Corrigendum #1

Terms of Reference for “Potential Assessment and Technical Feasibility Study for Floating Solar PV plant in Ahmedabad and Coimbatore”

The following corrigendum is hereby issued to the ToR document referred above for selection of consultant(s) for Potential Assessment and Technical Feasibility Study for Floating Solar PV plant in Ahmedabad and Coimbatore.

1. The last date for submission of the proposal is now extended to 18th of May 2022. Wherever the same appears in the ToR document, the last date for bid submission stands to be read as 18th of May 2022.

2. The new timelines for the bidding process are defined as below:

<table>
<thead>
<tr>
<th>Deadline for acceptance of proposals:</th>
<th>18th May 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of announcement of successful bidder:</td>
<td>30th May 2022</td>
</tr>
<tr>
<td>Indicative Starting Date:</td>
<td>6th of June 2022</td>
</tr>
<tr>
<td>Envisaged Duration of Contract:</td>
<td>3.5 months</td>
</tr>
</tbody>
</table>

3. The timeline for activities and deliverables agreed upon for the Part I the scope of work of this assignment remains the same, basis upon the date of sign of contract.

4. Eligibility amendments:

<table>
<thead>
<tr>
<th>S. No</th>
<th>ToR Section</th>
<th>Requirement/Eligibility</th>
<th>Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.1.1</td>
<td>Professional experience, point 1: The solar energy expert(s) should have a Bachelor or master's degree in engineering, with at least 10 years of experience in design, and development of ground mounted &amp; rooftop solar PV power plants totaling at least 50 MW of aggregated capacity</td>
<td>The experience requirement of 50 MW stands revised as 25 MW</td>
</tr>
</tbody>
</table>

5. Clarifications:

<table>
<thead>
<tr>
<th>S. No</th>
<th>ToR Section</th>
<th>Query/Suggestion</th>
<th>Corrections / Remarks from CapaCITIES team</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2.1.2</td>
<td>In Part II of scope of work, Does the consultant have to support in development of Solar PV project or wind energy project based on city inputs?</td>
<td>As Part II of the scope of work, consultant will need to support the project team in developing bankable DPR for either ground mounted SPV or FSPV project at scale (and not wind energy project) at the proposed sites in Ahmedabad and Coimbatore</td>
</tr>
<tr>
<td>2</td>
<td>3.2.1</td>
<td>In case of Joint Venture, if an EPC Solar developer is brought in on an advisory</td>
<td>Any consultant(s) or firm(s) participating in this tender individually or as a joint venture will not be able to participate in</td>
</tr>
<tr>
<td>3</td>
<td>3.2.2</td>
<td>Separate financial bid will be sought for execution of tasks under Part II of scope of work for this assignment, after completion of Part I, contingent upon acceptance from the city corporations to deploy MW-scale FSPV project in the proposed sites.</td>
<td>Separate financial bids are sought for execution of tasks under Part I &amp; II of the scope of work for this assignment. After completion of Part I, Part II of the scope of work will be activated and contracted separately with the consultant, contingent upon acceptance from the city corporations to deploy MW-scale Ground-mounted SPV or FSPV project in the proposed sites.</td>
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<td>---</td>
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</tbody>
</table>

The updated Terms of Reference for this assignment is attached for your reference.
Terms of Reference
for
Potential Assessment and Technical Feasibility Study for Floating Solar PV Plant in Ahmedabad and Coimbatore

<table>
<thead>
<tr>
<th>Title of Assignment:</th>
<th>Potential Assessment and Technical Feasibility Study for Floating Solar PV Plant in Ahmedabad and Coimbatore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project:</td>
<td>CapaCITIES – Phase II</td>
</tr>
<tr>
<td>Location:</td>
<td>Ahmedabad &amp; Coimbatore, India</td>
</tr>
<tr>
<td>Type of Contract:</td>
<td>Consulting Firm/Individuals</td>
</tr>
<tr>
<td>Deadline for acceptance of proposals:</td>
<td>18(^{th}) May 2022</td>
</tr>
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<td>Indicative Starting Date:</td>
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</tr>
</tbody>
</table>
1. Introduction

1.1 Background

ICLEI - Local Governments for Sustainability is the world’s leading association of more than 1500 metropolises, cities, urban regions, and towns. ICLEI South Asia, the South Asian arm of ICLEI - Local Governments for Sustainability, aims to build and serve a regional network of local governments to achieve tangible improvements in regional and global sustainability through local initiatives. ICLEI - South Asia is a strong and vibrant local government association with a membership base of over 70 cities in the region.

Capacity Building for Low Carbon and Climate Resilient City Development project (CapaCITIES) Phase II project, funded by the Swiss Agency for Development and Cooperation, aims to strengthen the capacities of Indian cities to plan and implement climate resilience actions, considering both climate change adaptation and mitigation measures in an integrated manner in key urban service sectors. ICLEI South Asia as a consortium partner of the CapaCITIES Implementing Agency, which comprises of South Pole Group ad econcept AG, is implementing the project across the selected cities and states.

After the successful implementation of the first phase of the project in Coimbatore, Rajkot, Siliguri and Udaipur cities, the CapaCITIES project in its second phase focuses on enhancing the capacity of 4 more cities namely, Ahmedabad, Vadodara, Tiruchirappalli, Tirunelveli, in implementing climate resilience actions. The project also engages with the state government of Gujarat and Tamil Nadu to mainstream climate action in urban development through adoption of integrated climate-resilient planning, design of innovative finance mechanisms and development of climate-resilient infrastructure. The project will bring together Indo-Swiss expertise in the sectors of water, waste, and transport to demonstrate scalable solutions of urban climate action in India, with a global relevance.

The primary objectives of the project are:

- City and state governments integrate climate change aspects (adaptation and mitigation) into urban planning and implementation.
- Enhanced capacities of city and state governments to access finance for scaled up urban climate action.

Ahmedabad and Coimbatore cities receive technical assistance from the project in preparation of the Climate Resilient City Action Plan addressing both climate change mitigation and adaptation aspects, and in identifying and implementing pilot demonstration projects and bankable projects.

1.2 Assignment Overview – Ahmedabad & Coimbatore

Ahmedabad Municipal Corporation (AMC) and Coimbatore City Municipal Corporation (CCMC) have shown interest in deploying Floating Solar PV (FSPV) in the cities’ water bodies to offset their energy consumption with technical support under the CapaCITIES Phase II project. Ahmedabad city has proposed the FSPV to be deployed on the stretch of Sabarmati River that passes through the city while Coimbatore city has proposed Periyakulam tank located within the city for deployment of FSPV. This assignment entails potential assessment and development of a technical feasibility report for deployment of MW scale FSPV in the two water bodies. It also includes identification of suitable location for deployment of a pilot project, providing inputs to the bidding process and bid assessment for the pilot project.

In this regard, ICLEI South Asia seeks expert consultancy services (individual or organization) to assist AMC and CCMC to identify the potential for deploying FSPV at the proposed sites and to assess feasibility of the proposed sites, to identify ideal location to deploy a pilot project in Coimbatore, and to provide support in Request for proposal (RFP) development and bid evaluation for the pilot project. The services also include providing technical support to the project team in undertaking cost-benefit
analysis comparing FSPV deployment with off-site deployment of Ground Mounted Solar PV and Wind Generators under the project to aid Ahmedabad Municipal Corporation in their decision making on RE investment for captive consumption. The consultant(s) are also expected to support the development of bankable DPR for either ground-mounted SPV or FSPV project based on the feasibility study for deploying MW-scale FSPV project in the proposed sites and acceptance from the city.

1.3 Proposed Site Details

Coimbatore:
Coimbatore City Municipal Corporation intends to deploy RE plants for captive consumption in addition to its already existing cumulative RE capacity of 5.6 MWp. It has proposed Periyakulam, one of the major lakes in the city spread over an area of 136 hectares, for deployment of FSPV subject to technical and financial feasibility of the project.

The Periyakulam tank is one of the lakes in the city where eco-restoration work is has been undertaken under the Smart City Mission and is located at the focal point of the city, close to important transit facilities and in proximity to densely populated core city areas and commercial center of the city. The lake has inflow of water from 6 inlet points on the northern bank and outflow through 3 outlets on the eastern and Southern banks of the lake.

The lake has a Full Tank Level (FTL) of 5.82 m and Maximum Water Level (MWL) of 6.51 m and Tank Bund Level (TBL) of 7.88 m. Based on the bathymetry profile developed for the lake under the eco-restoration project, the difference in the depth of the lake is up to 6 m sloping towards southwestern region of the lake. Western edge slope is steep, while eastern edge is comparatively plainer. The lake interfaces with the city on the northern and the eastern banks while the southern and western banks are close to the river Noyyal and have agricultural fields around them, and the access to these banks are not defined.

As per the city’s developmental plans for the lake, CCMC has suggested the northeast corner and the surrounding area of approximately 12 hectares for potential deployment of FSPV. Figure 1 indicates the potential area suggested by the corporation.

![Figure 1 Area of Periyakulam Lake suggested by CCMC for FSPV deployment](image)
Ahmedabad:
Ahmedabad Municipal Corporation aims to deploy RE power plants for captive power consumption. It has already deployed offsite Wind generators of cumulative capacity of 21 MWp, and grid connected solar RTPV plant across its own buildings of cumulative capacity 1.1 MWp. The city has allocated municipal budget to further source its energy from RE sources and is interested in deploying FSPV plants in the Sabarmati River stretch within the city, except the parts where the river stretch is channelized for the Sabarmati River front development project (including future river front development) which aims to develop Ahmedabad’s waterfront along the banks of Sabarmati River into a public asset.

The Sabarmati River is a monsoon-fed river that flows north-south through Ahmedabad, bisecting the city into its western and eastern halves. It has been an integral aspect of Ahmedabad city since its foundation. The river stretches approximately 31 km in the city from the Sardar Patel Ring Road bridge (Chainage 156 km) near the intersection of Narmada canal with Sabarmati River in the northern part of the city to Sardar Patel Ring Road bridge -1 (Chainage 125.2 km) in the Southern part of the city located downstream of the Vasna barrage. The water flow in the river stretch within the city depends on the discharge of water from Dharoi dam located approximately 200 km upstream of Ahmedabad, and subsequently from the Sant Sarovar barrage located in Gandhinagar.

The Sabarmati River front development project has developed a two-level, continuous promenade at the water’s edge along each bank of the river by channeling the river to a constant width of 263 m and reclaiming riverbed land of 204.91 hectares. The public riverfront extends up to a length of 11.25 kilometers on either bank of the river stretch in the heart of the city and is being extended by another 5 km under Phase II of the project (Refer Figure 1Figure 2). In the existing riverfront in Ahmedabad water level depth of 2-2.5 m with respect to the riverbed is ensured round the year.

In the stretch between Vasna Barrage (Chainage 135.7 km) to Sardar patel Ring Road Bridge (Chainage 156 km), part of which is developed as the Sabarmati Riverfront, release of water from Karai dam built upon the Narmada canal ensures all-round the year availability of water. Also, the Vasna barrage, the southern end of the riverfront development, was built downstream for water retention in Sabarmati and to divert water for irrigation through Fatehwadi Canal and is used to influence the water level in the river stretch within the city ensuring year-round availability of water.
2 Description of Services

2.1 Scope of Work

2.1.1 Part I: Assess the potential for FSPV, conduct site-specific feasibility study at the proposed sites & prepare a technical feasibility report

a) Project Inception Meeting:
The Consultant shall carry out a project inception meeting in each of the cities along with a team from ICLEI South Asia, South Pole and key stakeholders including but not limited to concerned departments in the cities such as the Energy Development Agency, Concerned DISCOMS, Department of Water Resources, River Development, Dept. of Meteorology, Irrigation, etc. The objective of the inception meeting is to discuss all the tasks specified in this section from 2.1.1(b) to 2.1.2(f), the workplan, potential challenges and constraints already identified by the stakeholders, proposed approach & methodology to plan and conduct the site visits, feasibility study and to gather all relevant documents and information to facilitate initial screening and site visits.

b) Screening of proposed sites for identification of study Area in Ahmedabad and Coimbatore:
The Consultant shall conduct initial site assessments to screen the gross area of the water bodies at the two proposed sites (refer section 1.3) based on secondary data available, information collected from stakeholders, and data analysis (as required for GIS-based assessment of the sites using satellite imagery available). Based on screening criteria, the consultant shall select the study area based on potential study areas identified based on initial site visits to the proposed project site in each city, considering key parameters such as type of water body and its purpose, accessibility to the site, ease of power evacuation, anchoring and mooring challenges, availability of space on shore and other logistical considerations such as ease of execution of project etc.

The Consultant shall prepare a brief inception report with recommendations on the Study Area to be considered for the preparation of the technical feasibility report. Further site visits and survey activities required for the feasibility study can be planned once the project stakeholders approve the recommended study area.

c) Site Visits and Surveys for potential assessment in Ahmedabad and Coimbatore:
The contractor shall conduct site visits and survey the selected study areas along with ICLEI South Asia team and city officials to investigate the following, but not limited to:

- Site access, existing infrastructure for grid connection, access to off-site facilities for interconnection, existing interconnection facilities, probable export cable routes and interconnection works and grid connection.
- General condition of the available surface including shading considerations, and surrounding topography, hydrology and ground conditions for development, construction, and logistical aspects.
- Local activities and potential utilities of the site, development works, and key environmental and social aspects
- Climatic conditions (temperatures, wind, humidity, soiling, rain, etc.), and any ground measurement station for solar irradiation in the vicinity.
- Hydrographic/bathymetric and Soil test data, if available already with the stakeholders or from secondary data
Note: Based on data available from the development projects undertaken in the water bodies in the two cities and other secondary data, Consultant should inform ICLEI South Asia if further hydrographic survey for bathymetry data and investigation for geo-technical information is required for the technical feasibility study and provide inputs to the Terms of Reference that would be developed by the CapaCITIES project team to hire relevant experts for the required surveys.

d) Potential Assessment for FSPV at the proposed sites in Ahmedabad and Coimbatore, and preparation of technical feasibility report:

The Consultant should conduct site-specific generation potential assessment and technical feasibility study in the selected study area in the two cities for the FSPV project, and develop a technical feasibility report for each of the project sites that includes the following but not limited to:

- Optimum technological solutions considering Solar PV module technology, size, and configuration, inverters, floating platforms, anchoring & mooring system, transformers etc. and other electrical, electromechanical, auxiliary and protection, control, and monitoring systems that are part of a FSPV system
- Power evacuation arrangements for the project considering power export cable routes, accessibility to substations, etc. and other electrical, electromechanical infrastructure required for grid integration based on discussions with relevant power distribution licensee and current market practices
- Solar Energy Resource Assessment and Energy Yield Assessment in per MWp basis considering the optimum technological solutions identified. The assessment must be undertaken for the entire life of the project
- Estimated costs per MWp of FSPV (including break-up of cost for PV panels and all BoS components) based on Consultant’s experience and understanding of prevailing market conditions and prices
- Brief scope of work for required Operation & Maintenance (O&M) of the FSPV and costs involved in per MWp basis. The O&M costs (including routine and periodic) must be assessed for the entire life of the project.
- Detail all regulatory clearances required for implementing the project.

e) Support to development of pilot FSPV project at the proposed site in Coimbatore:

The Consultant is expected to support the development of a pilot project at the proposed site [(refer section 1.3) in Coimbatore and shall,

- Propose an ideal location for deploying a pilot project at the proposed site in Coimbatore for a capacity of around 100 kW in a co-financing model along with the CCMC to be implemented under CapaCITIES project. It is to be noted that the final capacity of the system will be subject to the extent of co-financing available for project deployment from the city.
- Providing technical inputs to the tender process for the pilot project intended to be developed under design and build mode, including minimum technical specifications for all FSPV system components and approximate costs, estimated overall cost of project based on market conditions and prices, and clearances to be obtained by the developer for implementation
- Provide technical bid-evaluation support to the project team to select the most appropriate EPC developer for the pilot FSPV plant as per the bid criteria and techno-commercial proposals
f) Technical support to conduct cost benefit analysis comparing FSPV with off-site deployment of Ground Mounted Solar PV and Wind Energy Generators for Coimbatore and Ahmedabad:

Consultant is expected to provide technical inputs for the cost-benefit analysis to be undertaken by project team to support city corporation’s decision making on the technology of RE deployment for captive consumption for both Coimbatore and Ahmedabad. The following input at a minimum is expected from the Consultant:

- Capacity Utilization Factor for all alternative technologies with respect to FSPV, and deration over lifetime
- Overall costs (including break up for energy generator and BoS components) of ground mounted solar PV, and wind energy plants in per MW basis. Please note that location for offsite deployment of alternative RE technologies for cost considerations to be determined in discussion with stakeholders.
- Land / area requirements compared to floating solar
- Project life for the alternative technologies and brief scope of O&M and corresponding costs over project lifetime

Note: The project implementation team would undertake the cost-benefit analysis and the Consultant is expected to review and provide technical inputs to the analysis as stated above and is not expected to lead and undertake all of the cost-benefit analysis.

2.1.2 Part II: Support to project team in preparing a bankable DPR for developing a project at scale at the proposed sites in Ahmedabad and Coimbatore

Based on site feasibility and the study area identified under Part 1 of this Scope of work and inputs from AMC and CCMC, the consultant should at minimum undertake the following to support development of an at-scale Solar PV project (ground-mounted/ floating) in the two cities:

a) Propose an ideal location for deploying the at-scale bankable Ground-mounted SPV or FSPV project of installed capacity. The capacity shall be determined based on site, available potential, technology, and discussions with stakeholders.

b) Conceptual design of the Solar PV plant including site plan, plant layout design, Single Line Diagrams, and other necessary drawings for the Solar PV systems, and implementation arrangement for power evacuation based on good design principles to optimize all key parameters.

c) Independent Energy Yield Assessment for the project based on the conceptual design of the Solar PV project.

d) Minimum technical specifications for all the Solar PV plant components and power evacuation arrangements and infrastructure, high level equipment sizing and Bill of Materials.

e) Estimated project costs based on consultant’s experience and understanding of prevailing market conditions and prices.

f) Brief scope of work for required Operation & Maintenance of the Solar PV project and the costs involved.

g) Providing inputs to the tender process for the bankable project intended to be developed under design and build mode, including ascertaining the minimum technical specifications for all Solar PV system components and approximate costs, estimated overall cost of project based on market conditions and prices.

h) Provide technical bid-evaluation support to the project team to select the most optimum EPC developer for the bankable Ground-mounted SPV or FSPV project as per the bid criteria.
Note: The financial analysis and preparation of a bankable DPR will be undertaken by the CapaCITIES project team based on the technical feasibility report for the bankable Solar PV project (ground-mounted/floating) prepared by the Consultant and is not part of the scope of the Consultant. The consultant shall however be fully responsible for tasks specified in the scope 2.1.2 Part II from a) to h).

2.2 Deliverables & Schedule

2.2.1 Deliverables for Scope of Work: Part I

1. Project inception meeting with stakeholders and project inception report
2. Site visits and assessment of the proposed sites in two cities for FSPV based on the site visits, primary & secondary data hydrological survey (to be conducted if required)
3. Potential assessment for developing FSPV project at the identified sites in the two cities considering variation in water levels, climatic & environmental conditions, possible interference with other activities such as inland fishing, and reservoir maintenance
4. High level costs of FSPV project in per MWp-basis for the two cities considering the local context, including break-up of costs for panels and BoS components, and O&M costs over project lifetime
5. Site identification for development of pilot project in Coimbatore on design and build mode, technical inputs to bidding process and bid evaluation support for selection of appropriate EPC developer
6. Comparison of floating solar PV with off-site ground mounted solar and wind energy plant based on technical characteristics, project life, area requirements, costs etc. to be included as part of technical feasibility report for each city

2.2.2 Deliverables for Part II of scope of work:

1. Design criteria & conceptual design for the bankable ground-mounted SPV or FSPV project in each city, including the estimation of installed capacity depending on the type of technology and site
2. Solar resource assessment and estimated energy yields for the identified sites
3. Estimates of costs for development, construction, and operation of the projects based on broad-based equipment sizing and bill of materials
4. Grid connectivity provisions, location of transmission sub-stations, cost, and identification of potential barriers and recommendations to realizing a grid connection on-ground
5. Permitting requirements – list of approvals required, expected timeline, and estimated costs for securing these.
6. Support in tender process - inputs to evaluation criteria and bid assessment, feedback on proposals, participation in evaluation meetings with shortlisted bidders
2.2.3 Schedule of Deliverables:
The envisaged duration of this assignment for part I of the scope of work is 3.5 months. The following table provides the timeline for activities and deliverables agreed upon for the Part I of this assignment:

<table>
<thead>
<tr>
<th>No.</th>
<th>Deliverable</th>
<th>Description</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inception report for each project site in the 2 cities</td>
<td>The report is anticipated to provide details of the major inputs related to overall framework of the task, outcomes of the project inception meeting, difficulties/challenges that can affect the progress of the work, and the identification and selection of study area for which the technical feasibility report would be prepared.</td>
<td>4 weeks (from the date of award)</td>
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</tbody>
</table>
| 2   | Draft Technical Feasibility Report for each city (all deliverables under 2.2.1 to be captured in the report as applicable to the scope of work defined for each city) | • A draft technical feasibility report prepared for the project site in each of the two cities should contain overall study for feasibility of implementing floating solar power projects in consideration of all the related aspects (as noted in points a, b, c, d, f in section 2.1.1 Scope of Work: Part I)  
• The report for Coimbatore city shall also include site identification and technical inputs for implementation of pilot FSPV project in Coimbatore site. (As noted in point e in section 2.1.1 Scope of Work: Part I) | 10 weeks (from the date of award)             |
| 3   | Final reports for each city and support to development of pilot Project in Coimbatore | Submission of final reports post addressal of inputs/feedback from ICLEI South Asia and South Pole teams, and completion of all tasks included in Part I of scope of work (as noted in point e, section 2.1.1) for support in developing pilot project in Coimbatore city | 14 weeks (from the date of award)             |

The project timeline for Part II of scope of work will depend on the acceptance from the Coimbatore and Ahmedabad Municipal Corporations for developing a bankable Solar PV project (Ground-mounted/floating) in the cities. The project team shall intimate the Consultant on undertaking Part II of scope of work during submission of final report. The consultant shall quote separately for Part I and Part II of the scope of work.
2.2.4 Payment Schedule
The fee is payable upon satisfactory completion and acceptance of the deliverables by ICLEI South Asia. The breakdown of deliverables and percentage of payment is as follows for the contract that will be entered into for the scope of work mentioned in this ToR:

1. 30% of total work value: On signing of contract
2. 30% of total work value: Submission of draft technical feasibility report for 2 cities incorporating deliverables as specified in Section 2.2.1
3. 40% of total work value: Submission of final Reports and completion of all tasks included in the scope of work

The breakdown of deliverables and payment schedule with respect to Part II of scope of work, will also be on similar lines and will be communicated to the Consultant when drawing up the same.

2.3 Methodology
The Consultant(s) will report to ICLEI South Asia and will work closely with ICLEI personnel, AMC and CCMC representatives involved in the project. Project relevant communication with the Consultant(s) will be done through ICLEI South Asia. The Consultant(s) will attend the project inception meeting organized by ICLEI South Asia with the concerned city officials and project partners in Ahmedabad & Coimbatore cities to collect inputs from the stakeholders and to resolve queries, if any, from either party.

The methodology proposed by the Consultant(s) for the scope of work given in this assignment should have a clear focus on the objective of assessing the technical feasibility of the proposed sites for FSPV deployment and providing technical support to the project and the two project cities in developing a pilot project and/or in deciding the most optimum RE technology for at-scale development.

This will be achieved through coordination with stakeholders, document review, simulation analysis, feasibility study, technical design, economic analysis, meetings, report writing, and focused discussions with officials and representatives from both AMC and CCMC.

ICLEI South Asia will not provide any equipment or technical support in executing the assignment. It is expected that the Consultant(s) will sufficiently resource himself/herself in carrying out the potential assessment and

3 Bidders Eligibility Criteria and List of Required Documents
3.1 Bidder Eligibility Criteria
Both independent consultants and firms are welcome to apply. The consultants should ideally have the following expertise and experience:

3.1.1 Professional Experience
- The solar energy expert(s) should have a Bachelor or master’s degree in engineering, with at least 10 years of experience in design, and development of ground mounted & rooftop solar PV power plants totaling at least 25 MW of aggregated capacity
- The solar energy expert(s) should have at least 3 years of experience in conducting feasibility studies for Floating Solar PV, and in design and development of Floating Solar PV plants amounting to at least 5 MW of aggregated capacity
- The wind energy expert(s) should have at least 5 years of experience in conducting feasibility studies for Wind Energy Plants, and in design and development of wind power projects
The consultant should have prior experience in procurement, engineering, grid integration, techno-commercial feasibility studies, design & providing project management consultancy for implementation of MW scale floating solar power plants. Details of a minimum of 2 such implemented projects in the last 3 financial years would be required to be submitted.

- The expert shall develop the design, prepare technical specifications and drawings, and support drafting of bidding criteria and documents, in collaboration with the CapaCITIES project implementation team.

- Regional presence and prior experience engaging with public sector will be considered as an added advantage.

- Experts are desired to have IT and software proficiency as applicable for this assignment.

3.1.2 Financial requirements
- The bidder (if a firm) should possess a valid GST registration.
- The bidder must be registered with Income tax department and should produce Latest Income Tax clearance certificate/income tax return details.

3.1.3 Education Requirements
The consultant/ Team lead (if a firm) should have a minimum of bachelor’s degree in Engineering.

3.1.4 Communication Requirements
- Proficient in English. Proficiency in Tamil and Gujarati will be a clear advantage.
- Experience in stakeholder consultations is desired.

3.2 Documents to be Submitted by Participating Bidders
Interested individuals/firms must submit the following documents/information to demonstrate their qualifications:

3.2.1 Technical Bid
The Technical bid should provide the following information/documents:

a) Consultancy/ company profile (both independent consultants and firms are encouraged to apply)

b) Bidder’s experience on assignments of similar nature, the outline should indicate, inter alia, the profiles and names of the staff provided (if in case of a firm), duration of the assignment, contract amount, and firm’s involvement.

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/ state/ national/ international agency) for related consultancy.

d) On-going consulting assignments can be submitted with detail of progress supported by suitable documents (E.g., copy of invoice or payment received till date or through certificate from the respective client).

e) Detailed Approach and Methodology for undertaking the current Assignment.

f) Project Schedule with activity and duration to accomplish the task within the scheduled project duration along with detailed work plan.

g) Against the list of proposed staff, details of tasks assigned to each staff as per his / her experience shall influence the evaluation.

h) All relevant CVs shall be provided in full detail. If the CV of a proposed staff is found incorrect,
the award of the consultancy to the bidder may also be liable to cancellation considering such an event.

i) Each page of the CV must be signed in original by the authorized representative together with original or electronic signature of the key team member at the proposal stage. However, at the time of contract signing, original signatures of both authorized representative and the Key Personnel shall be required.

j) The consultant shall assess required support personnel both technical and administrative to undertake the assignment. Additional support and administrative staff shall be provided as needed for the timely completion of the Assignment within the total estimated cost. Consultant should provide time estimates of Key Personnel as well as support staff in the staffing schedule. It is important that the time for the assignment indicated in the TOR should be strictly adhered.

k) The Proposals/ bid documents must be duly signed by the authorized 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).

Note: Bidders shall also indicate how they will execute the project within the stipulated timelines as the assignment needs to be executed on an urgent basis and are welcome to include any previous experience on the same.

3.2.2 Financial Bid

The Financial bid should provide the following information/ documents:

a) Separate financial bids for the tasks mentioned in Part I and Part II of the scope of work described in this ToR document. The total cost should include all the expenses required to complete all the tasks mentioned in this ToR. Financial bids should be inclusive of all taxes, travel, and per-diem costs etc.

b) A financial proposal clearly stating manpower/expert time, travel, equipment, survey, and laboratory costs as may be required, adequately addressing the manpower stated available for the project, as given in the technical proposal. A breakup of the budget items indicated above and by tasks listed in the ToR is required.

c) The Financial bid shall be inclusive of all the costs including taxes associated with the assignment. It is clarified that, for the purposes of evaluation, the financial bid should be prepared in INR.

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 Pan Number and particulars of registration with GST

g) Last 3 Financial Year’s balance sheet (or as applicable), audited by certified Chartered Accountant.

Please note:

➢ Separate financial bids are sought for execution of tasks under Part I & II of the scope of work for this assignment. After completion of Part I, Part II of the scope of work will be activated and contracted separately with the consultant, contingent upon acceptance from the city corporations to deploy MW-scale Ground-mounted SPV or FSPV project in the proposed sites.

➢ The bidder shall acquaint with the work and working conditions at site and locality. No claim shall be entertained on this issue after the bid has been submitted.

➢ All or any accessories/consumables/items required for satisfactory commissioning of the study/work shall be deemed to be included in the contract and shall be provided by the bidder without extra charges

➢ All Technical and Financial bids should be in English. Bidders are encouraged to visit the weblink with the ToR before submission of bid.

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. Bidders shall ensure that the technical and price bid documents shall have a sign of the authorized representative/signatory, on the first and last pages at a minimum.

3.2.3 Bid Submission

• The Terms of Reference (ToR) shall be downloaded free of cost from the ICLEI South Asia website.

• The bid document (including both technical and financial proposal) shall be submitted by bidders through email to the below mentioned email IDs on or before 18/05/2022: nikhil.kolsepatil@iclei.org Nikhil Kolsepatil, Senior Manager (Energy & Climate), ICLEI South Asia

senthil.arumugam@iclei.org Senthil Kumar Arumugam, Project Officer (Energy & Climate), ICLEI South Asia

• For any queries, please write to the below mentioned email contacts for clarification at least 3 days in prior to the last date of bid submission:

senthil.arumugam@iclei.org v.jain@southpole.com

• The bidder shall also submit 2 sets of hard copies of the bid documents to the address as mentioned below:

Soumya Chaturvedula, Deputy Director, ICLEI South Asia Secretariat, C-3, Lower Ground Floor, Green Park Extension, New Delhi - 110016, India.

Tel: +91 – 11 – 4974 7200 Fax: +91 - 11 - 4974 7201

• The hard copy of bid document shall reach to the above-mentioned address not later than 3 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 in two parts, viz. **Part A: Technical Bid** and **Part B: Financial Bid** submitted in a sealed envelope and shall be scribed as:

  “CapaCITIES Phase II - Potential Assessment and Technical Feasibility Study for Floating Solar PV plant in Ahmedabad and Coimbatore”

- 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 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 sub-contract part of his deliverables, the final responsibility of delivery and performance solely lies with the bidder.

### 4 Contract Terms

#### 4.1 Specific conditions of contract

**Contractor to study conditions:**

- The bidder shall be deemed to have carefully examined the work and site conditions. In this regard, he/she will be given necessary information to the best of knowledge of ICLEI South Asia in consultation with but without any guarantee to it.
- If he/she 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, he/she 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. ICLEI South Asia will respond to queries until January 21, 2022. Once a tender is submitted, the matter will be decided according to the tender conditions in the absence of such authentic pre clarification.

#### 4.2 General conditions of contract

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

#### 4.3 Tender Evaluation & Bid Assessment

- The bids received will be scrutinized & evaluated by ICLEI South Asia in consultation with senior city officials from AMC & CCMC involved in the execution of project. The decision shall be informed to the winning bidder.
- The bids of those bidders whose technical bids are found to be responsive shall be
informed and shall be invited for seeking any further clarification/s either individually or a meeting would be called, if desired. In both the cases the bidders shall be informed accordingly, and bidders are expected to be present at given date and time.

- ICLEI South Asia will inform those bidders whose proposals did not meet the minimum qualifying requirements or were considered technically non-responsive to the terms of reference and their Price Bids will not be opened.

4.4 Award of contract

- Detailed Work Order will be issued to the winning bidder within 5 days of announcing the winning bidder.
- The winning bidder is to forward the signed and sealed work order to ICLEI at the earliest or not more than 3 (three) days of issue of work order.
- In case the winning bidder fails to indicate his intent to undertake the said work within the stipulated time of 3 (three) days and observe the formalities as above, the Letter of Intent will be cancelled, and the next bidder will be finalized by ICLEI South Asia in Consultation with senior city officials.

4.5 Compensation for delay

- Time is the essence of the contract and as such all works shall be completed within the time stipulated in the contract/ work order
- 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.

4.6 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-

- 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.

*Please note that this clause will only account if event occurs during data collection/ site visit/ city visit period.*

4.7 Materials/Appliance at site

- Neither ICLEI South Asia nor AMC or CCMC undertake any responsibility for supply of any materials/ equipment/ Appliance/ tool for site analysis to the bidder.
- All materials/ equipment/ tools brought to site by the bidder shall be the responsibility of the bidder. AMC, CCMC and 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.
4.8 Final Inspection of Work

- AMC, CCMC and ICLEI South Asia team shall jointly make final inspection of all work included in the contract/work order, or any portion thereof as soon as practicable after notification by the bidder that the work is completed and ready for acceptance.

- At the time of such inspection, AMC and CCMC shall inform ICLEI South Asia which in turn will inform the bidder in writing as to the concerns to be remedied before final acceptance can be made.

4.9 Ownership of Materials and Confidentiality

All material will acknowledge ICLEI South Asia, by featuring its logo, together with the logos of the CapaCITIES Phase II initiative and other project partners (Swiss Agency for Development & Cooperation, South Pole, econcept AG and the logo of the Initiative at the beginning and at the end of the documents.

The Consultant understands that as part of the Consultancy, they might be asked to create, modify, or contribute to the creation of architectural designs, drawings, documentation, and other copyrightable works. The Consultant agrees that all designs, drawings, assignment outputs, including design formats for infrastructure, forms, text, photographs and videos, computer programs, work-up files, documentation, and other copyrightable materials that have been prepared as part of this contract shall be "works made for hire" and that ICLEI South Asia, AMC and CCMC shall own all the copyright rights in such works.