**REQUEST FOR QUOTATION (RFQ)**

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| **RFQ Reference: RFQ/LBY/RFF/2022/002**<br><br>**Supply and Installation of Solar Power systems in Awal village (South of Libya)** | Date: **21 January 2022** |

**SECTION 1: REQUEST FOR QUOTATION (RFQ)**

UNDP kindly requests your quotation for the provision of goods, works and/or services as detailed in Annex 1 of this RFQ.

This Request for Quotation comprises the following documents:

Section 1: This request letter

Section 2: RFQ Instructions and Data

Annex 1: Schedule of Requirements

Annex 2: Quotation Submission Form

Annex 3: Technical and Financial Offer

When preparing your quotation, please be guided by the RFQ Instructions and Data. Please note that quotations must be submitted using Annex 2: Quotation Submission Form and Annex 3 Technical and Financial Offer, by the method and by the date and time indicated in Section 2. It is your responsibility to ensure that your quotation is submitted on or before the deadline. Quotations received after the submission deadline, for whatever reason, will not be considered for evaluation.

Thank you and we look forward to receiving your quotations.

Issued by:

Signature: _____

Name: **Shohrukh Abdulloev**

Title: **Procurement Specialist**

Date: **January 20, 2022**

## SECTION 2: RFQ INSTRUCTIONS AND DATA

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| **Introduction** | Bidders shall adhere to all the requirements of this RFQ, including any amendments made in writing by UNDP. This RFQ is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement<br><br>Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this RFQ.<br><br>UNDP reserves the right to cancel the procurement process at any stage without any liability of any kind for UNDP, upon notice to the bidders or publication of cancellation notice on UNDP website. |
| **Deadline for the Submission of Quotation** | **January 31, 2022, 16.00 hours, Tripoli time**<br>If any doubt exists as to the time zone in which the quotation should be submitted, refer to http://www.timeanddate.com/worldclock/. |
| **Method of Submission** | Quotations must be submitted as follows:<br>☒ Dedicated Email Address<br><br>Bid submission address: **tenders.ly@undp.org**<br><br>▪ File Format: PDF Format<br>▪ File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard.<br>▪ All files must be free of viruses and not corrupted.<br>▪ Max. File Size per transmission: 5MB<br>▪ Mandatory subject of email: **RFQ/LBY/RFF/2022/002 - Supply and Installation of Solar Power systems in Awal village (South of Libya)** Multiple emails must be clearly identified by indicating in the subject line "email no. X of Y", and the final "email no. Y of Y.<br>▪ It is recommended that the entire Quotation be consolidated into as few attachments as possible. |
| **Cost of preparation of quotation** | UNDP shall not be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process. |
| **Supplier Code of Conduct, Fraud, Corruption,** | All prospective suppliers must read the United Nations Supplier Code of Conduct and acknowledge that it provides the minimum standards expected of suppliers to the UN. The Code of Conduct, which includes **principles on labour, human rights, environment and ethical conduct** may be found at: https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct<br>Moreover, UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors to observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_and_investigation.html#anti |
| **Gifts and Hospitality** | Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches, dinners or similar. In pursuance of this policy, UNDP: (a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question; (b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract. |

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| **Conflict of Interest** | UNDP requires every prospective Supplier to avoid and prevent conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, specifications, cost estimates, and other information used in this RFQ. Bidders shall strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified.<br><br>Bidders must disclose in their Bid their knowledge of the following: a) If the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel who are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving goods and/or services under this RFQ.<br><br>The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this RFQ, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Bid. |
| **General Conditions of Contract** | Any Purchase Order or contract that will be issued as a result of this RFQ shall be subject to the General Conditions of Contract<br>Select the applicable GTC:<br>☒ General Terms and Conditions / Special Conditions for Contract.<br>☒ General Terms and Conditions for de minimis contracts (services only, less than $50,000)<br>☐ General Terms and Conditions for Works<br>Applicable Terms and Conditions and other provisions are available at UNDP/How-we-buy |
| **Special Conditions of Contract** | ☒ Cancellation of PO/Contract if the delivery/completion is delayed by [30 days]<br>☐ Others [pls. specify] |
| **Eligibility** | A vendor who will be engaged by UNDP may not be suspended, debarred, or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. Vendors are therefore required to disclose to UNDP whether they are subject to any sanction or temporary suspension imposed by these organizations. Failure to do so may result in termination of any contract or PO subsequently issued to the vendor by UNDP.<br><br>It is the Bidder's responsibility to ensure that its employees, joint venture members, sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP.<br>Bidders must have the legal capacity to enter a binding contract with UNDP and to deliver in the country, or through an authorized representative. |
| **Currency of Quotation** | Quotations shall be quoted **in United States Dollars (US$)** |
| **Joint Venture, Consortium or Association** | If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or Association for the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association jointly and severally, which shall be evidenced by a duly notarized Agreement among the legal entities, and submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture, Consortium or Association.<br>Refer to Clauses 19 – 24 under Solicitation policy for details on the applicable provisions on Joint Ventures, Consortium or Association. |

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| **Only one Bid** | The Bidder (including the Lead Entity on behalf of the individual members of any Joint Venture, Consortium or Association) shall submit only one Bid, either in its own name or, if a joint venture, Consortium or Association, as the lead entity of such Joint Venture, Consortium or Association.<br>Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following:<br>a) they have at least one controlling partner, director or shareholder in common; or b) any one of them receive or have received any direct or indirect subsidy from the other/s; or<br>b) they have the same legal representative for purposes of this RFQ; or<br>c) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Bid of, another Bidder regarding this RFQ process.<br>d) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under its name as lead Bidder: or<br>e) some key personnel proposed to be in the team of one Bidder participates in more than one Bid received for this RFQ process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Bid. |
| **Duties and taxes** | Article II, Section 7, of the Convention on the Privileges and Immunities provides, inter alia, that the United Nations, including UNDP as a subsidiary organ of the General Assembly of the United Nations, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs restrictions, duties, and charges of a similar nature in respect of articles imported or exported for its official use. All quotations shall be submitted net of any direct taxes and any other taxes and duties, unless otherwise specified below:<br>All prices must:<br>☐ be inclusive of VAT and other applicable indirect taxes<br>☒ be exclusive of VAT and other applicable indirect taxes. |
| **Language of quotation** | English<br>Including documentation including catalogues, instructions and operating manuals. |
| **Documents to be submitted** | Bidders shall include the following documents in their quotation:<br>☒ Annex 2: Quotation Submission Form duly completed and signed.<br>☒ Annex 3: Technical and Financial Offer duly completed and signed and in accordance with the Schedule of Requirements in Annex 1.<br>☒ Cover Letter: A cover letter that lists the lead contact person with contact information.<br>☒ Registration certificate and local registrations, licenses. |
| **Quotation validity period** | Quotations shall remain valid for<br>**90 days** from the deadline for the Submission of Quotation. |
| **Price variation** | No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted at any time during the validity of the quotation after the quotation has been received. |
| **Partial Quotes** | ☒ Not permitted<br>☐ Permitted. |
| **Alternative Quotes** | ☒ Not permitted<br>☐ Permitted<br>If permitted, an alternative quote may be submitted only if a conforming quote to the RFQ requirements is submitted. Where the conditions for its acceptance are met, or justifications are clearly established, Click or tap here to enter text. reserves the right to award a contract based on an alternative quote. If multiple/alternative quotes are being submitted, they must be clearly marked as "Main Quote" and "Alternative Quote" |
| **Payment Terms** | ☒ 100% within 30 days after receipt of goods, works and/or services and submission of payment documentation.<br>☐Other Click or tap here to enter text. |

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| **Conditions for Release of Payment** | ☒ Passing Inspection<br>☐ Passing all Testing [specify standard, if possible]<br>☐ Completion of Training on Operation and Maintenance [specify no. of trainees, and location of training, if possible<br>☒ Written Acceptance of Goods, based on full compliance with RFQ requirements<br>☐ Others [pls. specify] |
| **Contact Person for correspondence, notifications, and clarifications** | **E-mail address: procurement.ly@undp.org**<br>Attention: Quotations shall not be submitted to this address but to the address for quotation submission above. Otherwise, offer shall be disqualified.<br>Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers. |
| **Site Visit** | An organized site visit, subject to government movement restrictions, is arranged on January 26, 2022, at 10:00 hours, Libya time, at below mentioned place:<br><br>**Awal village (South of Libya)**<br>Focal Contacts:<br>Saeid ZEKRY Field Coordinator Cell: 218 912 125 637; +218 919 324 563<br>Ahmed Albukhari Site Engineer Cell: +218 925 790 070 |
| **Clarifications** | Requests for clarification from bidders will not be accepted any later than 03 day before the submission deadline. |
| **Evaluation method** | ☒The Contract or Purchase Order will be awarded to the lowest price substantially compliant offer |
| **Evaluation criteria** | 1. Minimum of three (03) years of experience in similar nature of services/works.<br>2. Registration certificate, permission/registration from relevant Libyan Government body to operate in Libya.<br>3. Capacity to undertake the project. The company should have completed as prime contractor at least one similar contract, including the electrical works (inclusive of solar power grid expertise) with the minimum value of $50,000. Copies of past contracts and completion certificates (handover of work) must be provided.<br>4. Qualification and suitability of the key personnel proposed for the contract including their previous experience with same type of assignment:<br>• Electrical Engineer/Project Manager - shall have a University Degree in Electrical engineering and minimum 5 years of relevant work experience<br>• Electrician - with a diploma and minimum of 3 years of relevant work experience<br>5. Earliest Delivery /shortest lead time.<br>6. Full warranty for 2 years for the equipment proposed.<br>7. Bidder shall submit the Manufacture testing certificate, country of origin, certified characteristics, test performance curves.<br>8. Full compliance with all requirements as specified in Annex 1<br>9. Full acceptance of the General Conditions of Contract |
| **Right not to accept any quotation** | UNDP is not bound to accept any quotation, nor award a contract or Purchase Order |
| **Right to vary requirement at time of award** | At the time of award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25% ) of the total offer, without any change in the unit price or other terms and conditions. |

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| **Type of Contract to be awarded** | ☒ Purchase Order<br>☐ Contract Face Sheet (Goods and-or Services) (this template is also utilised for Long-Term Agreement) and if an LTA will be signed, specify the document that will trigger the call-off. E.g., PO, etc.)<br>☐ Contract for Works<br>☐ Other Type/s of Contract [pls. specify] |
| **Expected date for contract award.** | 01 February 2021 |
| **Publication of Contract Award** | UNDP will publish the contract awards valued at USD 100,000 and more on the websites of the CO and the corporate UNDP Web site. |
| **Policies and procedures** | This RFQ is conducted in accordance with UNDP Programme and Operations Policies and Procedures |
| **UNGM registration** | Any Contract resulting from this RFQ exercise will be subject to the supplier being registered at the appropriate level on the United Nations Global Marketplace (UNGM) website at www.ungm.org. The Bidder may still submit a quotation even if not registered with the UNGM, however, if the Bidder is selected for Contract award, the Bidder must register on the UNGM prior to contract signature. |

**ANNEX 1 : SCHEDULE OF REQUIREMENTS**

**Scope of Works**

Supply and Installation of Solar Power systems in Awal village (South of Libya) as detailed in below Annex2.

The system is designed to cover the Essential loads in Awal for the following places: -

1) **05 kwp for 6 houses, In South Awal, there are families who are in dire need of electricity.**
2) **05 kwp for the Water desalination plant.**
3) **15 kwp for the main Mosque and the Popular Café.**
4) **10 kwp for the village Mosque and the Koranic school.**
5) **15 kwp for the Well water pumps system.**
6) **10 kwp for the Handicrafts and Municipal Council**.

And the system will be grid interactive connected with battery backup system, which will allow many power sources options.

Usage priority is given to solar energy. The electrical system will import from the solar power and supply surplus electricity to the batteries, the batteries can be charged from Grid or PV power,

The Contractor shall perform a detailed engineering site survey to acquire all necessary information for preparation of design documentation and discuss technical issues with representatives of all relevant stakeholders.

Contractor shall submit shop drawings for all architectural, civil, electrical and a complete photovoltaic solar system works, including a single line diagram showing all the components of the PV system, DC and AC distribution boards, PV Arrays lay out and battery backup systems connections and cables, wires cross section for all the system to be approved by the Engineer before executing the work.

Contractor shall submit the catalogues of each component showing the requested specifications stated at the bill of quantity.

The contractor shall submit the Manufacture testing certificate, country of origin, certified characteristics, test performance curves, spare parts regular (as recommended by manufacturer, maintenance manuals and manufacturer's warranty for each component of the system.

As-built drawings and writing setting parameters shall be submitted after handing over the work.

Upon completion of the installation, the contractor shall organize an on-site training program for operation and maintenance purpose involving nominated employer's staff. Such a program shall be carried out during the commissioning phase. The cost of the training shall be deemed to have been included in the tendered rates.

The price includes all builders' works, making good and reinstatement including necessary materials and workmanship as well as removal of unwanted materials to dump sites approved by the engineer to complete the job successfully.

All the electrical works shall be executed according to IEEE Standards, specifications and supervisor Engineer instructions.

The contractor shall arrange for all required safety measures, signs, and protections around the sites.

**ANNEX 2: QUOTATION SUBMISSION FORM**

*Bidders are requested to complete this form, including the Company Profile and Bidder's Declaration, sign it and return it as part of their quotation along with Annex 3: Technical and Financial Offer. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.*

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| Name of Bidder: | Click or tap here to enter text. | |
| RFQ reference: | **RFQ/LBY/RFF/2022/002** | Date: Click or tap to enter a date. |

**Company Profile**

| Item Description | Detail |
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| Legal name of bidder or Lead entity for JVs | Click or tap here to enter text. |
| Legal Address, City, Country | Click or tap here to enter text. |
| Website | Click or tap here to enter text. |
| Year of Registration | Click or tap here to enter text. |
| Legal structure | Choose an item. |
| Are you a UNGM registered vendor? | ☐ Yes ☐ No If yes, insert UNGM Vendor Number |
| Quality Assurance Certification (e.g., ISO 9000 or Equivalent) *(If yes, provide a Copy of the valid Certificate):* | ☐ Yes ☐ No |
| Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? *(If yes, provide a Copy of the valid Certificate):* | ☐ Yes ☐ No |
| Does your Company have a written Statement of its Environmental Policy? *(If yes, provide a Copy)* | ☐ Yes ☐ No |
| Does your organization demonstrate significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues *(If yes, provide a Copy)* | ☐ Yes ☐ No |

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| Is your company a member of the UN Global Compact | ☐ Yes ☐ No |
| Bank Information | Bank Name: Click or tap here to enter text.<br>Bank Address: Click or tap here to enter text.<br>IBAN: Click or tap here to enter text.<br>SWIFT/BIC: Click or tap here to enter text.<br>Account Currency: Click or tap here to enter text.<br>Bank Account Number: Click or tap here to enter text. |

| **Previous relevant experience: 3 contracts** | | | | |
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| **Name of previous contracts** | **Client & Reference Contact Details including e-mail** | **Contract Value** | **Period of activity** | **Types of activities undertaken** |
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**Bidder's Declaration**

| Yes | No | |
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| ☐ | ☐ | **Requirements and Terms and Conditions:** I/We have read and fully understand the RFQ, including the RFQ Information and Data, Schedule of Requirements, the General Conditions of Contract, and any Special Conditions of Contract. I/we confirm that the Bidder agrees to be bound by them. |
| ☐ | ☐ | I/We confirm that the Bidder has the necessary capacity, capability, and necessary licenses to fully meet or exceed the Requirements and will be available to deliver throughout the relevant Contract period. |
| ☐ | ☐ | **Ethics**: In submitting this Quote I/we warrant that the bidder: has not entered into any improper, illegal, collusive or anti-competitive arrangements with any Competitor; has not directly or indirectly approached any representative of the Buyer (other than the Point of Contact) to lobby or solicit information in relation to the RFQ; has not attempted to influence, or provide any form of personal inducement, reward or benefit to any representative of the Buyer. |
| ☐ | ☐ | I/We confirm to undertake not to engage in proscribed practices, , or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we have read the United Nations Supplier Code of Conduct :https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct and acknowledge that it provides the minimum standards expected of suppliers to the UN. |
| ☐ | ☐ | **Conflict of interest:** I/We warrant that the bidder has no actual, potential, or perceived Conflict of Interest in submitting this Quote or entering a Contract to deliver the Requirements. Where a Conflict of Interest arises during the RFQ process the bidder will report it immediately to the Procuring Organisation's Point of Contact. |
| ☐ | ☐ | **Prohibitions, Sanctions:** I/We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium members or subcontractors or suppliers for any part of the contract is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists and have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. |
| ☐ | ☐ | **Bankruptcy**: I/We have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future. |

| Yes | No | |
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| ☐ | ☐ | **Offer Validity Period:** I/We confirm that this Quote, including the price, remains open for acceptance for the Offer Validity. |
| ☐ | ☐ | I/We understand and recognize that you are not bound to accept any Quotation you receive, and we certify that the goods offered in our Quotation are new and unused. |
| ☐ | ☐ | By signing this declaration, the signatory below represents, warrants and agrees that he/she has been authorised by the Organization/s to make this declaration on its/their behalf. |

Signature: _____

Name: Click or tap here to enter text.

Title: Click or tap here to enter text.

Date: Click or tap to enter a date.

**ANNEX 3: TECHNICAL AND FINANCIAL OFFER -Goods**

*Bidders are requested to complete this form, sign it and return it as part of their quotation along with Annex 2 Quotation Submission Form. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.*

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| Name of Bidder: | Click or tap here to enter text. | |
| RFQ reference: | **RFQ/LBY/RFF/2022/002** | Date: Click or tap to enter a date. |

**Technical Offer**

*Provide the following:*

- *a brief description of your qualification, capacity and expertise that is relevant to the Scope of Specs.*

| No | Description/Specifications | Compliance YES/NO | Please fill-in |
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| **A.** | **Supply, install, test and commission 5 kw solar power system for 6 houses in South Awal** | | |
| A.1 | **Solar panels 5 kwp**<br>Supply, install, connect and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 5 KWp. The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | | |
| A.2 | **Inverters - 5 KW**<br>Supply, install, connect and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220V AC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | | |

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| A.3 | **Deep Cycle Battery**<br>Supply, install, connect and operate 12V, 250AH gel Battery, 1.4 KWh,8 for each house. The batteries must provide high-quality and achieving superior performance, the manufacturing date must be new and not more than 6 months, suitable for every type of applications especially for solar renewable energy, designed Service Life 10 years with low internal resistance, designed to be deeply discharged. The Battery should provide benefits of being maintenance free, case flame retardant & non-hazardous. | | |
| A.4 | **PV Mounting structure**<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | | |
| A.5 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like electrical boards, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions. | | |
| A.6 | DC Inverter 12000 BTU split air conditioners:<br>Supply, install, test and commission split air conditioners unit wall type split unit similar to YORK, Carrier, Haier brand or equally approved. The AC units shall be according to the below specifications:<br>Capacity: 12000 BTU, DC Inverter compressor, washable screen anti-bacterial filtration, ambient temp range T3 (-10 to +53), power supply source 220V /1PH /50HZ, digital, multi-function LCD remote.The price shall include one year warranty period and all associated electrical and AC material and workmanship, such | | |

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| | as waterproof outdoor unit, insulated copper pipes, drainpipes, galvanized steel holders. Etc., complete; in accordance with the manufacturer's instructions and the Engineer's approvals. | | |
| B | **Supply, install, test and commission 5 kw solar power system for The Water desalination plant** | | |
| B.1 | **Solar panels 5 kwp**<br>Supply, install, connect and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 5 KWp. The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | | |
| B.2 | **Inverters - 5 KW**<br>Supply, install, connect, and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220VAC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | | |
| B.3 | **PV Mounting structure**<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed | | |

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| | structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | | |
| B.4 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like Earthing System For (AC Side and PV Structure), electrical Board, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions | | |
| C | **Supply, install, test and commission 15 Kw solar power system for the main Mosque and the Popular Cafe** | | |
| C.1 | **Solar panels 15 kwp**<br>Supply, install, connect, and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 15 KWp. The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | | |
| C.2 | **Inverters - 5 KW**<br>Supply, install, connect and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220VAC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | | |
| C.3 | **Deep Cycle Battery**<br>Supply, install, connect, and operate 12V, 250AH gel Battery, 1.4 KWh, the batteries must provide high-quality and achieving superior performance, the manufacturing date must be new and not more than 6 months, suitable for every type of applications especially for solar renewable energy, designed Service Life 10 years with low internal resistance, designed to be deeply discharged. The Battery should provide benefits of being maintenance free, case flame retardant & non-hazardous. | | |
| C.4 | PV Mounting structure<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of | | |

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| | selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | | |
| C.5 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like Earthing System For (AC Side and PV Structure), electrical boards, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions | | |
| C.6 | **DC Inverter 18000 BTU split air conditioners**<br>Supply, install, test and commission split air conditioners unit wall type split unit similar to YORK, Carrier, Haier brand or equally approved. The AC units shall be according to the below specifications:<br>Capacity: 18000 BTU, DC Inverter compressor, washable screen anti-bacterial filtration, ambient temp range T3 (-10 to +53), power supply source 220V /1PH /50HZ, digital, multi-function LCD remote.<br>The price shall include one year warranty period and all associated electrical and AC material and workmanship, such as waterproof outdoor unit, insulated copper pipes, drainpipes, galvanized steel holders. Etc., complete; in accordance with the manufacturer's instructions and the Engineer's approvals. | | |
| D. | **Supply, install, test and commission 10 kw solar power system for the village Mosque and the Koranic school** | | |
| D.1 | **Solar panels 10 kwp**<br>Supply, install, connect and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 10 KWp. The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | | |
| D.2 | **Inverters - 5 KW** | | |

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| | Supply, install, connect and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220VAC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | | |
| D.3 | **Deep Cycle Battery**<br>Supply, install, connect and operate 12V, 250AH gel Battery, 1.4 KWh, the batteries must provide high-quality and achieving superior performance, the manufacturing date must be new and not more than 6 months, suitable for every type of applications especially for solar renewable energy, designed Service Life 10 years with low internal resistance, designed to be deeply discharged. The Battery should provide benefits of being maintenance free, case flame retardant & non-hazardous. | | |
| D.4 | **PV Mounting structure**<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | | |
| D.5 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like Earthing System For (AC Side and PV Structure), electrical boards, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions | | |
| D.6 | **DC Inverter 18000 BTU split air conditioners**<br>Supply, install, test and commission split air conditioners unit wall type split unit similar to YORK, Carrier, Haier brand or equally approved. The AC units shall be according to the below specifications:<br>Capacity: 18000 BTU, DC Inverter compressor, washable screen anti-bacterial filtration, ambient temp range T3 (-10 to +53), power supply source 220V /1PH /50HZ, digital, multi-function LCD remote. | | |

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| | The price shall include one year warranty period and all associated electrical and AC material and workmanship, such as waterproof outdoor unit, insulated copper pipes, drainpipes, galvanized steel holders. Etc., complete; in accordance with the manufacturer's instructions and the Engineer's approvals. | | |
| **E.** | **Supply, install, test and commission 15 kw solar power system for The Well water pumps system** | | |
| E.1 | **Solar panels 15 kwp**<br>Supply, install, connect and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 15 KWp. The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | | |
| E.2 | **Inverters - 15 KW**<br>Supply, install, connect, and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220VAC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | | |
| E.3 | **Deep Cycle Battery (Just for night lighting)**<br>Supply, install, connect, and operate 12V, 250AH gel Battery, 1.4 KWh, the batteries must provide high-quality and achieving superior performance, the manufacturing date must be new and not more than 6 months, suitable for every type of applications especially for solar renewable energy, designed Service Life 10 years with low internal resistance, designed to be deeply discharged. The Battery should provide benefits of being maintenance free, case flame retardant & non-hazardous. | | |
| E.4 | **PV Mounting structure**<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site | | |

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| | conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | | |
| E.5 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like Earthing System For (AC Side and PV Structure), electrical boards, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions | | |
| **F.** | **Supply, install, test and commission 10 kw solar power system for The Handicrafts and Municipal Council** | | |
| F.1 | **Solar panels 10kwp**<br>Supply, install, connect and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 10 KWp . The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | | |
| F.2 | **Inverters - 5 KW**<br>Supply, install, connect and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220VAC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | | |
| F.3 | **Deep Cycle Battery**<br>Supply, install, connect and operate 12V, 250AH gel Battery, 1.4 KWp, the batteries must provide high-quality and achieving superior performance, the manufacturing date must be new and not more than 6 months, suitable for every type of applications especially for solar renewable energy, designed Service Life 10 years with low internal resistance, designed to be deeply discharged. The Battery should provide benefits of being maintenance free, case flame retardant & non-hazardous. | | |
| F.4 | **PV Mounting structure**<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical | | |

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| | supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | | |
| F.5 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like Earthing System For (AC Side and PV Structure), electrical boards, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions | | |
| F.6 | **DC Inverter 18000 BTU split air conditioners**<br>Supply, install, test and commission split air conditioners unit wall type split unit similar to YORK, Carrier, Haier brand or equally approved. The AC units shall be according to the below specifications:<br>Capacity: 18000 BTU, DC Inverter compressor, washable screen anti-bacterial filtration, ambient temp range T3 (-10 to +53), power supply source 220V /1PH /50HZ, digital, multi-function LCD remote.<br>The price shall include one year warranty period and all associated electrical and AC material and workmanship, such as waterproof outdoor unit, insulated copper pipes, drainpipes, galvanized steel holders. Etc., complete; in accordance with the manufacturer's instructions and the Engineer's approvals. | | |

**Financial Offer:**

**Currency of Quotation: United States Dollars**

| **A.** | **Supply, install, test and commission 5 kw solar power system for 6 houses in South Awal** | | | | |
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| **No** | **Description** | **Unit** | **Qty** | **Unit Price USD** | **Total Amount in USD** |
| A.1 | **Solar panels 5 kwp**<br>Supply, install, connect, and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 5 KWp. The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays, and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | Set | 6 | | |
| A.2 | **Inverters - 5 KW**<br>Supply, install, connect, and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220V AC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | No. | 6 | | |
| A.3 | **Deep Cycle Battery**<br>Supply, install, connect, and operate 12V, 250AH gel Battery, 1.4 KWh,8 for each house. The batteries must provide high-quality and achieving superior performance, the manufacturing date must be new and not more than 6 months, suitable for every type of applications especially for solar renewable energy, designed Service Life 10 years with low internal resistance, designed to be deeply discharged. The Battery should provide benefits of being maintenance free, case flame retardant & non-hazardous. | No. | 48 | | |

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| A.4 | **PV Mounting structure**<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | Set | 6 | | |
| A.5 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like electrical boards, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions. | Set | 6 | | |
| A.6 | DC Inverter 12000 BTU split air conditioners:<br>Supply, install, test and commission split air conditioners unit wall type split unit similar to YORK, Carrier, Haier brand or equally approved. The AC units shall be according to the below specifications:<br>Capacity: 12000 BTU, DC Inverter compressor, washable screen anti-bacterial filtration, ambient temp range T3 (-10 to +53), power supply source 220V /1PH /50HZ, digital, multi-function LCD remote.<br>The price shall include one year warranty period and all associated electrical and AC material and workmanship, such as waterproof outdoor unit, insulated copper pipes, drainpipes, galvanized steel holders. Etc., complete; in accordance with the manufacturer's instructions and the Engineer's approvals. | No. | 6 | | |
| B | **Supply, install, test and commission 5 kw solar power system for The Water desalination plant** | | | | |
| **No** | **Description** | **Unit** | **Qty** | **Unit Price in USD** | **Total in USD** |
| B.1 | **Solar panels 5 kwp**<br>Supply, install, connect, and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 5 KWp. The item Includes supply, install &connect the following: | Set | 1 | | |

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| | • Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | | | | |
| B.2 | **Inverters - 5 KW**<br>Supply, install, connect, and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220VAC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | No. | 1 | | |
| B.3 | **PV Mounting structure**<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | L.S. | 1 | | |
| B.4 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like Earthing System For (AC Side and PV Structure), electrical Board, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions | L.S. | 1 | | |
| C | **Supply, install, test and commission 15 Kw solar power system for the main Mosque and the Popular Cafe** | | | | |
| **No** | **Description** | **Unit** | **Qty** | **Unit Price in USD** | **Total in USD** |

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| **C.1** | **Solar panels 15 kwp**<br>Supply, install, connect, and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 15 KWp. The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | Set | 1 | | |
| C.2 | **Inverters - 5 KW**<br>Supply, install, connect, and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220VAC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | Set | 3 | | |
| C.3 | **Deep Cycle Battery**<br>Supply, install, connect, and operate 12V, 250AH gel Battery, 1.4 KWh, the batteries must provide high-quality and achieving superior performance, the manufacturing date must be new and not more than 6 months, suitable for every type of applications especially for solar renewable energy, designed Service Life 10 years with low internal resistance, designed to be deeply discharged. The Battery should provide benefits of being maintenance free, case flame retardant & non-hazardous. | No. | 8 | | |
| C.4 | PV Mounting structure<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The | L.S. | 1 | | |

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| | mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | | | | |
| C.5 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like Earthing System For (AC Side and PV Structure), electrical boards, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions | L.S. | 1 | | |
| C.6 | **DC Inverter 18000 BTU split air conditioners**<br>Supply, install, test and commission split air conditioners unit wall type split unit similar to YORK, Carrier, Haier brand or equally approved. The AC units shall be according to the below specifications:<br>Capacity: 18000 BTU, DC Inverter compressor, washable screen anti-bacterial filtration, ambient temp range T3 (-10 to +53), power supply source 220V /1PH /50HZ, digital, multi-function LCD remote.<br>The price shall include one year warranty period and all associated electrical and AC material and workmanship, such as waterproof outdoor unit, insulated copper pipes, drainpipes, galvanized steel holders. Etc., complete; in accordance with the manufacturer's instructions and the Engineer's approvals. | No. | 3 | | |
| D. | **Supply, install, test and commission 10 kw solar power system for the village Mosque and the Koranic school** | | | | |
| **No** | **Description** | **Unit** | **Qty** | **Unit Price USD** | **Total Amount in USD** |
| D.1 | **Solar panels 10 kwp**<br>Supply, install, connect and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 10 KWp . The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | Set | 1 | | |
| D.2 | **Inverters - 5 KW**<br>Supply, install, connect, and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220VAC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet | Set | 2 | | |

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| | connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | | | | |
| D.3 | **Deep Cycle Battery**<br>Supply, install, connect, and operate 12V, 250AH gel Battery, 1.4 KWh, the batteries must provide high-quality and achieving superior performance, the manufacturing date must be new and not more than 6 months, suitable for every type of applications especially for solar renewable energy, designed Service Life 10 years with low internal resistance, designed to be deeply discharged. The Battery should provide benefits of being maintenance free, case flame retardant & non-hazardous. | No. | 2 | | |
| D.4 | **PV Mounting structure**<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | L.S. | 1 | | |
| D.5 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like Earthing System For (AC Side and PV Structure), electrical boards, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions | L.s. | 1 | | |
| D.6 | **DC Inverter 18000 BTU split air conditioners**<br>Supply, install, test and commission split air conditioners unit wall type split unit similar to YORK, Carrier, Haier brand or equally approved. The AC units shall be according to the below specifications:<br>Capacity: 18000 BTU, DC Inverter compressor, washable screen anti-bacterial filtration, ambient temp range T3 (-10 to +53), power supply source 220V /1PH /50HZ, digital, multi-function LCD remote. | No. | 2 | | |

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| | The price shall include one year warranty period and all associated electrical and AC material and workmanship, such as waterproof outdoor unit, insulated copper pipes, drainpipes, galvanized steel holders. Etc., complete; in accordance with the manufacturer's instructions and the Engineer's approvals. | | | | |
| **E.** | **Supply, install, test and commission 15 kw solar power system for The Well water pumps system** | | | | |
| **No** | **Description** | **Unit** | **Qty** | **Unit Price USD** | **Total Amount in USD** |
| E.1 | **Solar panels 15 kwp**<br>Supply, install, connect, and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 15 KWp. The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | Set | 1 | | |
| E.2 | **Inverters - 15 KW**<br>Supply, install, connect, and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220VAC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | Set | 3 | | |
| E.3 | **Deep Cycle Battery (Just for night lighting)**<br>Supply, install, connect and operate 12V, 250AH gel Battery, 1.4 KWh, the batteries must provide high-quality and achieving superior performance, the manufacturing date must be new and not more than 6 months, suitable for every type of applications especially for solar renewable energy, designed Service Life 10 years with low internal resistance, designed to be deeply discharged. The Battery should provide benefits of being maintenance free, case flame retardant & non-hazardous. | No. | 2 | | |
| E.4 | **PV Mounting structure**<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 | L.S. | 1 | | |

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| | degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | | | | |
| E.5 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like Earthing System For (AC Side and PV Structure), electrical boards, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions | L.s. | 1 | | |
| **F.** | **Supply, install, test and commission 10 kw solar power system for The Handicrafts and Municipal Council** | | | | |
| **No** | **Description** | **Unit** | **Qty** | **Unit Price USD** | **Total Amount in USD** |
| F.1 | **<u>Solar panels 10kwp</u>**<br>Supply, install, connect and operate Mono Crystalline or Polycrystalline Photovoltaic Solar Modules with all material needed to have complete job ready for installing high quality PV modules with total arrays capacity to achieve 10 KWp . The item Includes supply, install &connect the following:<br>• Waterproof PV junction boxes IP65 for each array including DC Fuses, DC LTL, bus bars, terminals, ducts or trays, supports &labels suitable to the PV arrays loads.<br>• Solar DC cables appropriately sized to connect the PV solar cells together and to the J.B and from J.B to the inverter directly to have a complete operational circuit with all conduits, clamps, trays and cable end terminations which shall be DC plug and socket connectors. The DC cables must be sized in accordance with the installation requirements applicable on site, the allowable voltage drop for DC cables between PV Arrays and inverter less than 1%. | Set | 1 | | |
| F.2 | **<u>Inverters - 5 KW</u>**<br>Supply, install, connect, and operate 1-phase inverter, Grid Input Voltage: 220VAC, Input frequency: 50HZ, Output Voltage: 220VAC, Output Frequency: 50Hz, Pure Sine Wave MPPT. with data communication unit with Ethernet connection, (monitoring and controlling unit). (Type is SMA or equivalent). The inverter with must be suited to any PV module configuration and depending on the system design and installation proposed and for the future extended also. | Set | 2 | | |

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| | The DC max power input rating should be equal or more than 5 KW of the PV modules capacity at standard test condition. | | | | |
| F.3 | **Deep Cycle Battery**<br>Supply, install, connect and operate 12V, 250AH gel Battery, 1.4 KWp, the batteries must provide high-quality and achieving superior performance, the manufacturing date must be new and not more than 6 months, suitable for every type of applications especially for solar renewable energy, designed Service Life 10 years with low internal resistance, designed to be deeply discharged. The Battery should provide benefits of being maintenance free, case flame retardant & non-hazardous. | No. | 4 | | |
| F.4 | **PV Mounting structure**<br>Supply and install Module mounting structure from hot galvanized steel Angles foundation suitable to the dimension of selected PV modules and PV numbers, the mounting provides a fixed inclination of the modules 26-30 degree with vertical supports, plates, screws and casting concrete foundations B250 (0.4*0.4*0.4) m3 for each leg, The PV structure must covered with approved type of Epoxy painting with approved colour with painting layers approved types with all testing, the structure includes bracing and double hot galvanized angles for dividers. The mounting structures and the foundations must be designed structurally to be suitable to withstand all static loads (weight of modules, wind loads etc.) that might occur according to the Site conditions. The mounting structure components are bonded together to guaranty potential equalization.<br>All works and materials must be according to drawings, specifications and supervisor instructions and approval. | L.S. | 1 | | |
| F.5 | Supply, testing, and commission all related of the electrical works in the site work. The price shall include supplying and installation of all needed material and works and provide all missing parts like Earthing System For (AC Side and PV Structure), electrical boards, MTS, missing cables, circuit breakers (DC/AC). junction box, cable tray, PVC conduits, fix all the system defects to ensure safe operation, (unless paid separately in the BoQ items) all in accordance with the requirement of the relevant Standards and the engineer's instructions | L.s. | 1 | | |
| F.6 | **DC Inverter 18000 BTU split air conditioners**<br>Supply, install, test and commission split air conditioners unit wall type split unit similar to YORK, Carrier, Haier brand or equally approved. The AC units shall be according to the below specifications:<br>Capacity: 18000 BTU, DC Inverter compressor, washable screen anti-bacterial filtration, ambient temp range T3 (-10 to +53), power supply source 220V /1PH /50HZ, digital, multi-function LCD remote.<br>The price shall include one year warranty period and all associated electrical and AC material and workmanship, such as waterproof outdoor unit, insulated copper pipes, drainpipes, galvanized steel holders. Etc., complete; in | No. | 2 | | |

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| | accordance with the manufacturer's instructions and the Engineer's approvals. | | | | |
| | **Grand Total of A+B+C+D+E+F**<br>**Including installations and all incurred works** | | | | |

**Compliance with Requirements**

| | You Responses | | |
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| | Yes, we will comply | No, we cannot comply | If you cannot comply, pls. indicate counter - offer |
| Delivery Lead Time | ☐ | ☐ | Click or tap here to enter text. |
| Validity of Quotation | ☐ | ☐ | Click or tap here to enter text. |
| Payment terms | ☐ | ☐ | Click or tap here to enter text. |
| Other requirements [pls. specify] | ☐ | ☐ | Click or tap here to enter text. |

| I, the undersigned, certify that I am duly authorized to sign this quotation and bind the company below in event that the quotation is accepted. | |
|---|---|
| *Exact name and address of company*<br>Company NameClick or tap here to enter text.<br>Address: Click or tap here to enter text.<br>Click or tap here to enter text.<br>Phone No.:Click or tap here to enter text.<br>Email Address:Click or tap here to enter text. | Authorized Signature:<br>Date:Click or tap here to enter text.<br>Name:Click or tap here to enter text.<br>Functional Title of Authorised Signatory:Click or tap here to enter text.<br>Email Address: Click or tap here to enter text. |