sustain, and relevant plans for how project results will be transferred to be managed by the partner. It should also describe how the SSC project's synergies with the wider Danish engagement in the country will be sustained, for instance, through contribution to other Danish aid and business instruments and/or further commercial or investment cooperation in that country

One year before the termination of the FP, the PMG - and later SMG - should assess and agree on the possible next phase of FP. A final FP results report based on AMG's format should be submitted by Municipality of Aarhus for discussion and approval by the SMG. The closure of accounts should follow the principles in the AMG.

Annex 1: Project descriptions

Summary of current and planned projects 2023-2026

Ghana –	Phase	1.	on-going	project:	expected	start	of	nhase	2 in	2024
Ullalla –	I mase	1,	on-going	project,	expected	Start	01	phase	4 III	2024

Project title	Strategic Sector Cooperation on Urban Water
Project period	Phase 1, 4 years (January 2020 – December 2023) Extended due to some
	delays during Covid-19 pandemic
Country	Ghana
Main sector	Country climate context highlights
development issues	 Ghana in general benefits from rich water resources but the resource is stressed by human activities and in some parts in the northern region of the country also by increasing periods of stress. Despite improvements water access, affordability and quality are predominant concerns in both urban and rural area, including the Greater Accra Metropolitan Area (GAMA)
	 Many years of under investment combined with a growing population are stretching service provision.
	 Non revenue water and waste water management and stormwater drainage are reducing the climate resilience of the city and causing operational challenges in providing a good level of service. Poverty, vulnerability, inequality – and role of climate change and
	natural resources degradation
	• The lack of clean drinking water and poor wastewater treatment and sanitation is a severe public health concern contributing to 70% of diseases in Ghana (e.g. cholera, diarrhoea, dysentery)
	• Rapid urbanization in the southern region of Ghana is significant and resulting in stress on urban infrastructure including water and growing informal settlements. The increasing urbanisation risks increasing already high inequality levels.
	• The majority of the underserved population in urban areas live in informal settlements and slums. In Accra (neighbouring Tema) about 35% of the population only have access to clean drinking water two day a week, while 10% have no access to safe drinking water.
Thematic focus	• Urban water resources management, water efficiency, wastewater and climate adaptation
National partner	Municipality of Tema (TMA)
authority (recipient	Ghana Water Company Limited (GWCL)
country)	
Other partners to	Municipality of Aarhus and Aarhus Vand are the key partners from
include, incl. Danish	Denmark. Other Danish partners and institutions include Danish Water
authorities	Valley and Danida Fellowship Centre.
	Collaboration expected with C40 in Phase 2.
	Ghana Environmental Protection Agency is an affiliated stakeholder.
	Further, for phase 2 relevant line ministries will be considered (e.g.

	Ministry of Sanitation and Water Resources, Ministry of Environment;
	Ministry of Local Governance and Rural Development).
Objective	TEMA's citizens and businesses have increased resilience against climate
	change though improved water management with replication in other
	urban areas in Ghana.
Main expected	Outcome A – Wastewater management: Strengthened institutional
components	capacity for enhancing climate resilience through improved
(outcome areas)	wastewater management. Development of a long-term strategy and
	climate adaptation and wastewater plan and improve the institutional and
	technical skills and capacities needed in relation to operation and
	maintenance of the wastewater system.
	Outcome B – Water efficiency: Improved planning and strategy
	development for reduction of Non-Revenue Water (NRW).
	Strengthen systems, capacities, skills, and procedures to bring down NRW
	and increase the level of financial and technical sustainable drinking water
	services.
Considerations about	The focus on coherent wastewater planning and climate adaptation will
how "greening" is	have the potential of improving water quality in general, increase resilience
addressed	against water related diseases and reduce the impact of untreated
	wastewater on water-related eco-systems. The reduced pollution to river
	and the aquatic environment will improve the ecological conditions.
	Reduction of non-revenue water will reduce the leakage from water supply
	pipes thus increasing efficiency of the water supply system and improve
	the water services, namely for the underserved and marginalised
	communities. A constant water supply with pressurized pipes may be
	colluted surface water. The water supply will be more efficient and the
	political surface water. The water supply will be more efficient and the
	Overall the project will lead to increased lives bility and increased resilience.
	of the city in terms of its ability to withstand climate induced shocks
	(drought flooding rising temperatures etc). Eurther the institutional
	capacities in TEMA GWCL and nationally will be strengthened through
	the capacity building and leverage of learnings to pational level
	the capacity building and leverage of learnings to hadonar level.
	The most relevant SDG-goals addressed are 3, 6,11, and 13
Significant	The continued relevance and wish to continue into a Phase 2 were
outstanding	reconfirmed by the partners by signing of a Memorandum of
questions or critical	Understanding on a phase 2 (March 2022) as an addendum to the overall
steps in the process	MoU signed at the beginning of the partnership.
···· ··· ··· ··· ···	As Phase 1 of the project is still ongoing, the 2023 work plan for the
	project may be updated and adapted to the formulation of phase 2. The
	partners will continue the dialogue on priorities for a phase 2 as the
	current phase evolves. As is the case for phase 2, a new phase will be
	closely aligned with Ghana's priorities and needs as expressed in updated
	national policy and strategies.
Danish priorities,	The SSC on Urban water ticks several boxes in relation to key
interests, and	strategies of the Danish Government and is aligned with the strong
coherence	water commitment expressed in "The World we Share", along with

the strategy's focus on partnership, green transition and possibilities for people especially in sub-Saharan Africa.
• At the Embassy in Accra, water is also one of the core focus areas in a new strategy under preparation, after the completion of the transition from "Aid to Trade". This also includes the Trade Council. Good collaboration between the SSC and TC exists locally and synergies have been and will continue to be exploited through joint activities where relevant.
• As the SSC includes a strong element of adaptation to climate change, it has become one of the embassy's core platforms for climate diplomacy in Ghana. It is anticipated that the importance of this platform will continue to grow in coming years as adaptation has strong political focus in Ghana, as opposed to the climate mitigation agenda.
• Using the strong asset of DFC financed capacity building and research, the SSC on urban water has contributed to the development of close relations between Denmark and relevant key institutions on urban water and climate adaptation in Ghana. Examples include the Chief Director of the Ghana EPA, who has been heading the Ghana COP-delegations for the last many years and who has a very strong voice on climate in Ghana.
• In summary, the SSC has contributed significantly to maintaining the reputation of Denmark as a strong, long-lasting and reliable partner in the water sector in Ghana. The SCC has re-established access to core partners e.g. ministries, other development partners and banks and NGOs after years of absence from the sector.
• In depth insight into some of the core challenges facing the sector obtained from the SSC cooperation, combined with strong networks at the national level, create opportunities to have early access to provide comments to e.g. terms of references for national studies, new policies, draft documents, concept notes etc. and promote Danish approaches to the green transition.
• Concretely, the collaboration between the SSC and DFC has clearly increased the knowledge and the visibility of Danish smart, resource efficient water solutions, and technologies, including adaptation measures. This underpins the work of TC, creates leads and strong private sector involvement of Danish companies. Reflecting one of the key elements of the "Eksportstrategi for Vand".
• During the early difficult weeks of the Covid-19 pandemic, which impacted Ghana's two biggest cities especially hard, the embassy developed a "response engagement" with UNICEF and relevant public institutions (e.g. water, health, education and justice). This was a solidarity support from Denmark to Ghana, focusing on the mitigation of virus spreading risks and derivative consequences of the pandemic e.g. increased domestic and gender based violence in high-risk urban communities. Core parts of the project were WASH focused, inspired by the SSC on urban water. Urban WASH activities were new focus areas for UNICEF in Ghana at the time, but is pow

	 an area that has been formally included in their new strategy for the coming years. Finally, this engagement has also been instrumental in the further development of a newly launched pro-poor department in Ghana Water Company. The SSC on Urban water has also been used as a stepping-stone for the embassy to position itself centrally in the recently EU Delegation driven Team Europe process. Denmark is perceived as one of the leading member states on water services in cities. Several projects are in the pipeline for the years to come. Including involvement of other member states and the European Investment Bank. Chief among these are two Danida Sustainable Infrastructure Finance (DSIF) projects. The Aveyime Drinking Water Project (app. 1.2 mio. people) and the Tema Waste Water and Sewage System Rehabilitation/Expansion Project, including a strong climate adaptation and eventing appropriate of the site of Texas. The data is provided and the transmitter of the site of Texas. The data is provided and the transmitter of the site of Texas. The data is provided and the transmitter of the site of Texas. The data is provided and the transmitter of the site of Texas. The data is provided and the transmitter of the site of Texas. The data is provided as the site of Texas. The data is provided as the site of Texas.
	expected to be developed in close cooperation with the EIB and 1-2 other EU member states, as a Team Europe Initiative.
Previous results	
lessons	 Close and frequent dialogue with TMA management and the Mayor has supported a solid high-level anchoring and organisational consolidation of the project, and assured mobilisation of relevant staff. The hybrid of on-line and physical meetings and collaboration has turned out to be feasible and effective. In 2021 the importance to involve national institution became clear, not least to unleash the bilateral potential of the SSC, and in a longer perspective to leverage learnings from the municipal level. This also has given several relevant leads to Trade Council. The DFC has in many ways proven its relevance and is a strong modality supporting the SSC, capacity strengthening and consolidating the network. The SSC-project has supported 1-2 DSIF investment project development processes and the embassy's dialogue with the EU Delegation and European Investment Bank, on potential Team Europe initiatives.
Main other relevant ins	struments, engagements, and initiatives managed by the Embassy
Instrument/engagement	Main relevant linkage to SSC project
EU	Team Europe Initiatives at national and regional level
UNICEF	Strengthening of their city focus and experience, and supporting UNICEF private sector involvement ambitions through secondment of a finance expert.
DFC research	One project started and several very interesting in the pipeline.
Investment and trade counsellors	DSIF, TC, EIB, EKF Green Accelerator
Global sharing of learnings	To leverage learnings, feed into different city networks, e.g. C40, African Development Bank (African Water Facility, Urban and Municipal Development Fund

South Africa – Phase 2, new project phase

Project title	Tshwane -Aarhus partnership on enhancing climate resilience and water
	management
Project period	2023-2025
Country	South Africa
Main sector	Country climate context highlights
development issues	 Water scarcity is the main challenge facing the sector. If the current rate of water usage continues, demand is likely to exceed supply and availability of economically usable fresh water resources in the future and already in some areas. Water infrastructure is a fundamental issue in all elements of the water sector as the public infrastructure is at risk of failure. Lack of water infrastructure or the poor management of water resources results in the economic water scarcity. South Africa non-revenue water is close to 40%, as a consequence of poor financial regulation system and leaks. Unpredictable weather patterns leading to prolonged periods of drought in dry regions and flooding in others is also a great challenge in managing water resources. This can also affect access to electricity as South Africa might have to resort to more coal use. The South African water sector suffers vast from a huge investment backlog with maintenance and new build of water and wastewater infrastructure. The cores of the issue are that the revenue collection chain is broken due to vast water loses, missing collection and payment, under costing of services resulting in the system running dry of finance. Also multiple challenges at municipal level with institutional and technical capacity for operations, projecting and procurement of water infrastructure interventions
	Poverty, vulnerability, inequality – and role of climate change and
	natural resource degradation
	 Natural disasters in South Africa (e.g. droughts, floods, storms, fires) have led to significant social and economic losses, which is anticipated to exacerbate as consequence of climate change. There is a current pattern of increasing urbanization, which could increase already high inequality levels. Significant disparities in income and services across regions. Income per capita in Gauteng - the main economic province that comprises large cities like Johannesburg and Pretoria - is almost twice the levels as that found in the mostly rural provinces like Limpopo and Eastern Cape.

	• Current unemployment rate above 35%, with youth unemployment at 66%. Without access to natural resources and water this figure will inevitably rise, leading to more poverty and potentially conflict.
Thematic focus	Urban climate adaptation and resilience through comprehensive urban water management, water efficiency; wastewater; water resilience
National partner authority (recipient country)	City of Tshwane, South Africa
Other partners to include, incl. Danish authorities	Municipality of Aarhus and Aarhus Vand are the key partners from Denmark. Other Danish partners and institutions include Danish Water Valley and Danida Fellowship Centre.
	C40 will be involved in phase 2 projects. Potential collaboration with other C40 member cities in South Africa initially through outreach and knowledge sharing with relevant political and technical leaders in such cities.
	Other pertinent partners in South Africa will be identified before project start in 2023.
Objectives	City of Tshwane becomes a more sustainable and climate resilient city by promoting inclusive holistic water resource management in line with its Climate Action Plan.
Main possible or	Outcome A – Enabling environment creation: best practices for
expected components	climate responsive water management have been created through
(outcome areas)	improved governance.
	Outcome B – showcase: best practices for comprehensive water
	management have been showcased. This is done through pilot cases
	on wastewater management; non-revenue water management and own-
	resource optimization. And in line with developing a water security
	strategy for the city of Tshwane.
	Outcome C Adoption and outreach: best practices for climate
	responsive water management have been adopted. Focus on both
	policy level and community level, as well as integration in the monitoring
Considerations about	and evaluation plan.
how "greening" would	adaptation and a more sustainable and comprehensive management of
be addressed	water resources to increase resilience by considering the whole water
be addressed	cycle This includes reducing water losses by leak detection. This will below
	conserve the scarce water resources, and allow better resource use for
	domestic consumption, even during droughts. Further, improving the
	wastewater treatment operation and management will reduce pollution of
	drinking water reservoirs and the environment. Optimization of energy
	use will increase the energy efficiency and mitigate carbon emissions.
	Strategy for stormwater planning will reduce vulnerability to flooding
	Strategy for stormwater planning will reduce vulnerability to flooding particularly in low-lying areas, which are where informal, poor
	Strategy for stormwater planning will reduce vulnerability to flooding particularly in low-lying areas, which are where informal, poor communities without access to adequate and risk-reducing infrastructure

	help minimize financial losses, which can potentially enable reinvestment of savings into the city's water infrastructure.
	The most relevant SDG-goals addressed are 1, 3, 6, 11, and 13.
Significant outstanding	Following an extensive consultation process, mutual agreement to
questions or critical	continue the collaboration between City of Aarhus and City of Tshwane
steps in the process	in order to build on gains made and provide a basis for wider replication
	of lessons learnt. A joint workshop held in spring 2022 identified key
	objectives and outcomes based on needs and priorities of City of
	Tshwane. Partners are currently consolidating formulation of phase 2
	project, including fine-tuning of outcomes and outputs.
Previous results and	1) The phase 1 of the project has showed that SSC is well suited for
lessons	 South Africa, including at city level, and that there is good acceptance of work modalities and absorption and impact of input when focusing on clear national and urban priorities benefitting from political commitment. On this basis, phase 2 outcome, outputs and activities will be directly linked to City of Tshwane's own KPIs to ensure alignment and commitment of budget and human resources. 2) The organisation of the project implementation, and the institutional and not least personal relations are crucial for success. On this basis, the management team (divisional heads and/or groups heads) are closely involved in design of phase 2 and will be involved in the Project Management Team to further enhance city ownership and commitment. 3) Time combined with high quality persistent technical, cooperative and diplomatic contributions creates the platform of trust where results and impact can be achieved and sustained. This also places a considerable responsibility and expectations on Danish authority and utility partners and calls for high degree of professional responsiveness.
Danish priorities, interests, and coherence	 In light of the important and highly prioritized water resilience challenges in the country, the collaboration is an integrated and key element in the bilateral green strategic partnership. The project directly follows from the signing (February 2022) of Denmark's Green Strategic Partnership Agreement with South Africa, further strengthening bilateral relations and multi-pronged collaboration in areas of development cooperation, climate diplomacy, and green commercial interest for Danish water expertise and solutions. As such, water is now a major component of the SSC twinning programme between City of Tshwane and City of Aarhus. The close partnership with City of Tshwane offers a platform for Denmark to engage and position itself in broader green city-diplomacy for enhanced impact to the benefit of urban dweller, in particular those most exposed to climate hazards and water scarcity. Building on the existing strong Danish partnership with C40, and City of Tshwane's status as C40 innovator city, Danish city engagement and potential for impact will be further enhanced through sharing of knowledge, expertise and solutions with a broader set of cities, in South Africa and beyond.

• Building on synergies from the development engagement, the SSC project can further serve as an economic diplomacy platform whereby the South African framework mechanisms are improved and conducive to the implementation of competitive technical solutions offered by Danish companies.
• Opportunities for enhancing investments in resilient urban infrastructure are explored, including potential future engagement with DSIF, Green Accelerator (EKF), and Multilateral Development Banks, in particular the African Development Bank through collaboration and Banish support to the Bank's African Water Facility and the Urban and Municipal Development Fund (UMDF, future support from late 2022). An Investment advisor recently based in the Embassy in Pretoria is working with the SSC priority sectors with focus on improving investment climate, concrete project financing, and implementation.
• The Danish private sector focus on water related opportunities in South Africa, including Grundfos, AVK, Kamstrup and Danfoss which are expanding, and rising interests from companies like Ramboll and DHI.

Main other relevant instruments, engagements, and initiatives managed by the Embassy						
Instrument/engagement	Main relevant linkage to SSC project					
SA-DK green strategic partnership agreement	Government-to-government collaboration on green transition, economic growth and job creation					
SSC - Water Sector Programme	The purpose of the program is to support the South African government agencies and other relevant stakeholders in developing and implementing strategy, management and regulatory frameworks to contribute to the National Water Resource Strategy (2013)					
SSC – Investment Adviser	The Purpose of the program is to identify investment opportunities in the South African water and energy sector and thereby pave the way for green infrastructure development and increase Danish footprint in the country.					
MoU with Western Cape	Exchange experience with western cape government regarding technical expertise and capacity building in respect of infrastructure governance, development and service delivery at local municipalities.					
Climate Envelope - Energy/South Africa	The development objective of the programme is to decouple economic growth in the Republic of South Africa from the growth in the overall Greenhouse Gas (GHG) emissions. The intermediate objective is to increase the deployment of low carbon technologies in the energy sector.					

India – Phase II, new project phase

Project title	Sustainable Urban Water Management
Projektperiode	2023-2025
Country	India
Main sector	Country climate context highlights
development issues	• India is home to 17.5% of the global population, but has only
	about 4% of the total global freshwater resources.

	 Climate change is intensifying the natural water cycle, bringing more intense rainfall and associated flooding, as well as more intense drought in many regions. Water scarcity is the main challenge facing the sector. If the current rate of water usage and wastage continues the demand is likely to exceed supply. Climate change is worsening the situation by making the monsoon rains shorter and more extreme. India's non-revenue water rate is estimated to be 30-50% as a consequence of poor financial regulation system and leaks. Groundwater depletion and contamination is a major challenge. India's cities often operate under ill-informed and unsustainable water management and end up facing grave risks from coastal and inland flooding, scarcity of quality water, loss of biodiversity and access inequalities that threaten people's livelihoods and urban economic assets. Climate change will exacerbate these risks significantly. Poverty, vulnerability, inequality – and role of climate change and natural resource degradation Natural disasters in India (e.g. droughts and floods) have led to significant social and economic losses, which is anticipated to exacerbate as consequence of climate change. There a significant disparities across regions. Income per capita in states such as Tamil Nadu in the south are significantly higher than in the poorer states in north/central India such as Uttar Pradesh. The impacts of urbanization and climate change disproportionately affect the already disadvantaged including women from vulnerable communities', persons with disabilities, children and senior citizens, thereby exacerbates inequality and often leads to detrimental impacts to health and well-being, loss of livelihoods and lives
Thematic focus	Sustainable Urban Water Management
National partner	Rajasthan state with partners at city level directly delivering on the
authority (recipient	visions of the national mission AMRUT 2.0 - in particular Udaipur and
country)	Jaipur
	Ministry of Housing and Urban Affairs
Other partners to	Municipality of Aarhus and Aarhus Vand are the key Danish partners
include, incl. Danish	Other Danish partners and institutions including Danish Water Valley.
authorities	and Danida Fellowship Centre.
	1
	C40 and ICLEI will be involved in phase 2 project.
	Potential collaboration with other C40 and ICLEI member cities in
	India initially through outreach and knowledge sharing with relevant
	political and technical leaders in such cities.
	in 2023.

Objective	Partner cities in India become more water resilient and urban dwellers
	are less exposed to water scarcity and flooding
Main possible or	Outcome A - water security and efficiency: Improved security and
expected components	quality of drinking water services. Focus on water efficiency
(outcome areas)	measures (NRW reduction, distribution efficiency) and improving
	Water resource planning and management e.g through mapping of
	potential surface and groundwater resources.
	Outcome B - wastewater: Improved water quality by reduced
	proportion of untreated wastewater. A pilot wastewater project on
	sewage planning and sustainable sludge management, capacity building
	on waste to energy and Sewage planning, handling and treatment
	Outcome C - river rejuvenation: Enhanced liveability through
	River Rejuvenation and Blue-Green Solutions in Urban areas.
	Support with design for rejuvenation of a river stretch (demonstration
	project) and exchange experiences in regulation for tender specifications
	on river rejuvenation and development of urban liveability via nature-
	based solutions.
Considerations about	The Rajasthan state is highly sensitive to climate variations, and has
how "greening" would	limited available water resources. Hence, there is a need to ensure that
be addressed	cities take a sustainable and resilient approach towards the development
	of their infrastructure - one that aims to generate positive social,
	economic, and environmental impact. Making Cities Water Secure is the
	current state of the art in Rajasthan and the vision for the next 5 years
	(AMRUT 2.0 (Atal Mission for Rejuvenation and Urban
	Transformation)). The thematic focus of phase 2 will be Sustainable
	Urban Water Management in compliance with the AMRUT 2.0 including
	water supply resources and efficiency, wastewater management and river
	rejuvenation. It will be achieved through circular economy of water, by
	effecting water source conservation, rejuvenation of water bodies,
	recycle/ reuse of treated used water, and rainwater harvesting by
	involving the community at large. This will increase the resilience of the
	cities to adapt to climate change. Rejuvenating the rivers has the potential
	to satisfy the water needs and balance the environment. Further,
	provision of fundamental public services (clean and attordable water) will
	improve the health of citizens, including people living in poverty, who
	are most vulnerable to polluted water resources and untreated
	The Joint Project sime at contributing towards the SDC 1.3.6.11 and
	13.
Significant outstanding	The Danish and Indian partners have mutually agreed to collaborate to
questions or critical	contribute to the AMRUT 2.0 mission and to achieve the SDG 6 goal.
steps in the process	They have drafted a letter of Intent for this collaboration and are in the
	process of formalizing the cooperation in the form of a Memorandum
	of Understanding.
Previous results lessons	The learnings from the Phase 1 of the Strategic Sector Cooperation
	project emphasized the importance of continued engagement in
	Udaipur and other cities as the cities for demonstrating concrete

	projects and to let results from the cities impact the framework						
	conditions by	engaging at the state level with the State of Rajasthan.					
Danish priorities,	• The bilate	ral collaboration between India and Denmark has grown					
interests, and coherence	consideral	bly compared to when the first phase of the SSC project					
	was launcl	hed. With three summit-level meetings in three years, the					
	first one in	n September 2020 launching the Green Strategic					
	Partnershi	p (GSP). Denmark is in a unique position assisting India					
	in the gree	en transition.					
	• On 6^{th} An	ril a joint action plan (IAP) for 2021-2026 was agreed					
	between t	he 2 countries where the activities from the first phase of					
	the SSC p	roject have been integrated in Chapter 3 and Chapter 4 of					
	the IAP. T	The IAP further mention phase 2 of the SSC as one of the					
	actions to be taken in year 2022.						
	• The them:	atic area of the SSC project is covered under the					
	Memoran	dum of Understanding between the Indian Ministry of					
	Housing a	nd Urban Affairs (MoHUA) India and the Danish					
	Ministry o	f Industry Business and Financial Affairs					
	 The them 	atic area of the SSC project's phase 2 focuses on the					
	A MRUT2	0 (Atal Mission for Reinwenation and Urban					
	Transform	ation) mission, which was launched by the Indian Prime					
	Minister N	Addi in 2021 with the aim of making all the 4700 cities					
	Minister Modi in 2021 with the aim of making all the 4/00 cities						
	the responsible ministry in implementing this mission						
	• India and Denmark has already signed a letter of Intent on						
	5 th	Univ 2021 on collaborating on AMBUT 2.0 and phase 2					
	5 of	The SSC project is the law contributor to this action					
	• Deth Der	and so d India and an analyzed a local days of the section.					
	• Both Den	mark and India are working on launching 2 new					
	initiatives:	Smart Laboratory on Clean River Water in Varanasi and a					
	Centre of Excellence on Smart Water Resources Management. The thematic areas of these initiatives are similar to the thematic areas of						
	thematic a	ireas of these initiatives are similar to the thematic areas of					
	the SSC p						
	• The Trade Council in India has a sector counsellor in water and						
	Water Technology Alliance is underway led by the Trade Council.						
	The Innov	vation Center Denmark in India also has a focus on water					
	and is esta	blishing a water platform between Denmark and India.					
	• During the	e first phase of the project there has been a close					
	collaboration with the Trade Council at the Embassy in New Delhi						
	and the project and different private sector organisations like						
	Danish Industry, Danish Water Forum and other private sector						
Main atkensel	were involved and this will continue in phase II.						
Main other relevant instru	iments, engag	Main relevant linkage to SSC project					
Joint Working Group between th	e Ministry of	The thematic area of the SSC project is covered under the					
Housing and Urban Affairs and the Danish		Memorandum of Understanding between the Indian Ministry of					
Ministry of Industry, Business and Financial		Housing and Urban Affairs (MoHUA), India and the Danish					
Affairs		Ministry of Industry, Business and Financial Affairs.					
SSC project between the Danish	Environmental	The sector counsellors of the Aarhus SSC project and the SSC					
of Water to support the Ial Leean	Mission of	closely collaborate. The DEPAs project is with the Indian Ministry					
India.	111001011 01	of Water within the thematic area of groundwater-based drinking					

	water supply, reduction of non-revenue water and energy
	optimisation. DEPAs project focuses on the Rural water supply,
	where of one of the three thematic areas of the Aarhus SSC project
	is on Urban Water supply. Furthermore, Aarhus Vand is in both
	SSC projects. GEUS is also a partner in the research project funded
	to support the Aarhus SSC project.
Water Technology Alliance	The Trade Counsel at the Embassy has a sector counsellor in Water
	and the close collaboration with the trade counsel in identifying and
	collaborating with companies who contribute with input to SSC
	cooperation.
Investment and financing opportunities	Counsellor posted at embassy to assist in identifying potential
	investment and financing options in relation to the SSC project.
SDG facility project	The Embassy has initiated a study in collaboration with MoHUA
	with the aim to develop comprehensive Water Management plan
	and digitalization of Urban Water Sector. Embassy has allocated 0.5
	million DKK from the SDG facility instrument. Cities Udaipur and
	Varanasi were selected as pilot cities for this exercise. National
	Institute of Urban Affairs will be developing this in collaboration
	with the SSC project.
DANIDA Window 2 Research project	In 2019, the Embassy in collaboration with the DANIDA window 2
L /	instrument defined some topics from the SSC project. This has
	resulted in the financing of a research project of 5 million DKK on
	Integrated Water Ressource Management in Udaipur, where
	University of Copenhagen is a lead partner and GEUS and DHI are
	other Danish partners. GEUS is also a partner in the SSC project
	with DEPA.

Annex 2: Partner Assessment

Brief presentation of the City of Aarhus

The Municipality of Aarhus is home to more than 350.000 inhabitants, the majority living in the city proper making Aarhus the second-largest city in Denmark. Furthermore, in "Business Region Aarhus" 1.2 million people live within a one-hour drive from Aarhus.

The Aarhus City Council have set out a vision to make Aarhus a diverse and vibrant city, a city on the move, and a good city for everyone. Besides being one of Denmark's main engines of growth, Aarhus is also a college town due to the many educational institutions with over 50,000 students enrolled in 150 different advanced degree programs.

As the only municipality in Denmark, the Municipality of Aarhus is run by a City Executive Board consisting of the Mayor, five Aldermen who each head a municipal department as well as three aldermen who do not head a political department. The City Executive Board prepares the meetings of the Aarhus City Council which has 31 members and is the city's supreme authority in terms of decision-making and the allocation of funding.

The Municipality of Aarhus has six permanent committees covering areas such as finance, technical services and environment; social affairs and employment; health and care; culture as well as services for children and young people. The City Council can refer cases for consideration in the committees where citizens and institutions can be granted audiences. Furthermore, a committee can discuss cases and summon the mayor or the aldermen for consultation on its own initiative. As the municipality is run by a City Executive Board, the permanent committees only serve as advisory bodies.

The International Strategy for Growth lays out the cities vision for a vibrant and international perspective. Historically, the Municipality of Aarhus has collaborated with a wide range of international partners and is home to a large number of private enterprises that both operate and recruit internationally. Additionally, students and expats from all over the world, come to Aarhus to study and work, while simultaneously contributing to the city's openness and growth and employment, through insight into foreign cultures and knowledge. Aarhus is continuously working on developing new bonds and international partnerships.

The strategy presents several initiatives including active engagement in export orientated international cooperation. The SSC is recognized as an important instrument and the Municipality of Aarhus aims at engaging with the instrument by building on Danish strengths in water management in close collaboration with partners such as Aarhus Vand a/s, Water Valley Denmark and the wider objectives of the Business Region Aarhus.

Furthermore, the massive challenges presented by global warming and climate change can only be solved by means of international cooperation and through the exchange of knowledge. Therefore, Aarhus is acutely aware of the special responsibility and major role it plays in combatting climate change. Accordingly, Aarhus has set it owns ambitious target to reduce its CO2 emissions and aims to become a CO2-neutral city in 2030.

Aarhus maintains the position that the massive challenges presented by global warming and climate change, can only be solved by means of international cooperation and through the exchange of knowledge.

Summary of partner relevant capacities

Core strengths:

- The Municipality of Aarhus with its partners is at the leading edge of Danish technology, knowhow and practice within climate change adaptation and sustainable water resource management.
- The munipality has long experience of inclusive urban planning that engages with and integrates across social, economic and environment dimensions.
- Innovative approaches to climate resilience and environmental sustainability have been developed through fostering partnership with civil society and the private sector.

Capacity developed through phase 1 projects:

- The municipality and its partners have broadened the range of planning and technical specialists who are familiar with conditions in Africa and Asia.
- Through a range of platforms and events a network of contacts have been created both within the public and private sector which will serve the second phase well.
- By working with Aarhus Vand a/s and Water Valley, Denmark the city has widened the wide range of expertise is available for the framework programme.
- Core staff have become familiar with the demands and procedures of development cooperation in terms of project management and reporting.
- The skill set for effective capacity development and advocacy in a development context have increased.
- Recognition of the importance of top management attention and support for timely release and commitment of senior staff has increased.

Annex 3: Risk Management

Contextual risks

Risk factor	Likelihood	Background to assessment	Impact	Background to assessment	Risk response if applicable /	Combined
					potential effect on development	residual
					cooperation in context	risk
The political situation and	Unlikely	Each country is different but	Major	The programme is built on	Re-planning and consultation to adjust	Minor
priorities on climate change		none of the 3 are unstable and		current planning and levels of	the programme to the new situation -	
adaptation and sustainable		elections have recently been held		priority- if this changes the	in the worst case the sustainability of	
water management in the cities		- nevertheless whilst unlikely it		original outcome will not be	some of the results might be weakened	
or countries could change e.g.		is still possible.		achievable	_	
after elections						
Local and national lock-down	Unlikely	The pandemic appears to be	Signific	Travel and person to person	Use of remote communication, which	minor
due to covid-19	-	manageable and travel is	cant	contact is important for	has proven efficient during previous	
		opening up - yet there is always		building trust and paving the	lock-down - the ambition level and	
		the threat of new virus or new		way for active commercial	demonstration effect will probably	
		strains		engagement	need to be adjusted downwards	

Programmatic risks

Risk factor	Likelihood	Background to assessment	Impact	Background to assessment	Risk response if applicable /	Combined
					potential effect on development	residual
					cooperation in context	risk
Aarhus key staff not available	Likely	Management level on board and	Major	The peer-to-peer element of	Consult with management and ensure	minor
on-demand		Aarhus has a strong focus on its		the projects is key, and the	allocation of time to the project. In	
		international involvement in the		senior staff is needed for the	specific cases, where distinct expertise	
		water sector. However, the		success of the projects.	is needed some use of external	
		pressure on senior staff in the			consultants will be considered,	
		public sector in Denmark is high			including engagement through a	
		and level of ambition is raised in			framework contract to limit transaction	
		phase 2 projects. Whilst the			costs.	
		political commitment to support				
		this program is high, it is not				
		something that can be				
		guaranteed in case of change of				
		leadership.				

Lack of commitment and	Likely	The management level has	Minor	Earlier phases have shown that	Regular meetings with the stakeholders,	minor
participation from relevant	-	committed to phase II of the		a more widespread	sharing of useful information and	
stakeholders (high-level		projects (Ghana TBC), and these		commitment and engagement	gradual involvement in activities will	
management, other authorities,		new phases are closely aligned		of stakeholders over a longer	encourage and consolidate engagement	
private sector) could affect		with national and city priorities.		period and in context of	and commitment. These meetings will	
progress and results		However, other stakeholders –		changing personnel, plans and	also identify other stakeholders who	
		e.g. in other departments, at		priorities is necessary to ensure	need to be more actively engaged and	
		national level, municipal		success	make a commitment to fulfilling their	
		association of local governments,			roles. Continued involvement of the	
		newly elected political leaders,			ambassadors e.g. launching the new	
		CSOs) not directly involved in			SSC framework at high-level seminars	
		the projects, but whose input is			and securing that project steering	
		needed might not prioritise it as			committee meetings are held with high-	
		highly.			level participation from the embassy.	
The Danish private sector does	Unlikely	Aarhus Municipality and Aarhus	Major	The showcasing of Danish	Intensify advocacy e.g. through Water	minor
not respond to the potential		Vand have a good cooperation		solutions and an active	Valley, business events etc. Enhance	
opportunities		with the private sector.		commercial engagement is	linking to investment opportunities	
		However, the extent to which		essential for the SSC	through embassy posted investment	
		the private sector responds and		programme.	advisors, multilateral development	
		the number of companies and			banks and other relevant partners	
		promotional investment they			including C40.	
		make is open to doubt.				

Institutional risks

Risk factor	Likelihood	Background to assessment	Impact	Background to assessment	Risk response if applicable /	Combined
					potential effect on development	residual
					cooperation in context	risk
The projects could risk	Unlikely	It is second phase of the three	Major	Several other development	Coordinate and map development	Minor
duplicating activities and/or fail		projects (Ghana from 2024), and		partners are active in the water	engagement of others	
to recognise interfaces and		Aarhus Municipality and their		sector.		
synergies with other initiatives in		counter partners in the three				
a crowded and dynamic field of		countries show a good				
development partners		understanding of the context				
		and where the projects can add				
		value. This is further enhanced				
		through closer cooperation with				
		C40 in phase II.				

There is a risk of	Unlikely	The SSC 2.0 approach is a	Minor	The approach is new and more	Apply management support and	Minor
implementation and		development and a formalisation		demanding on cooperation at	incentives and increase awareness of	
administrative challenges for the		of the existing SSC and		the same time resources at	key staff of the benefit of cooperation	
involved Danish stakeholders in		incorporates a new way of doing		different levels are stretched	across institutional boundaries. Adopt	
reaching outcomes 2 and 3		business for the Danish		and there is staff turnover	an adaptive management approach	
related to the need for closer		ministries and authorities			which implies an active monitoring and	
whole of government		engaged.			a flexible response.	
cooperation					_	

Annex 4 Plan for Communication of Results

This summary communication plan for City of Aarhus' framework programme on strategic sector cooperation (SSC) will work towards the aim of ensuring broad knowledge among key targets groups about MFA and City of Aarhus' international cooperation through SSC projects. This includes results, lessons, and general awareness about the significance of the issues of global and national resilience and adaptation to climate change with a focus on water related challenges - and City of Aarhus' role in addressing the key challenges through the SSC program with clear attribution to Danish Development Cooperation.

The Communication Plan is dynamic and will be updated and implemented according to developments with policies, results, lessons learned and needs and opportunities identified by partners, stakeholders and staff involved in SSC cooperation. The Communication Plan targets a wide audience in both Denmark, partner countries and globally with the use of SoMe channels, homepages, production of videos, explainers and story-telling from both Denmark and partner countries.

For Whom?	What?	When?	How?	Responsible
Target	(the message)			
Group/Audience				
Target Group 1: Danish public	Stories about City of Aarhus' SSC work, the SSC projects, challenges and concrete results. Short videos for SoMe and	During implementation of SSC projects, i.e. minister visits, missions in- country, study tours in Denmark, major outputs produced,	Facebook, LinkedIn, Instagram, Twitter or press releases if relevant City of Aarhus webpage	Project Manager (content) Communication Focal Point (publishing on SoMe and homepage)
	Homepage. City of Aarhus webpage updated on SSC cooperation and SSC projects.	milestones achieved etc.	Produced photos and video during missions. Use of Explainers and Story-telling	M&E Focal Point (SSC annual report) Project managers and technical staff (City of Aarhus)
	1-2 pagers on SSC programme and each of the SSC Projects (info ark).Press releasesDocument and disseminating	Once a year	Danida OpenAid, Results Framework Initiative	Press Unit (press releases) MFA Anchor point
	results from SSC projects			
Target Group 2: Sector partners in Denmark	See above	See above	See above Development, Public	See above

sector associations	Articles on water		Administration or	
and others			Water Sector	
and others.	sector		water Sector	
	development		relevant magazines	
	issues		Visual and	
			infographic	
			versions of	
			documents and	
			material.	
Target Group 3:	As above-	As above-	As above-	As above-
Public and	mentioned	mentioned	mentioned	mentioned
institutions in				
partner countries	Stories about		Make use also of	
and globally.	Danish		relevant	
	strongholds, state-		communication	
	of-the-art		materials from	
	solutions in		other partners (e.g.	
	climate resilient		State of Green	
	urban water		C40	
	management and			
	ath on the mass of		Communication	City of Asyland and
	other themes of			DEC
	relevance.		channels used by	DFC
			the specific partners	
	Talks organized		International	
	by DFC		conferences	
			Talks organized by	
			DFC	
Target Group 4:	Results reporting	Once a year –	City of Aarhus	Project Managers
Internal	and milestones	Strategic	Intranet	
communication in	for SSC	Management		
City of Aarhus	programme and	Group (SMG)	Dedicated	
,	its projects.	Twice a vear –	communication	
	1)	Programme		
	Outcome	Management	SMG meetings	
	harvesting and	Group (PMG)	PMG meetings	
	reporting.		Annual reporting	
	T - 0		City of Aarhus	
			management	
			meetings	
	1		meetings	

Annex 5: Approach to Capacity Development

- The overall aim of capacity development of City of Aarhus FP is to strengthen the ownership, engagement and effectiveness at national, and in particular city, level in the partner countries which is necessary to make sustainable improvements and developments within the food and agricultural sector.
- The SSC aims to support planning and implementation processes through which partner organizations and stakeholders in partner countries adapt, strengthen and maintain the capability to define, plan and achieve their own sector development objectives on a cross-sectoral, holistic, inclusive and sustainable basis.
- Capacity development is often addressed at three different levels, namely the enabling environment, the organizational level and the individual level. Interventions at each level is often mutually supportive.
- For the enabling environment the SSC e.g. works directly or indirectly with laws and policies by engaging and bringing together public or private stakeholders and related partners and civil society. In line with HRBA, capacity and processes for instance for participation of non-governmental stakeholders, hearing processes, transparency efforts, and consideration of marginal groups will be integrated as relevant.
- At the organizational level the SSC e.g. advise and promotes change processes that relates to structures, policies and procedures that determine sector institutions and other stakeholders impact and effectiveness, also ensuring participation, transparency and non-discrimination.
- At the individual level, the SSC aims to develop and strengthen the skills, experience and knowledge that allow each person to perform.
- Capacity development is always undertaken with due respect to the national context, priorities and the resources available for the FP. Capacity development is often undertaken with the involvement of both public and private sector, both in Denmark and partner countries.

Annex 6: Process Action Plan for Implementation

Action/product	Deadlines	Responsible/involved units	Comment/status
Presentation for Council for Development Policy	22 September 2022	GDK	
Development of Draft Framework Agreement	September	GDK in dialogue with Aarhus	Sparring with FRU
	Appro	oval process	•
Minister's approval of Framework Programme	Late October/early November	ELQ submits proposed Framework Agreements and minutes of CDP meeting	After Council for Development Policy meeting
Signing of Agreement	December	GDK/Aarhus	
Preparation of framework program implementation Start implementation of	December 2022/ January 2023 January 2023	Aarhus/Embassies	
Framework Program and Phase 2 projects in South Africa and India (after project document approval by GDK)			
Programme Management Group Meeting	March 2023	Aarhus/GDK	Stock-taking and preparation of decision on SSC Ghana phase 2 project
Strategic Management Group Meeting	May 2023	GDK/Aarhus	Decision on Ghana phase 2 project
Programme Management Group Meeting	November	Aarhus/GDK	Review and approve 2024 programme planning and budget.

Annex 7: Signed table of appraisal recommendations

ANNEX 4 - SUMMARY OF RECOMMENDATIONS

Title of Programme/Project	Framework Programme on Strategic Sector
	Cooperation with City of Aarhus (2023-2026)
File number/F2 reference	2022-8935
Appraisal report date	08 August 2022
Council for Development Policy meeting	22 September 2022
date	
Summary of possible recommendations not for	llowed

Summary of possible recommendations not followed (to be filled in by the responsible unit)

N/A

Overall conclusion of the appraisal:

The June 2022 desk appraisal of the "Framework Programme (FP) on Strategic Sector Cooperation with City of Aarhus (2023-2026)" provides an independent quality assurance assessment of its design and documentation as per the DANIDA Aid Management Guidelines and MYNSAM 2.0 Guidelines for Country Strategic Frameworks, Programmes and Projects. This appraisal assesses the draft Framework Programme within a total budget of DKK 56 million.

There are three SSC projects in various phases of support in three countries (Ghana, India, and South Africa) under the proposed framework programme with no planned supplementary country to be added. The FP rationale is concise and globally relevant. The programme aligns well with Denmark's core high-level policies, objectives and institutional frameworks and the CoA core competencies in climate resilient urban water management.

The FP describes its development, climate resilience and poverty orientation agenda well but there is space to better present positive results from phase 1 (results according to the 3 outcome areas, partner strategies and priorities, poverty focus) as evidence of the realism of the ambitions. The alignment with the Sustainable Development Goals can be presented better, as well as the scoring of the Climate and Environment markers also requires some clarification. The linkages between the outcome areas of capacity development, green diplomacy and commercial value require an explanation as to planning of the yearly workplans. An adaptation and risk management approach, which ties in the risk matrix with the monitoring and experience is to be presented.

Overall recommendation: The proposed framework programme is *recommended for approval with only minor adjustments* taking the recommendations of this report into consideration.

Recommendations by the appraisal team	Follow up by the responsible unit		
Programme level			
Programme documentation			
 The AT recommends that the FP document introduces a box on partners' strategies and KPIs (could be from policy to operational objectives), justifying alignment on objective between CoA and their partners. The box will naturally be integrated into the last paragraph of chapter 2.5 "Aid effectiveness" could be renamed "Aid effectiveness and alignment to partner strategies" and skip the present text on partners. 	Agree. New table 3 "Alignment to partner strategies" added in section 2.6 (page 15)		
2. The AT suggest that the FP documents introduce a matrix diagram presenting the results obtained during phase 1 according to the three global results outcomes of the SSC. An example taking departure in the results from Ghana/Tema is given in Annex 5 to the appraisal report. It is suggested that the AT together with the Sector Advisors develop similar results in Tshwane and Udaipur.	Agree. New table 2 presenting the results obtained during phase 1 according to the three global results outcomes of the SSC has been added in section 2.4 (page 11)		
 The AT suggest that a box named; Tangible results from phase 1 in the field, be included in the chapter on results and lessons from previous phases. 	Agree. Cf. 2 above.		
 If these recommendations are followed the present non-harmonised text on the three projects can be left out. 	Agree. Initial text on projects results replaced by table 2.		
Framework Programme Assessment			
5. Box 3 (being the Municipality of Aarhus	Agree.		
and Aarhus Vand together termed City of Aarhus) on core competencies should be positioned in chapter 2.2 where reference is made to the box.	Box 1 (previously box 3) is inserted in section 2.3 (page 9). For easy reference, same Box 1 is also kept in section 1. Introduction, where Aarhus core competences are first referred to.		
 A fifth core competence f) that should be added is the strength of having an entity supporting the SSC composed of a regulator and a utility. 	Agree. Added in above mentioned Box 1 in section 2.2 (and in section 1).		

 The AT has suggested a modified table (in Annex 6 of appraisal report) presenting the SDG targeted by this SSC. To replace existing table in 2.1. 	Agree. Original table replaced with new table 1 in section 2.2 (page 8) showing the projects contribution to the targeted SDG's.
 The AT suggest that the FD only refers to the 5 SDG goals mentioned in chapter 2.1. 	Agree. Project document aligned to this recommendation in above mentioned table 1.
9. The AT suggests that box 4 is further elaborated with justification of why vulnerable and poor suffer more from poor water management, as well as a how human rights-based approach (HRBA) will be incorporated into the planning processes.	Agree. Box 2 (previously box 4) section 2.1 has been revised. In addition, new text further elaborating on justification of why urban poor disproportionally suffer from poor water management and vulnerability of urban water systems. Besides, additional text on the FP approach to poverty and HRBA and how this is incorporated into planning processes has been added in section 2.6. HRBA also underlined in the approach to capacity development (new Annex 5). The possibility to include non-governmental national stakeholders in project level governance is noted in section 7. Finally, Section 9 (learning, etc.) has been adjusted to ensure focus on HRBA and poverty reduction in the learning sessions at FP and cross-project level.
10. If considered relevant and resources are available, the AT suggest that the SSC project acts as a catalyst for the development of a road map laying out for each project how it will contribute, within the selected focus areas, to the sustainable development of the water sector in the country (targeting of DFC courses, prioritisation of DSIF investments, research institutions, interest/focus of Danish private water sector).	Agree. In the context of preparation of phase 2 projects the following will be developed: an outline vision for final SSC project results (after phase 3) and strategy for transition that ensures sustainability of main results after phase 3 completion including potential investment projects (financing from different sources). Outline will be drafted and discussed in a larger group with representatives from City of Aarhus, Embassy (SSC counsellor, policy, climate and TC teams), GDK (urban anchor point, IFU team, TC team). Draft outline will be discussed with national partners. Additional text added in section 5.
 The AT recommends a short explanation/justification to be incorporated in chapter 2.1 for the choices made on scoring of environment and climate (Rio marker). 	Agree. A short explanation on scoring choices has been added in section 2.2 (page 7).

Theory of Change, objectives and results framework		
12. The AT suggest that the FP document	Agree.	
describe the replicability strategy as being an integrated part of the each workplan and as such a shared responsibility between CoA and the sector advisors.	To ensure that a robust replicability strategy is developed for each individual phase 2 project this work will be part of the ongoing project design process, starting with South Africa and India phase 2 projects. Once such strategy is integrated in approved project design, activities sustaining its implementation will be part of annual work plans at project level. New text inserted in section 5.	
13. Describe more explicitly the different	Agree.	
nature of the three outcomes in the Results Framework (development / diplomatic / commercial), including the ODA-related implications, and strengthen the linkages between the three outcomes in the yearly work plan elaboration.	Section 2.5 explains the nature of the outcomes and has been further strengthened. In addition, the Theory of Change (section 4) has been revised significantly to clarify linkages among the three outcomes and their relations to the overall FP programme objectives' focus on a socially just, inclusive, green transition and climate resilience – as well as ensuring linkage to the FP results framework. Small adjustments in the results framework definitions of outcomes to clarify, for instance, the outcome linked to the private sector's role.	
Programme management, reporting, monitor	oring and learning	
14. Define a Monitorine. Evaluation and	Apree.	
Learning (MEAL) Plan to guide the Municipality of Aarhus in FP level results monitoring based on aggregated project results (based on a small number of relevant standard output indicators) and to provide clear definitions and indications on when and how Outcome Harvesting will be carried out, reviews and evidence gathered, etc. for presentation to the FP PMG.	Wording in section 4 (Results Framework) has been adjusted to state that a MEAL Plan will be developed during the first months of implementation of the framework programme and presented for approval to PMG. This will include further detailing of the indicators and approach to outcome harvesting. Additional text inserted in section 9. Monitoring, learning and risk management.	
Budget, financial management and flow of funds		
15. Define the Adaptive Management criteria/considerations that will be used by the SMG and PMG to: Determine funds allocation and re-allocation, determine closure or continuation of the FP and guide selection of new projects	Agree. Initial criteria inserted in Section 7, and statement included that an operational handbook will be developed including such management criteria/procedures.	

and/or countries vs. project	
Risk management framework	
16. The AT could have wished for a more detailed plan for how to secure that Danish SSC priorities receive attention from especially high-level management. Examples could be a) ambassador launching the new SSC framework at high-level seminars, b) securing that project steering committee meetings are held with high-level participation from the embassy.	Agree. Risk management framework has been revised including further details in risk response. High-level management in partner cities/countries as well as in Aarhus have committed to phase 2 projects and these new phases are closely aligned with national and city needs and priorities.
17. Include an adaptation and risk management approach in the FP document, which ties in the risk matrix with the monitoring and experience gathering underpinning risk management.	Agree. Wording added in section 7 and 9. Further, in risk matrix, a response to institutional risks has been expanded to include the need to adopt an adaptive management approach which implies an active monitoring and a flexible response.
18. The AT would suggest incorporating a second institutional risk centred on the responsibility of reaching outcomes 2 and 3, with a likelihood "unlikely" and an impact "minor".	Agree. A new institutional risk has been included in the risk matrix and matrix revised accordingly.
Sustainability and continuation/exit scenar	ios
 Include a bullet point and corresponding short narrative in Section 5 of the FP to provide future projects with practical guidance on designing systems- strengthening capacity development support that will secure greater outcome sustainability. 	Agree. Section 10 (closure/exit) has been strengthened with text that ensures inclusion of transition strategies describing plans for sustainability in all "phase 3" projects. New text on approach to system- strengthening capacity development added in section 5. This is now summarized in Annex 5 (capacity development).

I hereby confirm that the appraisal team has identified the above-mentioned issues and provided the corresponding recommendations as stated above to be addressed properly in the follow-up to the appraisal.

Signed in Copenhagen on the 22 August 2022

Talen T. Some

Torben Traustedt Larsen Appraisal Team leader/ELK representative

I hereby confirm that the responsible unit has undertaken the follow-up activities as stated above. In cases where appraisal recommendations have not been accepted, reasons for this are given either in the table or in the notes enclosed.

Signed in Copenhagen on the 6 September 2022

Karin Poulsen Head of Unit