The Clean Energy Investment Accelerator (CEIA) is a public-private partnership initiative supported by the U.S. and German governments as well as other partners to drive deployment of clean energy solutions for large consumers in key emerging markets across the globe. The CEIA is jointly led by World Resources Institute, the U.S. National Renewable Energy Laboratory, and Allotrope Partners.

Along with other CEIA resources and tools (www.cleanenergyinvest.org/resources), this RFP Template and its supporting attachments are meant to enable the replication and scaling of renewable energy projects in commercial and industrial sectors. This is a working document informed by CEIA experiences to date in target markets and will be updated over time to capture additional lessons learned.

This RFP Template and the attachments are designed to serve as a starting point for organizations (project proponents) that are aggregating on-site commercial or industrial solar projects into a project pool on behalf of one or more buyer companies across multiple locations. This version of the RFP Template specifies that proposals include a bid for a turnkey solution, and allows for additional optional bids for Power Purchase Agreements (PPAs), leases or other financing mechanisms. This approach was used to accommodate a range of needs across a pool of buyer companies.

Project Proponents using this template and attachments will need to tailor them for their unique purposes, modifying content to align with desired financing models or offerings and adding specific information such as: proposal submission procedures, system specifications, site locations, key dates, local or domestic legal requirements, and other factors that vary across technologies, projects, countries, and circumstances.

Several placeholders where such project-specific data is needed are highlighted in red throughout the template. Italicized text provides examples or a description of text that could be inserted.

The CEIA team welcomes feedback on this RFP template as we continue to update our materials. Please provide written comments to info@cleanenergyinvest.org.

**Disclaimer:** While CEIA aspires to make useful information for advancing solar widely available and user friendly, this document is in no way meant to provide technical, legal, or financial advice or recommendations. Any company or individual using this RFP Template takes
full responsibility for their actions and absolves the CEIA and associated organizations of any liability.

CONTENTS

Template: REQUEST FOR PROPOSALS..................................................................................4
Appendix A: Proposal Evaluation Guidelines........................................................................28
Appendix B: RFP Scoresheet..............................................................................................33
CEIA is jointly implemented by NREL, Allotrope Partners, and WRI.

CEIA is supported by a range of public, private and philanthropic partners.
Template: REQUEST FOR PROPOSALS
FOR
COMMERCIAL AND INDUSTRIAL SOLAR PHOTOVOLTAIC (PV)
PROJECT PORTFOLIO

Issued by: [Project Proponent]

Project partner: [Name]

[Date]

Responses due by: [Time, Time zone, Date]

To: [email address]

Request for Proposals (RFP)
Commercial and Industrial Solar PV Project Portfolio
[Location]
[Date]

RFP CONTENTS
1. Background .......................................................................................................................... 6
2. RFP Process .......................................................................................................................... 7
3. Project Sites Description ..................................................................................................... 9
4. RFP Submission Requirements .......................................................................................... 9
5. Evaluation of Submittals ...................................................................................................... 13
6. List of Attachments and Digital Files ................................................................................ 14
   Attachment 1: Bid Submission Letter Template and Checklist ........................................... 15
   Attachment 2: Proposal Form ............................................................................................... 16
   Attachment 3: Site Data ....................................................................................................... 25

Confidentiality Statement

[Insert confidentiality statement]
1. Background

Include information such as: Name of company or organization facilitating the RFP; Year Established; Experience in field; Professional Certifications.

Include information such as: Name of company or organization supporting the project proponent in facilitating the RFP; Year Established; Experience in field; Professional Certifications; Experience in projects.

For example:

Project proponent is seeking bids for the design, procurement of materials, permitting, installation, testing and commissioning, and associated documentation, financing, maintenance and warranties for solar PV systems to be located at the respective Buyers’ properties. All of the Buyers’ sites must be included in each proposal received for this RFP, unless the bidding company can make a strong case as part of the proposal for not including one or more sites.

It is anticipated that the aggregate size of projects in this portfolio can provide economies of scale that result in more competitive proposals (i.e. lower prices) for the Buyers group. Systems within the scope of this RFP may be purchased outright by the Buyers or may be financed, owned, and operated by the Bidders under a Power Purchase Agreement (PPA) or operating lease. (Note: PPAs may not be allowed by law in all jurisdictions.)

To participate in this RFP, bidding firms must demonstrate the ability to perform the work set forth in this document and are expected to have significant experience successfully performing comparable work in [relevant country or jurisdiction].

In response to this RFP, Bidders should prepare and submit:

1. Bid Submission Letter (see Attachment 1);
2. Narrative Proposal as described in Section 4 below, containing:
   a. Company Profile;
   b. Proposed system designs and expected annual electricity production for each site;
   c. Cost proposal narrative for each site/system;
   d. Warranty and Operations & Maintenance Plan;
3. Proof of Corporate License; and
4. Proposal Form (see Attachment 2).

Further details about these submission requirements are included in Section 4. Proposals will be evaluated based on company experience and the quality and pricing of their offerings, as outlined in Section 5.

2. RFP Process

The following is the RFP process timetable, subject to change at [the Project Proponent’s] and Buyers’ sole discretion:

A. [Date] : RFP Issued
B. [Date] : Bidders Confirm Site Visit Attendance
C. [Date] : Bidders Conduct On-Site Evaluation
D. [Date] : Deadline for Bidders Submittal of Questions
E. [Date] : Deadline for Submittal of Final Proposals
F. [Date] : Proposal Evaluations / Interviews
G. [Date] : Select and Notify Qualified Bidders
H. [Date] : Contract Negotiations Begin

A. Site Walks
A list of anticipated dates and times for on-site technical evaluations is listed below, and all RFP respondents are highly encouraged to participate. In addition to Bidders’ experience and expertise, information gathered during the site walks and provided in this RFP are expected to be sufficient for Bidders to assess the roof, structural, and electrical service point conditions, so as to propose optimally designed systems for the respective sites.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Address</th>
<th>Date/ Time</th>
</tr>
</thead>
<tbody>
<tr>
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Bidders that will be participating in the site walks shall send an email to [Insert: Project Proponent's email for contact] to confirm their planned attendance by [Date].
B. Requests for Information & Questions
Bidders may submit questions and requests for information regarding this RFP only via the online form located here: [link to online questionnaire] no later than [Date]. Questions will be addressed and all responses will be issued via Addenda to all qualified bidders. Any attempt by a Bidder to contact any other persons at the [Project Proponent] or Buyers in regard to this RFP may result in disqualification of the Bidder.

C. RFP Due Date
Bidders shall submit to [the Project Proponent] via [email address], no later than [time, timezone, date], an electronic submission of the completed RFP documents in [required language]. Where noted, all responses shall utilize spreadsheets, documents, and online submission forms provided in this RFP.

D. Proposal Interviews
After bids have been submitted and evaluated, [the Project Proponent] may recommend finalists to Buyers, and then facilitate Buyers in carrying out interviews with selected finalists. The purpose of this interview is to confirm information provided in proposals submitted by the Bidder(s), and to allow Bidder(s) to respond to the questions from Buyers, provide clarifications, and expand on the information provided in their proposals.

Upon completion of interviews and proposal evaluations, the Buyers may issue a Bidder an Intent to Award. The Bidder receiving the Intent to Award may then enter into individual contract negotiations with each of the Buyers.

E. Award
Any contract(s) for this Project may be awarded to the qualified Bidders(s) able to effectively negotiate terms for the project(s) that provide the “best value” to the Buyers as determined solely by the Buyers and their agents. Buyers reserve the right to reject any or all proposals or any part of an individual proposal and to otherwise determine which, in their sole judgment, best meets their needs. If the selected Bidder seeks to add costs to the proposed project after selection or is unable to effectively execute contracts with the Buyers, alternate Bidders may be contacted in an effort to develop the proposed projects.

Please note, this document and the RFP process does not constitute a guarantee by [the Project Proponent] or any associated parties to purchase a system or enter into binding negotiations or contracts with any firms that respond to this RFP. Any and all costs associated with a firm providing a bid in response to this RFP are the sole responsibility of the company bidding. Bidders submitting responses to this RFP do so with the understanding that the Buyers do not guarantee the award of any contract or work. Buyers reserve the right, in their sole and absolute discretion, to abolish, refresh, amend, or extend the scope or limitations of this Project.
3. Project Sites Description

[The Project Proponent] is seeking technical and financial bids from qualified energy companies to provide engineering, procurement, permitting, and construction services related to the installation of grid-tied solar PV systems at the sites listed below.

*Based on preliminary site evaluations and electrical use data analysis for each site listed,* the total combined project pool is expected to be [estimated aggregated capacity]. The table below provides average monthly and minimum hourly daytime demand estimates for each of the sites. The total area listed in the table may not all be suitable for solar installations. Bidders are encouraged to participate in the site walks to obtain accurate, “installable” area figures for each site. System size ranges are provided as a guide. Bidders are welcome to provide designs that are outside of these ranges with accompanying drawings. Bids should attempt to cover as much of this usage as possible while providing positive economic returns for the Buyer within the constraints of net-metering and other relevant local and national policies.

Further details are provided in the Attachment 3, “Site Data.” *Building and electrical diagrams are available [provide a specified attachment or online location].*

*[The Project Proponent]* and all Buyers have endeavored to ensure the information included in the RFP is accurate and complete, but errors and omissions may have inadvertently occurred. *[The Project Proponent]* and prospective Buyers make no representations with respect to the sites, including their suitability. Bidders shall take full and sole responsibility for conducting any necessary due diligence in assessing the sites and their conditions in order to develop accurate proposals.

4. RFP Submission Requirements

Bidders are requested to provide the following proposal information in response to the RFP:

1. **Bid Submission Letter** (see Attachment 1);
2. **Narrative Proposal** as described below containing:
   a. **Company Profile** summarizing history, experience, and capability of the company that illustrates capacity to complete the project on time and on budget;
   b. **Proposed System Designs** and expected annual electricity production for each site;
   c. **Cost Proposal Narrative** for outright purchase, PPA, lease, or other financial options for each site/system;
   d. **Warranty and Operations & Maintenance Plan**;
3. **Proof of Corporate License**; and
4. **Completed Proposal Form**, using Attachment 2, summarizing information from the Narrative Proposal on design, costs, warranties, and reference projects.

Further information on the list above:

**1. Bid Submission Letter**
Please see Attachment 1 for the template and checklist.

**2 (a). Company Profile**
Please provide a high-level summary that includes a description of your company and project team, proposed PV systems and purchasing and financing options for this RFP, and description of relevant experience with similar projects. References can be included here and in the Proposal Form (Attachment 2). *(Note: Proponents may wish to ask bidders to provide information on the gender balance of their management team or other priority indicators to ensure bidders uphold fair and equitable practices.)*

**2 (b). Proposed System Design and Production Estimates**

The proposed solar energy system must abide by all electrical, construction, safety, and other laws governing [relevant country or jurisdiction], as well as permitting and interconnection requirements of authorities having jurisdiction and the local utilities.

Bidder shall provide preliminary system designs for each site that includes:

- Site overview with module layout, including proposed azimuth and tilt (slope) of each PV array.
- Product specification sheets for proposed racking, modules, inverters, and monitoring.
- Product warranty information for proposed racking, modules, and inverter applicable for the site conditions.
- *10 year* full system warranty (parts and labor) or a proposed warranty and maintenance plan detailing steps that will be taken by the Bidder to ensure product and workmanship warranties/ guarantees/ insurance, and any associated costs to the Buyer.
- Annual production estimates in kilowatt-hours (kWh) and associated production annual guarantee, if available.
- Preliminary Single-line electrical diagram (Optional)

Each proposed design should clearly specify system size (KW / DC STC: Standard Test Conditions), azimuth(s) of PV array(s), tilt, and shading considerations, as well as kWh of production for year one and planned annual degradation rates. Production modeling of the PV systems can be performed using PVSYST or equivalent modeling software using TMY3 weather data for the location closest to the site. The simulations shall accurately simulate energy production.
for proposed system layouts, sizes, and orientation. It is critical that PV production models are accurate with all methodology and assumptions described. The Buyer will independently verify production models are accurate to the designed systems and utilize simulation results for economic evaluations. Bidder shall be responsible for updating the production models each time sufficient changes are made to the proposed system designs that may impact production.

Bidders shall avoid excessive shading on modules to the extent possible. Where shading losses are encountered, Bidders should perform a shading analysis justifying the basis for their design, including any proposed tree removal, and explaining why shading does not create an adverse performance and/or economic impact.

If a production or performance guarantee is included or available with the bid, it should be sent with proposal materials, and should specify the amount of Expected Annual Contract Quantity (energy guaranteed per year) and compensation rates for insufficient production for the entire term of the agreement.

2 (c). Cost Proposal Narrative
Bidders should include a written cost proposal for each site that includes at a minimum a (Turnkey) outright purchase price. Proposed power purchase agreements (PPAs), leases, and other financial options are also welcome, but not required, and should be submitted in writing as part of the Project Cost Proposal.

The Turnkey scope of services ‘quoted’ in the bid should be for the provision of all tasks required to design, engineer, permit, fabricate, deliver, install, operate, and maintain the PV system(s). The scope shall also include, but not be limited to, securing all permits and approvals from governing agencies, all labor, taxes, services, interconnection and environmental studies and costs, and equipment necessary to produce a fully operational solar PV system. Any costs that are not included in the bid must be clearly identified by the Bidder, in the cover letter or on a single page within the bid package submittal, labeled “Additional Costs.”

Power purchase agreements, leases, or other similar quotes should be the Bidder’s best offer. At a minimum, proposals that include a PPA or lease option should include:

a. Price per kWh in year one, for example: [currency] per kWh (0.00/kWh);
b. Rate of annual price increase (%), if applicable;
c. Year one total kWh of production expected & annual degradation rate;
d. Length of PPA/Lease contract, e.g. 15 years, 20 years;
e. Amount of down payment (if requested);
f. Acceptable currencies of associated financial transactions; and
g. Renewable Energy Credit (REC) ownership stipulations, if applicable.
Currency: All prices should be provided in US dollars, and can include [relevant currency] at an exchange fixed rate of $1 USD = XXXX.XX currency.

2 (d). Warranty and Operations & Maintenance Plan
All proposed systems should include a [e.g., 10] year full system warranty that includes the cost of all parts and labor. These costs should be included in the turnkey purchase price. If the proposed outright purchase option provided by a bidder does not include a [e.g., 10] year warranty at no additional cost to the stated Turnkey price, bidders should provide additional price quotes for Operation and Maintenance (O&M) for the entire system for all applicable years [e.g., 1-10 and 10-20]. These O&M quotes should include all anticipated maintenance and repair work, as well as equipment replacement, including, but not limited to, inverter replacement, in order to keep the system operational and performing for 20 years. Alternatively, Bidders may indicate in your submission (cost proposal narrative) the length of the full system (parts and labor) warranty being offered and state that “no additional O&M services will be provided thereafter”.

For roof-based systems, include a description of the roof warranty (e.g. where penetrations are made) that will be provided, the length in years, and assignment of responsibilities.

The Bidders’ O&M service program should provide the following minimum requirements:

- Annual onsite system inspection,
- System testing (operating current of each electrical string),
- Identification of unique site characteristics (e.g., heat, dust, humidity, water access) that could impact panel efficiency, and lay out the plan for routine cleaning and preventive maintenance,
- Repair and/or replacement of defective parts (all equipment and labor), and
- System performance monitoring and historical data access for customer via secure website.

Bidders may be asked to provide evidence that the proposed technology and equipment would meet or exceed all currently applicable and proposed safety and interconnection standards in [relevant country or jurisdiction]. All equipment components must be UL or equivalently certified and meet existing facility structural and fire safety requirements. All system designs should comply with all applicable federal and local laws and regulations, including any electrical, environmental, building, and safety codes and ordinances.

Optional: Bidders are requested (but not required) to submit a purchase contract with a fixed price, and if offered, a lease or PPA contract that includes:

- Fixed completion price;
- PPA or Lease buy-out price for duration of contract each year;
● Restrictions on the ability of the EPC contractor to claim extensions of time and additional cost;
● Liquidated damages for both delay and performance;
● Output and performance guarantees;
● Insurance information;
● Security and guarantees from the EPC contractor (or its parent company); and
● Single point of responsibility resting with the EPC contractor.

Note: Shortlisted Bidders may be required to provide the information listed above following initial proposal evaluations.

3. Proof of Corporate License / List of Subcontractors
Only Proposers with a Civil Contractor License, an Electrical Contractor License recognized as sufficient for conducting such business by the Government of [country of project] and other relevant authorities (local/ national) and who have been approved through this process will be eligible to contract for the Project. Bidders that do not possess any of these Licenses must include a list of Subcontractor with such Licenses.

4. Proposal Form
In addition, Bidders should complete the Proposal Form (Attachment 2). The Tabs to be completed by Bidders are labeled: Company Profile, References, Project Cost, Warranties/ O&M, and Proposed System Design for each site. This spreadsheet should serve as a summary of information from the full RFP submission sections listed above.

5. Evaluation of Submittals
The RFP evaluation is for the purpose of determining which Bidders are deemed responsible, qualified, and capable of performing the proposed work, and to determine which technical proposals offer the best value to Buyers. Qualifications of applicants will be reviewed and evaluated by [The Project Proponent] team and Buyers based upon the submitted documents and any other information available. Buyers retain the sole discretion to determine issues of compliance and to determine whether a Bidder is responsive and responsible.

Bids will be scrutinized to assure that prices are highly competitive, reflect the benefits of pooled equipment purchases across all sites, and are consistent with market conditions. A bid's competitiveness may be adversely affected if the prices fall significantly below or above current market conditions. The Buyer’s decision will be based on the evaluation of several factors including, but not limited to the following:

Qualifications & Experience (25%)
● Strength of qualifications and experience of proposing firms and key personnel
- Strength of project references, customer satisfaction, completion of projects equivalent to those included in this RFP, and success in maintaining project budgets and schedules
- Financial stability and proof of funding for these projects with proven track record

**Technical Proposal (25%)**
- Preliminary system design is appropriate for site needs, accounts for site conditions, and is optimized to take advantage of the conditions conferred by *net-metering policy* or other relevant policies
- Projected energy production is realistic and appropriate for each facility
- Module, inverter, racking, and monitoring components are high quality, available, and have strong track record and warranty coverage

**Project Costs (40%)**
- For direct purchase costs:
  - Operations and maintenance cost for first 10 years of system life, plus 10 additional years
  - Financial analysis of total system costs and benefits over 10 years
- For PPA/lease costs of energy over specified term:
  - Operations & Maintenance costs for first 10 years of system life, plus 10 additional years
  - Financial analysis of total system costs and benefits over 10 years

**Proposal Attributes (10%)**
Proposal is complete and addresses requirements and preferences stated in the RFP, addresses local workforce preferences, and demonstrates experience working with commercial projects.

**6. List of Attachments**

- Attachment 1: Bid Submission Letter Template and Checklist (*document format type, e.g. Word, PDF*)
- Attachment 2: Proposal Form (Excel spreadsheet)
- Attachment 3: Site Data (*Proponents may want to share detailed site data as well as building and electrical diagrams when available, placing related documents in a digital format online with limited access for qualified Bidders. This allows for fewer emails with attachments and assures that all Bidders have access to the same information, which can be updated as needed.*)
Attachment 1: Bid Submission Letter Template and Checklist

Please review, sign, and submit this letter with your company’s response to this RFP.

Dear Project Proponent,

We are pleased to present our proposal for your review as part of the Request for Proposals (RFP) dated __________. Our company has worked in solar installations since __________. The projects we are proposing meet or exceed the technical and legal requirements needed to complete this project on time and within budget.

Our bid includes:

☐ Narrative Proposal containing: a company profile, system design, cost proposal narrative, and warranty and O&M plan
☐ Proof of Corporate License
☐ Proposal Form

Thank you for the opportunity to participate in this RFP. If you have any questions, please feel free to get in contact with me directly.

Sincerely,

Bidding Company Representative’s Name: __________________________________________
Position: ___________________________________________
Company: ___________________________________________
Date: ____________________________
Attachment 2: Proposal Form
Attachment 3: Site Data
Appendix A: Proposal Evaluation Guidelines
Appendix B: RFP Scoresheet