

SABAKI WATER CARRIER PROJECT DISCLOSURE OF PROJECT DEVELOPMENT PHASE

The Public Private Partnerships Act Cap 430, allows a Private Party to submit a Privately Initiated Proposal (PIP) to a Contracting Authority. Section 40 to 44 of the PPP Act outlines the conditions and procedure for consideration and evaluation of a PIP. Accordingly, this document provides a summary of the Sabaki Water Carrier project in line with the National Treasury Circular for Public Disclosure on PIPs.

A. BASIC PROJECT INFORMATION

ITEM	DESCRIPTION
Private Party	Utility Partners One (UPO) LLP
Contracting Authorities	<ol style="list-style-type: none"> 1) State Department for Water and Sanitation under the Ministry of Water, Sanitation and Irrigation (MWSI) 2) Coast Water Works Development Authority (CWWDA) 3) Mombasa Water Supply and Sanitation Company Ltd (MOWASCO) 4) Kilifi Mariakani Water and Sewerage Company Ltd (KIMAWASCO) 5) Malindi Water and Sewerage Company Ltd (MAWASCO)
The Project	<p>The proposed project entails abstraction of 80,000m³/per from Baricho aquifer on Sabaki/Athi River; construction of 103 Km bulk water supply pipeline; provision of bulk water storage facilities; and construction 165 Km of distribution pipelines for last mile distribution to to end-users in Mombasa, Malindi, Watamu and Kilifi.</p> <p>The project also involves development of a 7MW captive renewable power infrastructure which is deemed economically viable compared to grid power and wastewater collection and treatment of up to 33,000m³/day.</p> <p>Last-mile operations by the utility company will entail distribution, storage of water, billing and revenue collection as well as</p>

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	wastewater reticulation based on tariffs to be approved by the Water Services Regulatory Board (WASREB).
Project Cost	Estimated at USD 255,000,000 Equivalent to KES 32,966,333,955
Financial Structure	Proposed Financial Structure Equity = 75% Grant = 25% The proponent intends to refinance the project with external debt during the operations phase. The capital structure and repayment schedule will form part of contract negotiation.
Project Duration	The proposed project has a construction period of 4 years and an operations and maintenance phase of 20 years.
Project location	Mombasa and Kilifi Counties
Project scope	<p>The project scope entails:</p> <ul style="list-style-type: none"> i. Baricho Water Abstraction and Chlorination: Drilling of 12-15 boreholes for abstraction of 80,000 m³/day. The anticipated discharge is 400m³/hr from the Baricho aquifer; ii. Water Transfer Transmission lines supplying designated zones in Mombasa and Kilifi Counties; <ul style="list-style-type: none"> Sector 1: This is a 41 Km, DN 450 southeast bound pipeline that runs from Baricho to Watamu via Kakoneni, Jilore and Kakuyuni. This will serve Watamu - a service area for MAWASCO. Sector 2: This is a 103 Km (excluding branches) DN 1000-1200 southbound pipeline that runs from Baricho to Mombasa via Dida, Ganze Rd Junction, Jaribuni, Mavueni, Lutsangani, Mbuyuni, Mtwapa and Pangani. The pipeline ends at Nguu Tatu, where the terminal reservoirs are located. This will serve KIMAWASCO and MOWASCO service areas. iii. Reservoirs; for the sector 1 pipeline, there will be a reservoir at Kakuyuni, capacity 5,000m³ and for the sector 2 pipeline,

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	<p>there will be reservoirs at Jaribuni, Mtwapa 7,500m³ and the terminal one Nguu Tatu in Bamburi 12,500m³;</p> <p>iv. Water supply to end-users; project proposes to construct 165 Km (up to DN 250) of distribution pipelines in Malindi, Watamu (17MLD), Kilifi and Mtwapa in Kilifi County (23MLD) and 175 Km (up to DN 400) to serve Kisauni and Nyali Sub Counties in Mombasa County (37MLD);</p> <p>v. Captive power generation; a 7MW grid-tied solar power plant in the Baricho area; and</p> <p>vi. Wastewater Treatment Plants and Sewer Lines comprised of Mombasa Nguu Tatu: 11.5 MLD capacity, Shimo La Tewa: 5.5MLD capacity. This entails collection and treatment at Watamu, Malindi, Mombasa and Mtwapa.</p>																										
<p>Proposed concession zones</p>	<table border="1"> <thead> <tr> <th data-bbox="430 940 573 1024">County</th> <th data-bbox="573 940 748 1024">WSP</th> <th data-bbox="748 940 907 1024">Zone</th> <th data-bbox="907 940 1105 1024">Current average supply</th> <th data-bbox="1105 940 1235 1024">Total potable water</th> <th data-bbox="1235 940 1414 1024">Wastewater treatment</th> </tr> </thead> <tbody> <tr> <td data-bbox="430 1024 573 1287" rowspan="2">Kilifi</td> <td data-bbox="573 1024 748 1115">KIMAWASCO</td> <td data-bbox="748 1024 907 1115">Mtwapa</td> <td data-bbox="907 1024 1105 1115">3,339m³/day</td> <td data-bbox="1105 1024 1235 1115">23MLD</td> <td data-bbox="1235 1024 1414 1115">7.9MLD WWTP at Kanamai</td> </tr> <tr> <td data-bbox="573 1115 748 1287">MAWASCO</td> <td data-bbox="748 1115 907 1287">Watamu (Jacaranda Area, Watamu village and hoteliers)</td> <td data-bbox="907 1115 1105 1287">6,696m³/day</td> <td data-bbox="1105 1115 1235 1287">17MLD</td> <td data-bbox="1235 1115 1414 1287">7.7 MLD WWTP</td> </tr> <tr> <td data-bbox="430 1287 573 1518" rowspan="2">Mombasa</td> <td data-bbox="573 1287 748 1518" rowspan="2">MOWASCO Mombasa-Nguu Tatu two offtake points (Lutsangani & Pangani)</td> <td data-bbox="748 1287 907 1377">Kisauni</td> <td data-bbox="907 1287 1105 1377">11,432m³/day</td> <td data-bbox="1105 1287 1235 1518" rowspan="2">37MLD</td> <td data-bbox="1235 1287 1414 1377">11.5MLD WWTP at Nguu Tatu</td> </tr> <tr> <td data-bbox="748 1377 907 1518">Nyali</td> <td data-bbox="907 1377 1105 1518">6,156m³/day</td> <td data-bbox="1235 1377 1414 1518">5.5MLD WTP at Shimo la Tewa</td> </tr> </tbody> </table>	County	WSP	Zone	Current average supply	Total potable water	Wastewater treatment	Kilifi	KIMAWASCO	Mtwapa	3,339m ³ /day	23MLD	7.9MLD WWTP at Kanamai	MAWASCO	Watamu (Jacaranda Area, Watamu village and hoteliers)	6,696m ³ /day	17MLD	7.7 MLD WWTP	Mombasa	MOWASCO Mombasa-Nguu Tatu two offtake points (Lutsangani & Pangani)	Kisauni	11,432m ³ /day	37MLD	11.5MLD WWTP at Nguu Tatu	Nyali	6,156m ³ /day	5.5MLD WTP at Shimo la Tewa
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<p>Current status</p>	<p>The PPP Committee, on 10th February 2025 granted conditional approval of the Project Development Report, for the proponent and Contracting Authority (CA) to address the outstanding issues and conduct contract negotiations.</p>																										

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<p>Risk allocation</p>	<p>Below is the proposed risk allocation matrix prepared by the proponent before negotiations:</p> <table border="1" data-bbox="428 359 1354 1087"> <thead> <tr> <th data-bbox="428 359 1036 443">Risk</th> <th data-bbox="1036 359 1136 443">Public</th> <th data-bbox="1136 359 1247 443">Private</th> <th data-bbox="1247 359 1354 443">Shared</th> </tr> </thead> <tbody> <tr> <td data-bbox="428 443 1036 531">Political risk (change in law; change in tax; war; terrorism; expropriation; nationalization or privatization of project assets)</td> <td data-bbox="1036 443 1136 531">•</td> <td data-bbox="1136 443 1247 531"></td> <td data-bbox="1247 443 1354 531"></td> </tr> <tr> <td data-bbox="428 531 1036 569">Change in tax regulations/ incentives</td> <td data-bbox="1036 531 1136 569">•</td> <td data-bbox="1136 531 1247 569"></td> <td data-bbox="1247 531 1354 569"></td> </tr> <tr> <td data-bbox="428 569 1036 606">Procuring land and wayleaves</td> <td data-bbox="1036 569 1136 606"></td> <td data-bbox="1136 569 1247 606">•</td> <td data-bbox="1247 569 1354 606"></td> </tr> <tr> <td data-bbox="428 606 1036 644">Community/resettlement risk</td> <td data-bbox="1036 606 1136 644">•</td> <td data-bbox="1136 606 1247 644"></td> <td data-bbox="1247 606 1354 644"></td> </tr> <tr> <td data-bbox="428 644 1036 711">Technical risk (constructing in accordance with design specifications)</td> <td data-bbox="1036 644 1136 711"></td> <td data-bbox="1136 644 1247 711">•</td> <td data-bbox="1247 644 1354 711"></td> </tr> <tr> <td data-bbox="428 711 1036 749">Time/schedule risk</td> <td data-bbox="1036 711 1136 749"></td> <td data-bbox="1136 711 1247 749">•</td> <td data-bbox="1247 711 1354 749"></td> </tr> <tr> <td data-bbox="428 749 1036 787">Site risk</td> <td data-bbox="1036 749 1136 787"></td> <td data-bbox="1136 749 1247 787">•</td> <td data-bbox="1247 749 1354 787"></td> </tr> <tr> <td data-bbox="428 787 1036 854">Non-political force majeure (e.g., storm; flood; earthquake; radioactive contamination)</td> <td data-bbox="1036 787 1136 854"></td> <td data-bbox="1136 787 1247 854"></td> <td data-bbox="1247 787 1354 854">•</td> </tr> <tr> <td data-bbox="428 854 1036 921">Permitting issues (e.g., registration with contracting authority, environmental impact assessments etc.)</td> <td data-bbox="1036 854 1136 921"></td> <td data-bbox="1136 854 1247 921"></td> <td data-bbox="1247 854 1354 921">•</td> </tr> <tr> <td data-bbox="428 921 1036 989">Non-political force majeure (e.g., storm; flood; earthquake; radioactive contamination)</td> <td data-bbox="1036 921 1136 989"></td> <td data-bbox="1136 921 1247 989">•</td> <td data-bbox="1247 921 1354 989"></td> </tr> <tr> <td data-bbox="428 989 1036 1026">Offtake risk</td> <td data-bbox="1036 989 1136 1026"></td> <td data-bbox="1136 989 1247 1026">•</td> <td data-bbox="1247 989 1354 1026"></td> </tr> <tr> <td data-bbox="428 1026 1036 1064">Credit risk</td> <td data-bbox="1036 1026 1136 1064"></td> <td data-bbox="1136 1026 1247 1064">•</td> <td data-bbox="1247 1026 1354 1064"></td> </tr> <tr> <td data-bbox="428 1064 1036 1087">Forex risk</td> <td data-bbox="1036 1064 1136 1087">•</td> <td data-bbox="1136 1064 1247 1087"></td> <td data-bbox="1247 1064 1354 1087"></td> </tr> </tbody> </table>	Risk	Public	Private	Shared	Political risk (change in law; change in tax; war; terrorism; expropriation; nationalization or privatization of project assets)	•			Change in tax regulations/ incentives	•			Procuring land and wayleaves		•		Community/resettlement risk	•			Technical risk (constructing in accordance with design specifications)		•		Time/schedule risk		•		Site risk		•		Non-political force majeure (e.g., storm; flood; earthquake; radioactive contamination)			•	Permitting issues (e.g., registration with contracting authority, environmental impact assessments etc.)			•	Non-political force majeure (e.g., storm; flood; earthquake; radioactive contamination)		•		Offtake risk		•		Credit risk		•		Forex risk	•		
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<p>Reasons for the choice of PPP</p>	<p>Qualitative Value for Money (VfM)</p> <p>This shows a descriptive analysis of the VfM based on efficiency gains and socio-economic benefits. The analysis demonstrates that implementing the project as a PPP addresses funding gaps, improves public health by reducing water shortages and disease, accelerates infrastructure development, enhances water management by reducing Non-Revenue Water loss, and increases billing efficiency.</p> <p>The project is in the social sector which has been limited by high Non-Revenue Water & legacy debt hindering creditworthiness for new borrowings and lack of cost-reflective tariffs to accommodate the high capex requirements for upstream infrastructure such as water abstraction. The value for money is demonstrated by the inclusion of last-mile operation through a PPP to address the challenges highlighted.</p> <p>The project meets the value for money assessment, subject to</p>																																																								

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	<p>specific contractual provisions under section 43 (5) (h) of the PPP Act, 2021.</p> <p>Quantitative Vfm A high - level review of the project cost as against other comparable project costs and unit prices indicate a high likelihood of project cost savings through EPC price discovery.</p>
Government Support	<p>The Government Support Measures as outlined in the project development phase report is as follows:</p> <p>Guarantees: None</p> <p>Grants: Invest International, a Dutch Impact Investor has committed to provide a grant of 25% of the project cost ~USD 63 million to improve the affordability of the projects’ tariffs.</p> <p>Land: The project will use the existing CWWDA wayleaves, which mostly belonging to road agencies.</p> <p>Rights: the proponent shall require rights to conduct last-mile operations by the utility company will entail distribution, storage of water, billing and revenue collection as well as wastewater.</p> <p>Payments for service: There are no direct fiscal commitments as the proponent is taking on the demand risk.</p> <p>Government support measures are to be negotiated as per GSM Policy 2018.</p>
Tariffs	<p>Tariff methodology, review and regulation The proponent's financial projections are predicated on achieving a targeted average potable water tariff of KES 160-170 per cubic meter (m³). A tariff study will be conducted and reviewed in consultation with the consumers and other key stakeholders. The final tariff is subject to negotiations and approval of the project's comprehensive financing plan & the final tariff structure by the Water Services Regulatory Board (WASREB), as per regulatory requirements.</p>

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Stakeholder Engagement	<p>The proponent needs to discuss with the key stakeholders to agree on:</p> <ul style="list-style-type: none"> a) Role of the County governments b) Role of regulators & Government of Kenya e.g. WASREB, WRA, CWWDA, Counties (WSPs), MWSI and road agencies c) Local communities including allocation water to meet the demand along the route for social license

B.PROJECT DEVELOPMENT PHASE FEASIBILITY STUDIES

Section 42 of the Public Private Partnership Act requires the Project Development Report to be reviewed against the following evaluation criteria:

- a) Public interest criteria;
- b) Project feasibility criteria;
- c) Public-private partnership suitability criteria; and
- d) Affordability criteria.

ITEM	DESCRIPTION
PUBLIC INTEREST	<p>The project is aligned to the public interest as it contributes towards the Government of Kenya’s goal to achieve universal access to safe and affordable water supply and sanitation for all Kenyans by 2030.</p> <p>The project is also aligned with:</p> <ol style="list-style-type: none"> 1. Sustainable Development Goal 6 (SDG 6) on access to safe water and sanitation, and to manage water sustainably. 2. Mombasa and Kilifi’s County Integrated Development Plans (CIDP) 2023 to 2027 3. National Water and Sanitation Investment Plan (NAWASIP), contributing about KES 33.09 billion from private sector capital. <p>The planned interventions will increase the capacity of the water sources, expand the distribution network, and reduce Non-Revenue Water (NRW) through rehabilitation of the existing infrastructure.</p>

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<p>PROJECT FEASIBILITY CRITERIA</p> <p>I. Technical Feasibility</p>	<p>Baricho aquifer currently has an installed capacity of 112,000m³/day following recent rehabilitation works that increased the production by 22,000m³/day, supplying 64% of the water in Mombasa County. The aquifer recharge is dependent on recharge from the Sabaki river which on average is 1.85m³/s. The water source in Baricho has a safe yield of 180,000 m³/day (and potentially 210,000 m³/s).</p> <p>On the safer side, it would imply 70,000m³/s is available meaning a 10,000m³/s deficit. To address the identified water deficit, the proponent intends to recycle and treat wastewater for sale and distribution to industrial and commercial consumers. Furthermore, the proponent will complete hydrogeological studies to ascertain the full capacity of the aquifer prior to financial close.</p> <p>The project plans to extract about 80,000 m³/day for distribution from Baricho aquifer. The project focuses on developing 12 new wells within the Baricho Aquifer, adding approximately 86,400 m³/day to the existing 112,000 m³/day capacity. The aquifer's natural replenishment comes from the Sabaki River. While current studies suggest a potential capacity of 180,000 m³/day, some assessments indicate long-term sustainability up to 240,000 m³/day. Water will be transported via two main pipelines: a 41 km line to Watamu (serving parts of Malindi) and a 103 km line to Mombasa (serving parts of Kilifi and Mombasa). These lines will include strategic reservoirs along their routes. Additionally, the project will lay 340 km of new distribution pipelines across Malindi, Watamu, Kilifi, Mtwapa, Kisauni, and Nyali to expand access.</p> <p>To ensure sustainable operations, a 7MW solar power plant will be installed near Baricho. The project also features a hybrid wastewater treatment approach, combining centralized and packaged treatment plants to suit different urban layouts. Key wastewater treatment</p>

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	<p>facilities will be in Mombasa (Nguu Tatu and Shimo La Tewa) and Kilifi (Mtwapa and Watamu), supported by extensive new sewer infrastructure.</p>
<p>II. Economic feasibility</p>	<p>Economic Benefits The Sabaki Water Carrier project is anticipated to deliver a wide array of ancillary benefits to society, such as positively influencing health, economic growth, gender equity, and environmental sustainability. The project is expected to lead to local economic growth through the stimulation of business enterprises. Direct economic gains are likely to be realised through the procurement of local construction materials such as ballast, sand and through relevant taxes to the government. The local economy will also benefit from the influx of capital and the increase in disposable income, all of which is expected to lead to a multiplier effect.</p> <p>Economic Costs The costs will involve construction, maintenance, and land acquisition, costs of alternative value of water resources and negative externalities of construction. In comparison, the economic benefits largely outweigh the costs.</p>
<p>III. Environmental and Social Feasibility</p>	<p>The Preliminary Environmental and Social Assessment (PESIA) conducted includes an outline of the Stakeholder Engagement Plan (SEP) and Grievance Redress Mechanism (GRM). The project has identified key negative environmental and social impacts and has outlined necessary mitigation measures. The comprehensive Environmental and Social Impact Assessment (ESIA) will be submitted before commercial close/financial close. Land acquisition will focus on stakeholder engagement and a robust resettlement framework in conjunction with the National Lands Commission and the Ministry of Lands.</p> <p>The project will acquire both private and public and/or riparian land. The water pipeline will be built on readily available public land in collaboration with various public</p>

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	<p>agencies will be critical for sections with illegal encroachment.</p>
<p>IV. Financial Feasibility</p>	<p>The estimated total project cost is approximately Ksh 33.09 billion.</p> <p>The proposed funding structure for the project comprises a strategic mix of private equity investment and grants.</p> <p>The proponent anticipates exploring refinancing opportunities during the operational phase to optimize the capital structure and potentially reduce the cost of capital.</p> <p>Invest International, a Dutch Impact Investor is expected to provide a grant of 25% of the project cost ~USD 63 million for Sabaki Water Project to improve the affordability of the projects' tariffs.</p> <p>The project is expected to generate revenue from the following sources:</p> <ol style="list-style-type: none"> 1. The sale of potable water: Based on estimated consumption volumes and the proposed tariff structure. 2. Wastewater collection, and treatment: Linked to the volume of wastewater processed. <p>The project has the operational efficiency of reducing the target Non-Revenue Water of 15% through reduction of technical and commercial losses.</p> <p>The proponent's financial projections are predicated on achieving a targeted average potable water tariff of KES 160-170 per cubic meter (m³). This proposed tariff is contingent upon project negotiations, the approval of the project's comprehensive financing plan, and the final tariff structure by the Water Services Regulatory Board (WASREB), as per regulatory requirements.</p>

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	<p>The financial model demonstrates viability under various scenarios, with the private party assuming key commercial risks inherent in the project, including but not limited to, demand risk, tariff risk, and collection risk.</p>
<p>V. Legal Feasibility</p>	<p>The legal feasibility analysis reviews the applicable laws, regulations, policies, Government circulars and other frameworks.</p> <p>Capacity to contract The proponent submitted the proposal as a sole proponent and will co-opt other partners in a consortium to strengthen and further enhance delivery. A draft consortium agreement has been submitted.</p> <p>Proposed contractual structure The proponent has proposed a hybrid Brownfield Concession and a Build-Own-Operate Transfer (BOOT) concession structure with both the National and County Governments.</p> <p>Due diligence has been carried out by the Government party on both Climate Fund Managers (CFM) and Nafasi Water, but the due diligence report remains outstanding from the Contracting Authority.</p>
<p>PPP Suitability Criteria</p>	<p>The proposed project has demonstrated public suitability for a Public-Private Partnership (PPP) based on the following:</p> <ol style="list-style-type: none"> 1. The State Department of Water and Sanitation and Water Service Providers (WSPs) have the legal authority to enter into PPP contracts with private parties. 2. The key project outputs are measurable and achievable; the WASREB's key performance indicators (KPIs) and water provision standards will be incorporated into the project agreement.

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	<ol style="list-style-type: none"> <li data-bbox="597 233 1417 359">3. The private party's willingness to assume design, finance, construction, operation, and maintenance risks indicates a clear opportunity for risk transfer. <li data-bbox="597 359 1417 485">4. The project also fosters innovation through technology deployment for last-mile billing and collections. <li data-bbox="597 485 1417 648">5. Finally, the proposed hybrid Brownfield Concession and Build-Own-Operate-Transfer (BOOT) arrangement is a permissible contractual type under the PPP Act, 2021