

Request for Proposal (RFP) - Terms of Reference (TOR) for ReCAP21

Provision, Operation and Maintenance of Four Solar Powered Water Vending Machines (“Water ATM”) and Sensor-based Handwashing Station for Low-Income and Climate-Vulnerable Population of Rajshahi City, Bangladesh 4th October 2021

Title of the proposed project	Provision, Operation and Maintenance of Four Solar Powered Water Vending Machine (“Water ATM”) and Sensor-based Handwashing Station for Low-Income and Climate-Vulnerable Population of Rajshahi City, Bangladesh
Location of the project	The project is proposed to be implemented at four locations in Rajshahi City. The specific locations within the thirty municipal wards will be identified in consultation with Rajshahi City Corporation (RCC) and Rajshahi Water Supply and Sewerage Authority (RWASA) and other relevant stakeholders.
Rationale	<p>Rajshahi city caters to a population of about 0.8 million; the city is experiencing rapid urbanization which places severe stress on the basic municipal services like water supply and sanitation. Currently, Rajshahi City is heavily dependent on the central water supply system, which poses risks to the citizens and tourists to access safe and clean water especially during natural disasters or lockdown due to pandemic.</p> <p>The RWASA and RCC are interested in exploring alternative, reliable and cost-effective decentralized water supply systems to tackle the situation during the COVID19 pandemic and anticipated natural disasters. In a recent study by Tap Safe¹ (a local think-tank), it was found that about 95% of tap water supplied by the Rajshahi Water Supply & Sewerage Authority (RWASA) is iron contaminated and does not fulfil the standard set up World Health Organization (WHO)². It is also worth noting that the poor access to clean water supply increases the spread of COVID-19 and other communicable diseases.</p>

¹ <https://www.tapsafe.org/rajshahi-tap-water/> (accessed on 10th August 2021)

² <https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/water-safety-and-quality/drinking-water-quality-guidelines> (accessed on 10th August 2021)

	In this context, it is essential to install integrated water vending machines (Water ATMs) and handwashing stations in appropriate locations of Rajshahi City with complete on-site operation and maintenance services to ensure safe, affordable, and accessible drinking water with personal hygiene for everyone. The project will help to contribute to Sustainable Development Goals 6 and 11.
Concrete deliverables expected	<ol style="list-style-type: none"> 1. Design, Supply, and Installation of four (4) solar-powered Water ATMs and twelve (12) sensor-based handwashing stations with each system having a storage capacity of 30,000 litres. 2. Operation and Maintenance of the Water ATMs and handwashing facilities until the end of December 2022.
Time Period	<ul style="list-style-type: none"> • TOR published – 4 October 2021 • Last date for applying – 19 October 2021 • Identification and hiring of vendor – 24 October 2021 • Implementation of the project at all four locations – 24 November 2021 • Quality check and verification – 26 November 2021 • Handover to Rajshahi City and launch – based on the availability of RCC and RWASA key management officials
Payment schedule	<ul style="list-style-type: none"> • 50% on total work value on the signing of the work order and submission of 1st invoice • 50% after installation and quality check and verification of all four (4) Water ATMs and twelve (12) handwashing facilities and submission of 2nd invoice
Contact	<p>Md. Jubaer Rashid Country Representative, ICLEI – Local Governments for Sustainability, South Asia, Bangladesh Country Office, House – 12 (Flat – 2B), Road – 20, Nikunja – 2, Khilkhet, Dhaka – 1229, Bangladesh Phone: +880 1819 866766 E-mail: jubaer.rashid@iclei.org Website: https://southasiaoffice.iclei.org</p> <p>Ms Soumya Chaturvedula Deputy Director ICLEI – Local Governments for Sustainability South Asia C-3, Lower Ground Floor Green Park Extension New Delhi - 110016, India Tel: +91 – 11 – 4974 7200 Email: soumya.chaturvedula@iclei.org</p>

1. Description of the Project

The project on ‘Solar Powered Water Vending Machine (Water ATM) and Sensor-based Handwashing Station for Low-Income and Climate-Vulnerable Population of Rajshahi City, Bangladesh’ is proposed to be implemented by the RCC under the auspices of the Resilient Cities Action Package 2021 (ReCAP21) with financial support from the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Bonn. The project will support the local community of Rajshahi city by providing access to safe drinking water and sensor-based hand washing facilities at four specific locations of the city. The project will use Solar Photovoltaic (SPV) to power the water vending machine and sensor-based handwashing station which will save energy consumption and associated greenhouse gas emissions. The project is designed considering the concept of ‘Build Back Better’ and will contribute to the resilient recovery of the Rajshahi City from the COVID-19 pandemic.

The project builds and follows up on the work being undertaken by RWASA and RCC on integrated water resource management and ensuring 24/7 access to clean water to every citizen of the city. The project is aligned with the Rajshahi Metropolitan Development Plan (RMDP) 2024 and the Government of Bangladesh’s National Strategy for Water Supply and Sanitation. Further the project also contributes to the Sustainable Development Goal (SDG) 6 ‘Clean Water and Sanitation’ and 11 ‘Sustainable Cities and Communities’. The study will be broadly based on the following aspects which are detailed in the activity plan.

2. Objectives of the project

The project’s objective is to

1. Address the need to enhance access to safe drinking water and personal hygiene through ensuring suitable and sustainable infrastructure facilities, especially against the backdrop of the ongoing pandemic.
2. Effectively assist the local community by building its resilience and adaptive capacity on the principle of Water, Sanitation and Hygiene (WASH) and in view of advancing environmental management, disaster resilience and human well-being.

3. Activities

The output wise activities of the contract are as follows

Table 1: Activity Plan

S. No.	Output	Activity
1	Project location identification	Activity 1: Discussion with Rajshahi City Mayor, City Council, Engineers and Planners of RCC and RWASA, ICLEI South Asia and other relevant stakeholders to identify the project locations.
2	Implementation and operation/maintenance	Activity 2: Design, Supply, Installation of Solar powered Water ATMs and sensor-based handwashing facilities in four locations of the Rajshahi city Activity 3: Sample service agreement for overall project operation and maintenance post installation of the project Activity 4: Operation and Maintenance of the project until December 2022
3	Operational guidance and training of RCC and RWASA staffs	Activity 5: Preparation of guidance manual on Project Operation and Maintenance Activity 6: Training to RCC and RWASA Officials on the operation of Water ATM and sensor-based hand washing stations
4	Project handover	Activity 7: Handover the project (with complete transfer of ownership of all materials and infrastructure of all entire project) to RCC through ICLEI South Asia

4. Benefits and Outcome of the project

1. Access to clean and healthy drinking water to everyone especially to the poor and vulnerable sections of the society and floating population.
2. Safety to local community and citizens from the water-borne diseases by ensuring supply of reverse osmosis treated water through water vending machines.
3. Saving time and efforts of local citizens which usually they spend in travelling or waiting to collect safe and pure drinking water.
4. Increase in municipal service level on safe drinking water coverage, reduction in non-revenue water and water pilferage.
5. Ensuring safe drinking water assists in combating COVID-19 pandemic and its further spread.
6. Handwashing stations will benefit in ensuring personal hygiene and cleanliness that will restrict the spread of COVID-19 and other communicable diseases in the local community by providing easy access to handwashing stations during the pandemic.

5. Stakeholders involved and type of involvement

The various stakeholders and their roles are described below in brief:

ICLEI South Asia	RCC	RWASA	Vendor
------------------	-----	-------	--------

<ul style="list-style-type: none"> • Overall project coordination • Baseline assessment • Coordination with RCC, RWASA and Vendor as required for the successful implementation of the project • Coordinate with the selected bidder for the successful implementation of the project 	<ul style="list-style-type: none"> • Monitoring of overall activities • Support that might be required for project levels regulatory approval, field work and data collection • Facilitate access to project site/land to the selected Bidder for the project implementation • Access to regular electricity supply as a backup • Regular project operation and maintenance after the successful handover by selected bidder to RCC 	<ul style="list-style-type: none"> • Monitoring of overall activities • Support that might be required during field work and data collection • Support in selection of project locations 	<ul style="list-style-type: none"> • Carry out all activities listed in Table 1 as per the details provided in section 6: detailed scope of work.
---	--	---	--

6. Detailed scope of the work

The detailed scope of the work under the contract are as follows

Activities	Scope
<p>1. Project communication, discussion and management</p>	<p>1.1 Participation in the stakeholder consultation meetings and core team meetings with RCC, RWASA, ICLEI South Asia and other stakeholders on identification on the project locations.</p> <p>1.2 A senior representative of the selected Bidder will attend all the meetings and discussions being planned with RCC and RWASA on the selection of the project locations.</p> <p>1.3 Weekly project level communication and progress updates to ICLEI South Asia, RCC and RWASA. The updates will be sent over email to ICLEI South Asia’s contract points with bullet points on the progress of the project implementation.</p>

2. Design, Supply, Installation, Operation and Maintenance of Solar powered Water ATMs and sensor-based handwashing facilities in four locations of the Rajshahi city

2.1 The selected Bidder shall install 4 Water ATM Vending Machines and 12 sensor-based hand washing at the sites identified and proposed by RCC, RWASA & ICLEI-SA.

2.2 The specifications of material used in the Water ATMs and sensor-based hand washing, for each and all included components, should be provided in the bid, along with their estimated life.

2.3 The selected Bidder shall also design a shelter/canopy to protect the machine from rain, heat, etc. and such cost shall be borne by the selected Bidder and included in the bid prices separately, wherever required. The Contractor shall design ATM's in such a way that material considered for design and construction should only be of Stainless Steel (minimum Grade 304) including storage.

2.4 The selected Bidder shall design stickers to be pasted on machines in such a manner that it clearly reflects the purpose of the machines. The stickers shall be bold and prominent. They shall be in Bangla and English. The design will be approved by RCC, RWASA and ICLEI-SA. The stickers of all the systems will include the following project name 'Resilient Cities Action Package 2021 (ReCAP21)' with all necessary organization logos and acknowledgement of in-kind support of the donor. The content of the same shall be approved in consultation with the ICLEI South Asia.

2.5 Treated Water storage tanks should consist of stainless Steel (minimum Grade 304) and submitting weekly test reports of output water to the Engineer-in-Charge of RCC and officials of ICLEI South Asia. Contractor shall design ATM's in such a way that sufficient quantity for storage of water should be made at each and every ATM but not less than the 30,000 litres.

2.6 The bidder shall also be responsible for overall project operation and maintenance for the period of one year with close cooperation with the RCC and ICLEI South Asia.

2.7 The selected bidder shall be required to provide a sample service agreement for the overall project operation and maintenance.

2.8 Making Power connection at Water ATMs and all electrical fittings up to the power meter; power connection & external electrification charges will be borne by the Contractor.

2.9 The water before being dispensed to the public shall be treated with suitable filtration process, as required, to meet Bangladesh Potable Water Quality Standards & WHO standard at all times. *(Please see **Annexure III** for details)*

2.10 Users may carry water up to 20 liters capacity jerry can. The Contractor may have a suitable vending place in the ATM for filling a container of 20 litre capacity.

2.11 ATM will be constructed as per the layout approved by the RCC and ICLEI South Asia

2.12. Water ATM should be equipped with provision for chilled water (water with temperature around 15 degrees Celsius during summers). Water ATM shall serve both chilled as well as non-chilled water

2.13 The Bidder shall use Reverse Osmosis (RO) technology with UV Treatment system to treat water in order to provide potable water at each ATM location. The treatment shall be completely in accordance with Bangladesh Standards & WHO standard (**Annexure III**). Depending upon level of contamination in water, alternate superior technology can be adopted only after approval from RCC, RWASA and ICLEI South Asia.

2.14 Each ATM should be equipped to also dispense water of 250 ml (eco-friendly biodegradable cups/glass of minimum 170 grams per square meter (GSM) paper to be provided by the Contractor at the ATM in the cost of water). Users will have options to collect 1 litre, 5 litre 10 litre, 15 litre and 20 litre water in their own containers.

2.15 Filling Speed: about 4-5 liter/minute

2.16 Operational Time – 8 AM to 8 PM every day, which may be amended in consultation with RCC and RWASA.

2.17 ATM Unit Dimension: Rectangular/ Square in shape with base area up to 20 sq. Feet or as approved by RCC.

2.18 The maintenance of pipelines etc. from the point of connection onwards to the Water ATMs shall be the responsibility of Contractor during the Contract Period

2.19 Specifications for the Water ATM Unit and Development of Site

- i. Maximum covered area of ATM Unit shall be 30 sq. ft or as approved by the RCC. This area includes the total space for the whole system including water ATM and hand washing station.
- ii. the Water ATM booth drawing design submitted by contractor and shall be as approved by the ICLEI South Asia and RCC.
- iii. It is mandatory for every Bidder to submit a layout plan showing the above maximum area requirement along with their bids. Bids of the bidders not complying with this are liable to be rejected.
- iv. Water Storage Tank shall be placed inside the ATM Structure.
- v. ATM Housing structure shall be of Stainless Steel (minimum Grade 304) with puff in between.
- vi. The thickness of Stainless Steel (Inner & Outer) should be a minimum 0.5 mm duly filled with puff of 40 to 50 mm thickness. The outer design should aesthetically gel with the surroundings.
- vii. Ensure the structural stability and safety of the ATMs.
- viii. The structure should be appropriate to protect the whole ATM system, including its equipment and accessories in all weather conditions and it should withstand the extreme climatic variations.
- ix. The roof material of the canopy should be PP reinforced UV stabilized Poly Vinyl/FRP covering.

	<ul style="list-style-type: none"> x. The total floor area and canopy area of the ATM should be covered with good quality vitrified/anti-skid tiles as approved by RCC. xi. The whole setup should be provided with a flex board with a minimum size of 5 (length) x 3 (width) feet with RECAP21 project support acknowledgement and logos of RCC, GIZ, ICLEI South Asia, RCities and Cities Alliance as per the design approved by RCC.
<p>3. Quality control and monitoring systems</p>	<p>Quality control and monitoring systems to be incorporated at each project location as per the following</p> <ul style="list-style-type: none"> ● The quality control system will be provided with an online monitoring system through General Packet Radio Service (GPRS) and Global Positioning System (GPS) for quality control ● All the real time monitoring information will be relayed to the RCC ● Water quality monitoring through Total Dissolved Solids (TDS) level of water, hardness, water temperature, pH value of water (refer Annexure III) ● A data logger system will be installed at each project location to maintain the record of water dispensing and overall usage of the service. ● The system will include sensor quality monitoring system for operation of hand washing station <ul style="list-style-type: none"> i. RCC shall have the right to exercise proper Quality Control measures. The Contractor shall provide all assistance to conduct such tests.
<p>4. Solar Panel for Operating ATM Dispense</p>	<p>4.1 Mono-crystalline solar panels with Battery bank of capacity to run the Dispensing system of the Water ATM for 6 hours without electricity.</p> <p>4.2 <u>PV Module</u>: PV module must be warranted for output wattage, which should not be less than 90% at the end of 15 years and 80% at the end of 20 years. Highly efficient Solar PV module based on crystalline technology and suitable modules aggregate capacity of 400-watt peak (Wp) under standard test conditions (STC).</p> <p>4.3 <u>Battery (Li-fe-Po4)</u>: Lithium Ferro Phosphate battery</p>

<p>5. Sensor-based handwashing</p>	<p>5.1 Wash basin fitted with touch free hand washer and touch free with soap dispenser in tamper proof way.</p> <p>5.2 The sensor hand wash should dispense only a limited amount of water at a time.</p>
<p>Others</p>	<ul style="list-style-type: none"> i. System operation can be enabled/disabled from server ii. Dispense quantities re-configurable from server iii. Operator Log-in, log-out feature iv. System to operate after successful operator login only. v. All card Recharge transactions to be uploaded to server vi. All water dispensing transactions to be uploaded to server vii. All Water refill transactions to be uploaded to server viii. Each dispensing unit shall be independently manageable from the server for coin or card operation of any value ix. Physical Security of the Water ATM shall be the responsibility of the Contractor. x. The Contractor shall ensure that a safe, clean and hygienic environment is maintained in and around ATM. xi. The disposal of used biodegradable paper glass shall be the responsibility of the Contractor. xii. Payment of water by the user shall be by cash or smart card. Provision of the same shall be done by the Contractor. The Contractor shall keep all the data of water dispensed through a data logger system or as per system approved by ICLEI South Asia and RCC. The Smart card issued to the user, should have the facility of credit (i.e balance in account) and can be recharged. Provision of dispensing of water by inserting Coins of BDT One, Two and Five etc. should also be made. RCC shall collect the cash from the ATM machine either daily or on a weekly basis. xiii. ICLEI South Asia and RCC has reserved the right to inspect any ATM at any time until December 2022. xiv. ICLEI South Asia and RCC have the right to take samples of water at any time until December 2022.

7. Work Plan

The following table provide details of work plan of contract execution between October 2021 to November 2021

Output	Activity	October 2021	November 2021				
		W1	W2	W3	W4	W5	
Project location identification	Activity 1: Discussion with Rajshahi City Mayor, City Council, Engineers and Planners of RCC and RWASA, ICLEI South Asia and other relevant stakeholders to identify the project locations.						
Implementation and operation/maintenance	Activity 2: Design, Supply, Installation of Water ATMs and handwashing facilities in four locations						
	Activity 3: Sample service agreement for overall project operation and maintenance post installation of the project						
	Activity 4: Operation and Maintenance of the project until December 2022						
Operational guidance and training of RCC and RWASA staffs	Activity 5: Preparation of guidance manual on Project Operation and Maintenance						
	Activity 6: Training to RCC and RWASA Officials on the operation of Water ATM and sensor-based hand washing stations						
Project handover	Activity 7: Handover the project (with complete transfer of ownership of all materials and infrastructure of all entire project) to RCC through ICLEI South Asia						

Annexure I: Bidders Eligibility Criteria and List of Required Documents

(A) Bidder Eligibility Criteria

➤ Technical requirements

- a) The Bidder may be a Manufacturer/ Assembler/ supplier of the solar-powered water vending machine and sensor-based hand washing station for a minimum period of last three years or an Authorized Distributor or Dealer of a Manufacturer/Assembler of the solar-powered water vending machine and sensor-based hand washing station for a minimum period of last three years.
- b) The Bidder should have installed a minimum of ten solar-powered water vending machines and sensor-based hand washing stations within the last three financial years and should provide proof of successful installation and/or operation of the project.

- c) The Bidder must possess written evidence in the form of Letter of intent/Work order/project completion certificate issued by the client (any city/ division/ national/international agency) for a related project.
- d) On-going projects shall also be considered and can be submitted with details of progress supported by suitable documents (e.g. copy of invoice or payment received till date or through certificate from the respective client).
- e) The Bidder shall have maintenance experience of at least three years for at least three solar-powered water vending machines and sensor-based hand washing stations within the last three years.
- f) The Bidder shall demonstrate capability to facilitate or attend to maintenance works during the O & M period of 1 year.
- g) Bidder shall provide information on technical criteria of the solar-powered water vending machine and sensor-based hand washing station.
- h) It is desirable that manufacturer/ assembler/ supplier/ authorized distributor/ dealer of a manufacturer/ assembler of solar-powered water vending machine and sensor-based hand washing station shall have a registered office in Bangladesh. Joint Venture / consortium between two or more company/ manufacturer/ assembler/ supplier/ authorised distributor/ dealer of a manufacturer/ assembler of solar-powered water vending machine and sensor-based hand washing station is allowed, but a certified copy of Board Resolution/Power of Attorney to the partner, having registered office in Bangladesh, indicating the representative shall accompany the Proposal.

➤ **Financial requirements**

- a) The Bidder should possess a valid national registration certificate.
- b) The Bidder should submit all the important registration certificates.
- c) The Bidder should produce the latest Income Tax clearance certificate/income tax return details as relevant.

(B) Documents to be submitted by participating bidders

➤ **Technical Bid**

The Technical bid should provide the following information/ documents

- a) Cover letter of proposal submission (*see Annexure IV: Proposal/Bid Submission Form*)
- b) Company profile

- c) Bidder's experience on assignments of similar nature, the outline should indicate, inter alia, the profiles and size and type of the project, duration of the project, contract amount, and firm's involvement. (*See Annexure V for details*)
- d) The Bidder is required to give detailed approach and methodology proposed to be adopted for completion of the works envisaged in the proposals including design, installation of solar powered Water ATMs and sensor-based hand washing stations, monitoring, operation and maintenance, quality control, man month schedule for execution and maintenance etc
- e) The Bidder shall make the assessment of support personnel both technical and administrative to undertake the assignment. Additional support and administrative staff shall be provided by the firm, if needed for the timely completion of the Assignment within the total estimated cost. The Bidder should provide time estimates of Key Personnel as well as support staff in the staffing schedule. It is stressed that the time period for the assignment indicated in the TOR should be strictly adhered
- f) The Proposals/ bid documents must be duly signed by the authorised representative/ signatory on each page and stamped as detailed below. This shall not contain any alternative items or suggestions, comments or conditions:
 - i. By the partner holding the Power of Attorney in case of a partnership firm / limited liability partnership (A certified copy of the Power of Attorney shall accompany the proposal)
 - ii. By the proprietor in case of a proprietary firm; by a duly authorized person holding the Power of Attorney or by a Board Resolution in case of a Limited Company or a corporation (A certified copy of the Power of Attorney/Board Resolution shall accompany the proposal)
 - iii. By the authorized representative of the Member in Charge in case of Joint Venture / consortium (a certified copy of Board Resolution/Power of Attorney indicating the representative shall accompany the Proposal).
- g) Bidders shall make the technical presentation and showcase their proposed solution to ICLEI South Asia and RCC as per the section 6 detailed scope of work.

Failure to comply with or provide the above listed items in the Technical Proposal may result in disqualification. The Bidder shall produce original documents for cross verification as and when requested by ICLEI South Asia.

➤ **Financial Bid:**

The Financial bid should provide the following information/ documents:

- a) A financial proposal needed in terms of all bill of materials for solar-powered water vending machine and sensor-based hand washing station

- b) The financial bid shall include the cost of operation and maintenance of the complete project until December 2022.
- c) The Financial bid shall be inclusive of all the costs including taxes associated with the assignment and should also include the expenses of the local agency. It is clarified that, for the purposes of evaluation, the financial bid should be prepared in both BDT and USD currencies.
- d) The total amount indicated in the financial bid shall be without any condition attached or subject to any assumption, and shall be final and binding. In case any assumption or condition is indicated in the financial bid, it shall be considered non-responsive and liable to be rejected.
- e) In case of any discrepancy between the amount quoted in figures and words, the amount quoted in words will be considered for evaluation purposes.
- f) A copy of valid registration certificates of the firm.

Please note:

- a) The Bidder shall be acquainted with the work and working conditions at site and locality. No claim shall be entertained on this issue after the bid has been submitted.
- b) All or any accessories/consumables/items required for satisfactory commissioning of the work shall be deemed to be included in the contract and shall be provided by the Bidder without extra charges.
- c) Each page of all the documents mentioned above as well as technical and price bid documents shall be duly signed by Bidder.

➤ **Bid Submission**

- The Terms of Reference (ToR) shall be downloaded free of cost from the ICLEI South Asia website <https://southasiaoffice.iclei.org>
- The bid document shall be submitted by bidders through email to the below mentioned email ID on or before 19th October, 2021.
 - soumya.chaturvedula@iclei.org
 - jubaer.rashid@iclei.org
 - Keshav.jha@iclei.org
- The Bidder shall also submit 2 sets of hard copies of the bid documents to the address as mentioned below:

Md. Jubaer Rashid

Country Representative, ICLEI – Local Governments for Sustainability, South Asia, Bangladesh Country Office, House – 12 (Flat – 2B), Road – 20, Nikunja – 2, Khilkhet, Dhaka – 1229, Bangladesh, Phone: +880 1819 866766, E-mail: jubaer.rashid@iclei.org

The hard copy of bid document shall reach to the above-mentioned address not later than 2 days from the last date of submission of bid document, provided the bid has been submitted through email before the due date of submission

- The Bid shall be submitted in two parts, viz.
 - Envelop I: Technical Bid;
 - Envelop II: Financial Bid; and
 - both the Envelops I & II to be placed and sealed inside Envelope III

- Envelop I: sealed and shall be super scribed as:
Part A: “Technical bid for Solar Powered Water Vending Machine (Water ATM) and Sensor-based Handwashing Station for Low-Income and Climate-Vulnerable Population of Rajshahi City, Bangladesh under the ReCAP21 project”

- Envelop II: sealed and shall be super scribed as:
Part B: “Financial bid for Solar Powered Water Vending Machine (Water ATM) and Sensor-based Handwashing Station for Low-Income and Climate-Vulnerable Population of Rajshahi City, Bangladesh under the ReCAP21 project”

- Envelop III: sealed and shall be super scribed as:
“Solar Powered Water Vending Machine (Water ATM) and Sensor-based Handwashing Station for Low-Income and Climate-Vulnerable Population of Rajshahi City, Bangladesh under the ReCAP21 project”

- The bid shall be valid for a period of 60 days from the date of submission of bid document
- A bidder shall submit the bid documents that satisfies each and every condition laid down in this notice, failing which, the bid will be liable to be rejected by ICLEI South Asia
- In case the Bidder wishes to subcontract part of his deliverables, the final responsibility of delivery and performance solely lies with the Bidder

Annexure II: Contract Terms

1 Specific conditions of contract

1.1 Contractor to ascertain local conditions:

- The Bidder shall be deemed to have carefully examined the work and site conditions. In this regard, the bidder will be given necessary information to the best of knowledge of ICLEI South Asia but without any guarantee to it.

- If the Bidder shall have any doubt as to the meaning of any portions of these general contract terms, or the scope of the work, or any other matter concerning the contract, the Bidder shall in good time, before submitting his tender, set forth the particulars thereof and submit them to the point of contact, as given in this TOR, by email in order that such doubts may be clarified authoritatively before tendering. Once a tender is submitted, the matter will be decided according to the tender conditions in the absence of such authentic pre clarification.

2 General conditions of contract

- 2.1 The contractor shall address all aspects of the proposed outputs and deliverables mentioned in this TOR
- 2.2 The comments and suggestions provided by the Bidder on the TOR are not binding and shall not affect the financial proposal
- 2.3 It should be noted that the project is being implemented by ICLEI South Asia and hence instructions to bidders will be given by ICLEI South Asia. ICLEI South Asia will be overall in-charge for all the works that would be executed under the present scope of work
- 2.4 The Bidder shall also obtain necessary permission, from concerned government departments related to the work/data collection if deemed necessary, in coordination with ICLEI South Asia.

3 Tender Evaluation & Bid Assessment

- 3.1 The bids received will be scrutinized and evaluated by ICLEI South Asia. The decision shall be informed to the winning Bidder.
- 3.2 Tender evaluation will be on the basis of Quality and Cost based Selection (QCBS) methodology
- 3.3 70 % weightage will be awarded for Technical Evaluation of the systems proposed and 30 % weightage will be awarded for Financial Evaluation.
- 3.4 Post the technical and financial evaluation process, marks scored by all the successful technical bidders will be combined using QCBS methodology as mentioned above. The technically qualified bidder who has scored maximum marks as per QCBS method will be the successful bidder.
- 3.5 ICLEI South Asia may ask for meetings with the Bidders to seek clarifications on their proposals and may visit Bidder's client site to validate the credentials/citations claimed by the Bidder.
- 3.6 ICLEI South Asia reserves the right to reject any or all proposals on the basis of any deviations.
- 3.7 Each of the responses shall be evaluated as per the requirements specified in this TOR.

4 Award of contract:

- 4.1 Detailed Work Order will be issued to winning Bidder within 1 day of announcing the winning Bidder

- 4.2 The winning Bidder is to forward the signed and sealed work order to ICLEI South Asia at the earliest or not more than 2 (two) days of issue of work order
- 4.3 In case the winning Bidder fails to indicate his intent to undertake the said work within the stipulated time of 2 (two) days and observe the formalities as above, the Letter of Intent will be cancelled and the next Bidder will be finalised by ICLEI South Asia.

5 Compensation for delay

- 5.1 Time is the essence of the contract and as such all works shall be completed within the time stipulated in the contract/ work order
- 5.2 If the Bidder, without reasonable cause or valid reasons, commits default in commencing the work within the aforesaid time limit, ICLEI South Asia shall without prejudice to any other right or remedy, be at liberty, by giving 15 days' notice in writing to the contractor to commence the work, to forfeit the balance payment depending on the status of work, and to cancel the Work Order.

6 Extension of date of completion

On occurrences of any events causing delay as stated hereunder, the Bidder shall intimate immediately in writing to ICLEI South Asia-

6.1 Force Majeure:

- Natural phenomena, including but not limited to abnormally bad weather, unprecedented flood and draught, earthquakes & epidemics.
- Political upheaval, strikes, lockouts, acts of any Government (domestic/foreign) including but not limited to war, properties, and quarantine embargoes.

7 Materials/Appliance at site

- 7.1 ICLEI South Asia does not undertake any responsibility for supply of any materials/ equipment/ Appliance/ tool for site analysis to the Bidder
- 7.2 All materials/ equipment/ tools brought to site by the Bidder shall be the responsibility of the Bidder. ICLEI South Asia shall extend help as and when approached by the Bidder to keep any materials/ equipment/ Appliance/ tool, however not liable for any loss, theft or damage due to fire or other cause, the responsibility for which shall lie entirely on the Bidder.

8 Final Inspection of Work

- 8.1 A third party shall make final inspection of all work included in the contract/work order, or any portion thereof, or any completed structure forming part of the work of the contract, as soon as practicable after notification by the Bidder that the work is completed and ready for acceptance.
- 8.2 At the time of such inspection, a third party shall inform the Bidder in writing as to the particular concerns to be remedied before final acceptance can be made

Annexure III: Water Quality Parameters according to Bangladesh Standards & WHO Guide Lines

Water Quality Parameters - Bangladesh Standards & WHO Guide Lines (2009) ³

Sl. No.	Water Quality Parameters	Bangladesh Standards (mg/L)	WHO Guide Line	Methods/ Equipment
01	Aluminum	0.2	-	Atomic Absorption Spectrophotometer (AAS)
02	Ammonia	0.5		UV-VIS
03	Arsenic	0.05	0.01	AAS
04	Barium	0.01	0.7	AAS
05	Benzene	0.01	0.01	Gas Chromatograph
06	BOD 5 Day, 200C	0.2	-	5 days Incubation
07	Boron	1.0	-	UV-VIS
08	Cadmium	0.005	0.003	AAS
09	Calcium	75	-	AAS
10	Chloride	150-600	-	Titrimetric
11	Chlorinated Alkenes			
11.1	Carbontetrachloride	0.01	0.004	Gas Chromatograph
11.2	1.1 Dichloroethelene	0.001	0.03	Gas Chromatograph
11.3	1.2 Dichloroethelene	0.03	0.03	Gas Chromatograph
11.4	Tetrachloroethelene	0.03	0.04	Gas Chromatograph
11.5	Trichloroethelene	0.09	0.07	Gas Chromatograph
12.1	Pentachlorophrnl	0.03	0.009	Gas Chromatograph
12.2	2,4,6-Trichlorophenol	0.03	0.2	Gas Chromatograph
13	Chlorine (Residual)	0.2	-	Titrimetric
14	Chloroform	0.09	0.2	Gas Chromatograph
15	Chromium (Hexavelent)	0.05	-	Iron Chromatograph
16	Chromium (Total)	0.05	0.05(P)	AAS
17	COD	4	-	Closed Reflux Method
18	Coli form (Faecal)	0 CFU (N/100mL)	0	Membrane Filtration Method
19	Coli form (Total)	0 CFU (N/100mL)	0	Membrane Filtration Method

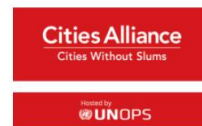
³ https://old.dphe.gov.bd/index.php?option=com_content&view=article&id=125&Itemid=133

20	Colour	15 Hazen	-	Colour Comparator
21	Copper	1	2	AAS
22	Cyanide	0.1	0.07	UV-VIS/Specific Ion Electrode
23	Detergent	0.2	-	UV-VIS
24	DO	6	-	Multimeter
25	Electric Conductivity	-us/cm	-	Multimeter
26	Fluoride	1	1.5	UV-VIS
27	Hardness as CaCO ₃	200-500	-	Titrimetric
28	Iodine	200-500	-	Titrimetric
29	Iron	0.3-1.0	-	AAS
30	Kjelhl Nitrogen (Total)	1	-	UV-VIS/ Digestion
31	Lead	0.05	0.01	AAS
32	Magnesium	30-35	-	AAS
33	Manganese	0.1	-	AAS
34	Mercury	0.001	0.001	Mercury Analyzer
35	Nickel	0.1	0.02(P)	AAS
36	Nitrate	10	50.0 as N	UV-VIS
37	Nitrite	<1	3.0(0.2)	UV-VIS
38	Odour	Odourless	-	Threshold Method
39	ORP (Eh)	-	-	ORP meter
40	Oil and Grease	0.01	-	Oil and Grease meter
41	pH		6.5-8.5	pH Meter
42	Phenolic Compounds	0.002	-	Gas Chromatograph
43	Phosphate	6	-	UV-VIS
44	Phosphorus	0	-	Digestion
45	Potassium	12	-	AAS
46	Radioactive Materials (Gross Alpha Activity)	0.01 Bq/L	0.5 Bq/L	-
47	Radioactive Materials (Gross Beta Activity)	0.1 Bq/L	1.0 Bq/L	-
48	Salinity	-%0	-	Multimeter
49	Selenium	0.01	0.01	AAS
50	Silver	0.02	-	AAS
51	Sodium	200	-	AAS
52	Suspended Solids	10	-	Filtration and Drying
53	Sulphide	0	-	UV-VIS
54	Sulphate	400	-	UV-VIS
55	Taste	-	-	Threshold Method
56	Total Alkalinity	-	-	Titrimetric
57	Total Dissolved Solid	1000	-	Multimeter
58	Temperature	20-30C		Thermometer
59	Tin	2	-	AAS
60	Turbidity	10 NTU	-	Turbidity meter

On behalf of



Implemented by



61	Zinc	5	-	AAS
----	------	---	---	-----

Annexure IV: Proposal/Bid Submission Form

To
Executive Director
ICLEI-Local Governments for Sustainability, South Asia
New Delhi – 110016, India

I/We have read and examined the terms of reference (ToR) documents relating to “**Solar Powered Water Vending Machine (Water ATM) and Sensor-based Handwashing Station for Low-Income and Climate-Vulnerable Population of Rajshahi City, Bangladesh under the ReCAP21 project**” including the main bid document and the annexures.

I/We hereby submit our proposal for execution of the work referred to in the aforesaid documents in accordance with the terms and conditions contained or referred to therein and in accordance in all respects with the specifications, designs, drawings and other relevant details furnished in the bid document and within the period(s) of completion as stipulated in our proposal.

If I/We fail to keep the proposal open as aforesaid or make any modifications in the terms and conditions of the proposal which are not acceptable to ICLEI South Asia or after signing of contract are unable to provide work or services to the satisfaction of ICLEI South Asia as per the terms of the contract and annexure documents, I/We agree that ICLEI South Asia shall without prejudice to any other right, be at liberty to revoke the contract. Should this proposal be accepted, I /We agree to abide by & fulfil all the terms conditions of aforesaid document and the annexure documents.

If after the proposal is accepted, I/we fail to commence the execution of the work, I/We agree that ICLEI South Asia shall without prejudice to any other right or remedy is at liberty to revoke the contract.

Signature and stamp of applicant.....
Name.....
Organization.....
Date and place.....

Annexure V: Technical Bid Elements Format

The table below provides the format in which general information about the Bidder must be furnished.

S. No.	Information	Details
1	Name of Bidder	
2	Address and contact details of Bidder:	
3	Registration Number and Year of Registration	
4	Web Site Address (if any)	
5	Registration number (eg TIN)	
6	Name, Designation and Address of the contact person to whom all references shall be made regarding this RFP:	
7	Telephone number of contact person:	
8	Mobile number of contact person:	
9	E-mail address of contact person:	

Format for Project Citation (Similar Works)

S. No.	Item	Details	Attachment Ref. No.
1	Name of the Project		
2	Date of Work Order		
3	Client Details		
4	Scope and Objective of Work		
5	Contract Value		
6	Completion Date		

Note: The Bidder is required to use above formats for all the projects referenced by the Bidder for the Pre-Qualification criteria and technical bid evaluation. For each assignment, please furnish a copy of work order/ service contract/ completion/ ongoing certificate.

Format for Annual Turnover

Requirements: The Average Annual Turnover to be provided in the following format for the last 4 Financial Years (2017-18, 2018-19, 2019-20 and 2020-21)

Financial Year	2017-18	2018-19	2019-20	2020-21
Annual Turnover (In BDT and USD)				
Note: Financial Information shall be certified by the Statutory Auditors. Photo Copies of the Balance Sheet for the above financial years should be provided along.				

On behalf of



Federal Ministry
for Economic Cooperation
and Development

Implemented by

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

