REQUEST FOR PROPOSAL (RfP)

Renewable Energy in Quezon City: Determining the Solar Energy Penetration and the Potential Market Demand in Buildings

C40 Cities Climate Leadership Group, Inc.
120 Park Avenue, 23rd Floor
New York, NY 10017
United States of America

7 June 2024
1. C40 Cities Climate Leadership Group Inc. ("C40")

C40 is a network of nearly 100 mayors of the world’s leading cities, who are working to deliver the urgent action needed right now to confront the climate crisis, and create a future where everyone, everywhere can thrive. Mayors of C40 cities are committed to using a science-based and people-focused approach to help the world limit global heating to 1.5°C and build healthy, equitable and resilient communities. Through a Global Green New Deal, mayors are working alongside a broad coalition of representatives from labour, business, the youth climate movement and civil society to go further and faster than ever before.

The strategic direction of the organisation is determined by an elected Steering Committee of C40 mayors which is co-chaired by Mayor Sadiq Khan of London, United Kingdom, and Mayor Yvonne Aki-Sawyerr of Freetown, Sierra Leone. Three term Mayor of New York City Michael R. Bloomberg serves as President of the C40 Board of Directors, which is responsible for operational oversight. A nine-person management team, led by Executive Director, Mark Watts, leads the day-to-day management of C40. C40’s three core strategic funders are Bloomberg Philanthropies, the Children’s Investment Fund Foundation (CIFF) and Realdania.

To learn more about the work of C40 and our cities, please visit our Website, or follow us on Twitter, Instagram, Facebook, and LinkedIn.

2. Summary, Purpose, and Background of the Project

2.1 About the Programme
The Climate Action Implementation (CAI) Southeast Asia Programme is part of a new, broader UK Government funded Urban Climate Action Programme (UCAP) that aims to work with cities in Africa, Latin America, and Southeast Asia to implement high impact, priority climate actions and to integrate climate action into city plans, processes, and structures. In Southeast Asia, the programme will work with Quezon City, Jakarta, and Kuala Lumpur. The CAI Programme will provide technical assistance and capacity building to the three cities in the region to enable action implementation in one key sector: energy & buildings. The actions to be implemented in the region centre on developing building codes and roadmap for passive and active systems towards net zero carbon buildings, establishing building energy performance monitoring systems, and developing municipal building decarbonisation action plans. This programme focuses on the particular policies and projects that can deliver the most significant emissions and risk reduction impact and wider benefits in support of a green and just recovery from the COVID-19 pandemic. The programme also aims to engage other cities across the region to share knowledge and lessons learned on climate action implementation.

2.2 Overview of Quezon City
As one of the most urbanised and populous cities in the Philippines, Quezon City (QC) has committed itself to ramping up its climate action initiatives in meeting its goal of reducing carbon emissions by 30% in 2030 and working towards net zero emissions...
by 2050. In 2021, with technical assistance from C40, Quezon City launched the Enhanced Local Climate Change Action Plan (LCCAP) for 2021-2050. It encapsulates the city’s ambitious climate actions that were crafted through scientific and evidence-based analyses and covers mitigation, adaptation, and equitable benefits to its citizens. In its Enhanced LCCAP, Quezon City identified seven thematic priorities to chart its way towards being a carbon neutral, resilient, and inclusive city. Two of these thematic areas include: (1) Building climate-smart industries and services by promoting green, energy-efficient, and resilient buildings; and (2) Sustainable energy through adopting renewable energy sources. Emissions from stationary energy are the largest contributor to greenhouse gas emissions in Quezon City. 51% of these energy-related emissions are attributed to commercial and institutional buildings and is followed by manufacturing and construction (25%) and residential buildings (24%).

2.3 Selected Priority Actions for Quezon City

Priority Action 1 (Policies and actions to promote green, energy efficient, and resilient buildings and establishments in Quezon City): This refers to the crafting of policies and promoting actions that will improve energy efficiency in government-owned, residential, commercial, institutional, and industrial facilities in Quezon City. This includes the aligning of relevant local plans and processes such as improving the performance requirements of the local Green Building Code as well as the associated incentivisation of green, energy efficient measures supporting the transition to net zero carbon buildings.

Priority Action 2 (Actions to expand adoption of renewable energy RE in government-owned, private, and residential buildings): This refers to the actions to expand and increase renewable energy across different building sectors of Quezon City by supporting the solarization of these buildings, prefiguring appropriate solutions, and developing incentive schemes.

2.4 Background and Purpose

In 2020, the C40 Cities Finance Facility (CFF) supported the QC Government to prepare and implement an innovative solar PV project on city-owned buildings.¹ The project aimed to prepare QC to install grid-tied solar PV systems in 50 out of 146 public schools and the scalability of the project has an enormous potential for rapid growth, with an expected 5,000 city-owned public buildings and 96 schools to be solarised over the coming years. Through the CFF project, the QC Government created a Solar Technical Working Group to spearhead the project preparation activities for its solar PV projects. From 2021 to 2050, the electricity savings of the city is estimated to be at USD 750,266 annually and with GHG emissions reduction potential of 50,723 tCO₂e. The three-staged solarisation of city government-owned buildings is as follows: (a) 50 public schools and 3 public hospitals; (b) publicly-owned sports facilities or 29 covered basketball courts; and (c) all remaining 104 public schools. From 2031 to 2050, all new city-owned buildings will be designed and constructed to have renewable energy sources (i.e. solar PV). Among the transformative actions in the city’s energy and building sector (as mentioned in the Enhanced LCCAP), are to meet national renewable energy targets (contingent on the achievement of national targets) as well as to scale-up solarization in not only in government-owned buildings but also in commercial and residential buildings.

**Intended Outcome:** The overarching outcome of this technical assistance aims to support QC in increasing its uptake of RE by driving solar energy adoption in municipal, residential, commercial, and industrial buildings.

**Specific Output:** This work specifically determines the solar energy penetration (through currently installed capacities of rooftop solar, etc.) as well as the addressable, technical potential of market demand in the city. The results of this work will then be used later on (as evidence-based information) to catalyse an appropriate solar deployment strategy and roadmap for the city by assessing different measures and prefiguring solutions to increase uptake of solar energy in the buildings of QC.

**Supporting Priority Action 2:** This work will directly support the delivery of Priority Action 2 with the overall goal of helping reduce the city’s carbon emissions by 30% in 2030 and working towards net zero emissions by 2050. It is important to note that the Priority Action 1, through the current draft of the Green Building Code, is already supporting Priority Action 2 by way of including a minimum requirement for a certain size threshold of buildings to have renewable energy supply a certain percentage of their energy consumption.

### 2.5 Key Activities and Deliverables

The deliverables of this consultancy are as follows. Additional value: Bidders are more than welcome to propose additional activities/deliverables with a justification on how each can provide an added-value for the success of the work. Note on the timeline: Bidders are free to propose a revised timeline as long as the total duration is under 20 weeks. Preference will be given to bidders who can finish earlier.

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inception report and work plan agreed with C40</td>
<td>Week 1</td>
</tr>
<tr>
<td>2. Amount of solar energy penetration (includes the currently installed capacities of rooftop solar, etc.) that is quantified, analysed, and illustrated by building typologies of QC</td>
<td>Weeks 2-7</td>
</tr>
<tr>
<td>3. Size of addressable, potential rooftop solar market demand that is quantified, predicted until 2050, analysed, and illustrated by building typologies of QC</td>
<td>Weeks 8-13</td>
</tr>
<tr>
<td>4. Report encapsulating results of deliverables 2 and 3, including potential impacts and benefits (emissions reduction, green jobs, etc.)</td>
<td>Weeks 14-16</td>
</tr>
<tr>
<td>5. Final report encapsulating all deliverables and recommendation on the clustering of buildings which have the high potential to participate in Distributed Energy Resources (DER) networks</td>
<td>Weeks 17-20</td>
</tr>
</tbody>
</table>

**Details of Each Deliverable:**

1. Inception report and, if needed, a revised work plan agreed with C40
   - Prepare an inception report (Google Docs at 5 pages max) following project kickoff, listing all needs (data, information, maps, etc.) to be requested from QC.
   - A revised work plan with detailed planned activities (if needed)
## 2. Amount of solar energy penetration (includes the currently installed capacities of rooftop solar, etc.) that is quantified, analysed, and illustrated

- Use an innovative approach to determine the amount of solar energy penetration in QC. Bidders should propose a methodology appropriate to the scope and limited time of the consultancy work.
- Quantify the existing installed capacity of rooftop solar in terms of power (kW, MW, etc.) as well as their energy generation (kWh, MWh, etc.)\(^2\)
- Aggregate the results per building typology: city government-owned buildings, national government-owned buildings, commercial buildings, institutional buildings, industrial buildings, and residential buildings. Other groupings of buildings are allowed but subject to final approval of C40 during project kick-off.
- Report and illustrate the findings in Google Docs format and GIS mapping.

## 3. Size of addressable, potential rooftop solar market demand that is quantified, predicted until 2050, analysed, and illustrated

- Use an innovative approach to determine the potential rooftop solar market demand (technical potential) in QC.
- Quantify the potential rooftop solar market demand in buildings in terms of power (kW, MW, etc.) and their potential energy generation (kWh, MWh, etc.)
- Based on the technical potential of rooftop solar, provide a financial cost estimate on putting up these solar systems.
- Predict how this potential market demand will look like until 2050.
- Aggregate the results per building typology: city government-owned buildings, national government-owned buildings, commercial buildings, institutional buildings, industrial buildings, and residential buildings.
- Report and illustrate the findings in Google Docs format and GIS mapping.

## 4. Report encapsulating findings of deliverables 2 and 3, including potential impacts and benefits (emissions reduction, green jobs, etc.)

- Quantify the impacts (annual GHG emissions reduction and annual electricity cost savings) in terms of the existing solar energy penetration as well as the potential rooftop solar market demand.
- Estimate the benefits of putting up solar PVs (good & green jobs, job distribution, cost savings, etc.).

## 5. Final report encapsulating findings of all preceding deliverables and recommendation on the clustering of buildings which have the high potential to participate in Distributed Energy Resources (DER) networks

- Based on Deliverable 3 findings, recommend the clustering of buildings to participate in the DER of the Energy Regulatory Commission (ERC)\(^3\).
- Cluster accordingly: (a) at least 5 clusters for low-income residential buildings; (b) at least 5 clusters for commercial, institutional, and industrial buildings; (c) at least 5 clusters for city government-owned buildings; and (d) at least 3

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\(^2\) Bidders are welcome to propose how to obtain the energy generation from rooftop solar. Although this can easily be estimated by multiplying the installed power capacity by the effective sunshine hours in the city.

\(^3\) For the latest rules of ERC on DER, refer here: [https://www.erc.gov.ph/Files/Render/issuance/42201/](https://www.erc.gov.ph/Files/Render/issuance/42201/). An example to this is the clustering of buildings (end-user systems) which can participate in the on-grid DER (which are meant for both consumption and export to the grid that is currently capped at 30%). This on-grid DER is applicable to aggregating rooftop solar installations from different buildings, totalling 100 kW up to 1 MW.
Other Expectations: The chosen service provider is expected to collaboratively work with C40 by participating in frequent check-in meetings as well as with QC by presenting project updates. This is summarised as follows.

<table>
<thead>
<tr>
<th>Meeting / Presentation</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project kick-off with C40</td>
<td>Week 1</td>
</tr>
<tr>
<td>Project kick-off with QC and C40</td>
<td>Week 1</td>
</tr>
<tr>
<td>Check-in meetings with C40</td>
<td>TBD at project kick-off</td>
</tr>
<tr>
<td>Interim presentation #1 / progress update</td>
<td>At the end of week 7</td>
</tr>
<tr>
<td>Interim presentation #2 / progress update</td>
<td>At the end of week 13</td>
</tr>
<tr>
<td>Final presentation</td>
<td>At the end of week 20</td>
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<tr>
<td>Project close-out</td>
<td>If needed</td>
</tr>
</tbody>
</table>

Deliverables Requirements: The service provider would be required to submit a consolidated report for all outputs and deliverables specified from this engagement. This should include but not limited to data compilation, computation spreadsheets, modelling work, inputs and their sources, outputs of the model, and final recommendations. All items above must be submitted in a format agreed with C40 upon kick-off of engagement.

3. Requirement of Experiences and Qualifications

In the process, it is recommended that the selected service provider has the relevant experiences to deliver this work. Specific person specifications are as follows. Personnel may also demonstrate that they have ‘multiple skills’ encompassing the different requirements below:

1. At least one (1) team member with relevant experience in gathering building data (particularly in terms of solar energy)
2. At least one (1) team member with experience in doing data analytics and computation (particularly in terms of solar energy data, its emissions reduction potential, electricity cost savings, and solar PV benefits)
3. A project manager with relevant experience in handling a similar project with local government unit or private entities
4. Optional but desirable: Team member with demonstrable experience in working and collaborating with local government units in an urban setting
5. Optional but desirable: Team member with knowledge and/or experience in the national and local renewable energy regulations

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4 Clustering requirements may be subject to change. This may depend on the geographical boundary limitations by ERC and should be consulted with them and QC.
4. Proposal Guidelines

This Request for Proposal represents the requirements for an open and competitive process. Proposals will be accepted until the deadline for receiving offers stated in the RfP timeline in subchapters 5 and 9. Any proposals received after the set date and time will be rejected. The proposal should give C40 evaluators all the information they need to assess your bid. The Bidder shall submit:

A. Returnable Forms
1. Complete and duly signed the Proposal Submission Form.
2. Complete and duly signed of each personnel for Commitment Letter.
3. Provide list of key personnel who would be working and their resumes in the standard C40 CV Template

B. Technical Proposal
1. Company Profile – describing the nature of business and field of expertise.
2. Track Record – providing the list of clients for similar services as those required by C40, indicating description of contract scope, contract duration, contract value, contact references/list of referees (name, email address, and phone number).
3. Detailed methodology on how to execute the project by considering how to produce quality activities, tasks, and/or deliverables in a timely manner.
4. Risks you have identified and appropriate mitigation measures.
5. Proposed timeline of implementation.
6. Any additional support that is needed to make the project a success, including any inputs required from third parties or C40 staff.
7. Proposed working partnership with C40, including (as applicable) project governance and management, key personnel, key roles and responsibilities, and escalation procedure for issues.
8. Information about the organisation’s commitment to equity, diversity and inclusion and ethical alignment with C40.

C. Financial Proposal
It is imperative that you incorporate a comprehensive breakdown of cost components or provide details on the methodology used for cost calculation. This is essential to facilitate the evaluation of cost reasonableness. Please note: Proposals are to be written in English, saved in PDF format, and not exceed ten (10) pages of text. Please take note that failure to comply with the maximum number of pages for the proposal may unfortunately result in the proposal not being considered. Reference material may be placed in annexes.

Important Points:
1) Supplier Diversity
C40 is committed to supplier diversity and inclusive procurement through promoting equity, diversity, and inclusivity in our supplier base. We believe that by procuring a diverse range of suppliers, we get a wider range of experiences and thoughts from suppliers and thus are best able to deliver to the whole range of our diverse cities and the contexts that they operate within. We strongly encourage suppliers (corporations) that are diverse in size, age, nationality, gender identity, sexual orientation, majority owned and controlled by a minority group, physical or mental ability, ethnicity, and perspective to put forward a proposal to work with us. Feel welcome to refer to C40’s Equity, Diversity and Inclusion Statement as supplier diversity and inclusive procurement is one element of applying equity, diversity and inclusion to help the
world limit global heating to 1.5°C and build healthy, equitable and resilient communities.

2) Contract
Please note this is a contract for professional services and not a grant opportunity. Organisations unable to accept contracts for professional services should not submit bids. The work will be completed on the C40 Standard Service Provider Agreement. These terms and conditions are non-negotiable. Organisations unable to accept them as drafted should not submit bids in connection with this opportunity. If C40 is unable to execute a contract with the winner of this competitive process, we reserve the right to award the contract to the second highest Potential Supplier.

3) Subcontracting
If the organisation submitting a proposal needs to subcontract any work to meet the requirements of the proposal, this must be clearly stated. All costs included in proposals must be all-inclusive of any outsourced or contracted work. Any proposals which call for outsourcing or contracting work must include a name and description of the organisations being contracted.

4) Programme Management
C40 Cities Climate Leadership Group Inc., including the Head of Implementation (SEA), Regional Programme Manager (SEA), Technical Adviser for Energy and Buildings (SEA), Inclusive Climate Action and Engagement Senior Manager (SEA), Programme Coordination Manager (SEA), and City Adviser for Quezon City

5. RfP and Project Timeline

<table>
<thead>
<tr>
<th>RFP Timeline</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request for proposals sent out. Potential suppliers with an interest to submit a proposal are advised to register their interest by emailing <a href="mailto:cai_sea@c40.org">cai_sea@c40.org</a> to receive direct updates for this RFP (if any).</td>
<td>7 Jun 2024</td>
</tr>
<tr>
<td>Questions submitted to C40</td>
<td>7-21 Jun 2024</td>
</tr>
<tr>
<td>C40 responds to questions</td>
<td>7-21 Jun 2024</td>
</tr>
<tr>
<td>Deadline for receiving offers</td>
<td>24 Jun 2024</td>
</tr>
<tr>
<td>Clarification of offers &amp; evaluation of proposal</td>
<td>24 Jun - 2 Jul 2024</td>
</tr>
<tr>
<td>Selection decision made</td>
<td>9 Jul 2024</td>
</tr>
<tr>
<td>All potential suppliers notified of outcome</td>
<td></td>
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</tbody>
</table>
6. Proposal Evaluation Criteria

Proposals will be evaluated against the following criteria:

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Weighting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitability of method: Work plan demonstrates understanding of project requirements and mitigates risks</td>
<td>30%</td>
</tr>
<tr>
<td>Suitability of timeline</td>
<td>10%</td>
</tr>
<tr>
<td>Expertise and experience</td>
<td>30%</td>
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<tr>
<td>Value for money</td>
<td>20%</td>
</tr>
<tr>
<td>Equity and ethical alignment</td>
<td>10%</td>
</tr>
</tbody>
</table>

7. Project Budget

Costs should be stated as one-time costs. The budget should not exceed **USD 50,000**. All proposals must include proposed costs to completed tasks described in the project scope, including all VAT, taxes, tools, equipment, transportation, meals, accommodations, etc., as the budget above represents the total amount available. Proposals should include a budget breakdown of the tasks and deliverables.

Cost for workshops, if any, should **exclude the cost for catering and venue hire**, these costs will be covered by C40. All budgets are to be prepared in **USD**.

All costs incurred in connection with the submission of this RfP are non-refundable by C40.

Payments are made within 30 days of C40 approving an invoice and subject to satisfactory delivery of the services as approved by C40. Please note, C40 does not pay contractors more frequently than once per month.

Payment will be made based on deliverables and after satisfactory acceptance by C40 the services provided on the schedule below:

<table>
<thead>
<tr>
<th>No.</th>
<th>Deliverables</th>
<th>Timeline</th>
<th>Payment Breakdown</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inception report and work plan agreed with C40</td>
<td>Week 1</td>
<td>5%</td>
</tr>
<tr>
<td>2</td>
<td>Amount of solar energy penetration (includes the currently installed capacities of rooftop solar, etc.) that is quantified, analysed, and illustrated</td>
<td>Weeks 2-7</td>
<td>30%</td>
</tr>
<tr>
<td>3</td>
<td>Size of addressable, potential rooftop solar market demand that is quantified, predicted until 2050, analysed, and illustrated</td>
<td>Weeks 8-13</td>
<td>30%</td>
</tr>
</tbody>
</table>
### Report Encapsulation Schedule

<table>
<thead>
<tr>
<th>Week Range</th>
<th>Deliverable Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weeks 14-16</td>
<td>Report encapsulating findings of deliverables 2 and 3, including potential impacts and benefits (emissions reduction, green jobs, etc.)</td>
<td>15%</td>
</tr>
<tr>
<td>Weeks 17-20</td>
<td>Final Report encapsulating all deliverables and recommendation on the clustering of buildings which have the high potential to participate in Distributed Energy Resources (DER) networks</td>
<td>20%</td>
</tr>
</tbody>
</table>

### 8. C40 Policies

C40 expects third parties to be able to abide by these C40 policies.
- Non-Staff Code of Conduct Policy - [Here](#)
- Equity, Diversity, and Inclusion Policy - [Here](#)

### 9. Submissions

Each Potential Supplier must submit their proposal to:
- CAI SEA Contracts Manager
- [cai_sea@c40.org](mailto:cai_sea@c40.org)
- No later than 24 Jun 2024 - 14:00 GMT+8

In the course of preparing and submitting your proposal, it shall remain your responsibility to ensure that it is submitted into the designated email by the deadline.

All questions related to this RFP by potential bidders should be directed by email to [cai_sea@c40.org](mailto:cai_sea@c40.org). Anonymised responses to questions will be provided [here](#) when the Q&A period closes.

### Disclaimer

C40 will not accept any liability or be responsible for any costs incurred by Potential Suppliers in preparing a response for this RFP. Neither the issue of the RFP, nor any of the information presented in it, should be regarded as a commitment or representation on the part of C40 (or any of its partners) to enter into a contractual arrangement. Nothing in this RFP should be interpreted as a commitment by C40 to award a contract to a Potential Supplier as a result of this procurement, nor to accept the lowest price or any tender.