|  |
| --- |
| Description: Description: Description: NRC logo**NATIONAL INVITATION TO TENDER** NRC Ethiopia funded by Swedish International Development Cooperation Agency (SIDA) and OTHER EU ORGANIZATIONS is seeking to engage suppliers to provide **Supply & Installation of Solar Water Pumping Solution**. **ITB reference: PTN/2020/003****TENDER DOCUMENTS**The Invitation to Bid (ITB) documents will provide all relevant information in detail, specifications, quantities, delivery location, date, time, and place for the submission of the Tender, and can be obtained either:**From** the NRC website: <https://www.nrc.no/procurement/>**Or** bidders can pick-up in person the ITB documents from Logistics Department from Monday to Friday 08:30 to 15:00 at the following locations:* Addis Ababa Country Office – 5th Floor, Adika Building, Woreda 03, Bole Sub-city, Addis Ababa
* Jigjigga Area Office – Kebele 10, Jigjigga City, Fafan Zone
* Dollo Ado Area Office – (Near WFP, DRC & World Vision), Kebele 03 (Yubo), Woreda Dolo Ado, Dolo Ado Town

**Closing date for submitting the tender is** **31 March 2020 at 16:30**. All times are local and follow the Gregorian calendar. All bids submitted after that date will be rejected. **TENDER PROCESS.** All interested and eligible firms are requested to submit their offers by hand **and not by email** in sealed envelopes to the address specified in the tender pack. Submissions can be made by DHL or any other express courier. Note that all bidders are required to sign a bid submission register upon submission. The register can be signed by a company representative or courier. Enquiries need to be made in writing via email et.tenders@nrc.no |

# SECTION 2: Bid Data Sheet (Envelope 1)

1. **BACKGROUND DATA**

This bid is issued by Norwegian Refugee Council Ethiopia and is open to local bidders only. Any **correspondence** can be addressed the following addresses:

By email:

et.tenders@nrc.no

By post:

**NRC Addis Ababa Country Office**

5th Floor

Adika Building (Besides Saro Maria Hotel)

Woreda 03

Bole Sub-city

Addis Ababa

Ethiopia

Google map: <https://goo.gl/maps/8PuX44Dnmqq>

The ITB **documents can be collected** from Logistics Department from Monday to Friday 08:30 to 15:00 at the following locations:

|  |  |
| --- | --- |
| **NRC Addis Ababa Country Office**5th FloorAdika Building (Besides Saro Maria Hotel)Woreda 03Bole Sub-cityAddis Ababa[https://goo.gl/maps/8PuX44Dnmqq](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgoo.gl%2Fmaps%2F8PuX44Dnmqq&data=02%7C01%7Cdaniel.bettega%40nrc.no%7C152d97a014f24dab4f5008d6faf90c84%7C3f86d1b42c6b4b1ab2ae6f5e950bca1e%7C0%7C0%7C636972344917369390&sdata=4uZl6xnlJeey0kPuyEDIzFIWoDpG%2FjnJHgvrv8rSnN8%3D&reserved=0)**Jigjigga Area Office**(In front of IOM guest house)Kebele 10Jigjigga CityFafan Zone [https://goo.gl/maps/hPbQs3mgLsgFzhbg7](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgoo.gl%2Fmaps%2FhPbQs3mgLsgFzhbg7&data=02%7C01%7Cdaniel.bettega%40nrc.no%7C152d97a014f24dab4f5008d6faf90c84%7C3f86d1b42c6b4b1ab2ae6f5e950bca1e%7C0%7C0%7C636972344917389378&sdata=NAe2ehNSKAlHnU9H9%2BEJJzGMIn5xwJhIM8KZ7bBJ0AY%3D&reserved=0) | **Dollo Ado Area Office**(Near WFP, DRC & World Vision)Kebele 03 (Yubo)Woreda Dolo AdoDolo Ado Town[https://goo.gl/maps/4Ucp6esRSzs](https://eur01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgoo.gl%2Fmaps%2F4Ucp6esRSzs&data=02%7C01%7Cdaniel.bettega%40nrc.no%7C152d97a014f24dab4f5008d6faf90c84%7C3f86d1b42c6b4b1ab2ae6f5e950bca1e%7C0%7C0%7C636972344917389378&sdata=Gmp9OGd6jpu5aD1ltNbuk%2F3pE8tAsEghUm2vdxQbBdY%3D&reserved=0) |

1. **SUMMARY OF SUPPLIES**

**Lot 1:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **N.** | **Item\*** | **Quantity\*\*** | **UoM** | **Delivery to**  |
|  | Renewable Solar Inverter (RSI) 22 KW, 3 phase solar pump controller | Pcs | 1 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | Multi-crystalline Solar module 24v DC (Module rating should at least be 250W). | Watts | 25,500 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | Solar panel structure  | Lump sum | 1 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | DC Breaker | PCs | 1 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | Lockable Metal box for solar pump controller and breaker  | Pcs | 1 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | Surge Protector | Pcs | 1 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | Water level relay with relay base (complete with adapters)  | Pcs | 1 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | 6mm2 single core cable for DC lines | Meter | 150 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | 16mm2 x 1core earth cable  | Meter | 20 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | Extra cable from Generator to solar panel area  | Meter | 30 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | Earth rod c/w clamp | Pcs | 1 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | Change over switch for connection with the generator during lower sunshine hours  | Pcs | 1 | Dollo Ado Woreda, Liben Zone; Somali Regional State |
|  | Equipment transportation to site up to treatment center.  | Lump sum  | 1 | Dollo Ado Woreda, Liben Zone;  |
|  | Installation of solar panels, electrical connection, Hybridization, testing, commissioning and training pump operators.  | Lump sum | 1 | Dollo Ado Woreda, Liben Zone; Somali Regional State |

**Lot 2 - SUMMARY OF SUPPLIES:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **N.** | **Item\*** | **Quantity\*\*** | **UoM** | **Delivery to**  |
|  | RSI inverter , 7.5kw, with lockable well ventilated enclosure ( Technical specs as LOT 1) | 1 | Pcs | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | Surge Protector  | 1 | Pcs | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | Other installation materials and accessories/equipment  | 1 | Lump sum | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | DC breakers or PV Disconnect 440-40-6 | 1 | Set | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | 6mm2 single core cable for DC line  | 100 | Meter | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | 16mm2 single core cable for earthing  | 20 | Meter | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | Cable Splicing kit (Set) | **1** | Set | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | Earthling rod C/W clamp | 1 | Pc | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | Supply and erect a panel support structure  | 1 | Set | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | Change over switch (set) | 1 | Pc | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | Well probe complete with cable waterproof cable from the borehole to the RSI, should be compatible with supplied RSI. | 1 | Pc | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | Multi-crystalline soar module 24v DC ( minimum per module, 250w) | 10,850 | Watts | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | Transportation to the site | 1 | Lump sum | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |
|  | Installation, testing and Commissioning | 1 | Lump sum | Gadhwyn Kebele, Erer Woreda, Siti Zone, Somali Regional State |

\* Please refer to the detailed specifications in section 5

\*\* Note that these are estimates and are subject to variations

1. **BID GUARANTEE (BID SECURITY BOND)**

All bidders are required to submit a bid guarantee (Cashier’s Payment Order – CPO) valued at **ETB 100,000**. Any bid received that does not meet this requirement will automatically be declared ineligible and will not be considered further. The bid security amount is fixed regardless of the value of the bid or the number of lots applied to.

1. **MAXIMUM TIME-FRAME FOR DELIVERY**

All bidders are expected to detail the lead time for all items. Failure to provide this information will be a disadvantage for the bid.

1. **SCHEDULE & DEADLINE FOR SUBMISSION**

The deadline for submission of bids is as follows. **Late bids will not be accepted.**

|  |  |  |
| --- | --- | --- |
| **Stage** | **Date\*** | **Time\*\*** |
| Invitation to Bid release | 15 March 2020 | 08:30 |
| Deadline for request for any clarifications from NRC | 27 March 2020 | 16:30 |
| Last date on which clarifications are issued by NRC | 30 March 2020 | 16:30 |
| Deadline for submission | 31 March 2020 | 16:30 |

\*Please note all dates are provisional dates and NRC reserves the right to modify this schedule.

\*\*All times are in the local time of Ethiopia

1. **MANNER OF SUBMISSION:**

Please submit your bids in accordance with the requirements detailed below:

Complete **bid documents must be submitted in TWO sealed envelopes that** shall be hand delivered at the following address not later than the due date indicated above. Upon submission a bid register must be signed by the bidder or their representative. Bids delivered by express couriers are allowed and will be asked to sign on the bid register.

**NRC Addis Ababa Country Office**

5th Floor

Adika Building

Africa Avenue

Bole Sub-city

Addis Ababa

Ethiopia

Google map: <https://goo.gl/maps/8PuX44Dnmqq>

**Envelope 1 (Eligibility and technical)**

* Section 1: Cover letter
* Section 2: Bid Data Sheet
* Section 3: General terms & conditions
* Section 4: Ethical Standards
* Section 5: Service specification
* Section 6: Capacity and lead time
* Section 7: Bidding form & declaration
* Business license registration certificate (Commercial registration)
* Tax Identification Number (TIN) registration certificate (Tax registration)
* Value Added Tax (VAT) registration certificate (if VAT is to be charged)
* Bid guarantee (Cashier’s Payment Order – CPO)
* Proof of past experience/ references (Copies of contracts/ POs/ completion certificates/ etc.)

**Envelope 2 (Financial)**

* Section 8: Priced offer

**BIDDER’S CHECKLIST:**

|  |  |  |
| --- | --- | --- |
| **Description** | **To be filled by bidder** | **To be filled by NRC bid committee** |
|  | **Included?** | **Present & complete?** | **Comments** |
| **Step/ document to be submitted with tender** | **Yes** | **No** | **Yes** | **No** |  |
| Complete tender package delivered before the deadline specified in Section 2 - Bid Data Sheet - **Compulsory** |  |  |  |  |  |
| Section 5 –Technical description of the goods – completed, signed & stamped – **Compulsory**  |  |  |  |  |  |
| Section 6 – Production capacity and lead time – completed, signed and stamped – **Compulsory**  |  |  |  |  |  |
| Section 7 – Bidding Form, company profile & declaration – completed, signed & stamped – **Compulsory** |  |  |  |  |  |
| Section 8 – Pricing proposal (in separate envelope) - signed & stamped – **Compulsory** |  |  |  |  |  |
| Additional Information on Specifications of Goods – completed, signed & stamped (if applicable) |  |  |  |  |  |
| **Supporting documents** |  |  |  |  |  |
| Copy of renewed business license – **Compulsory** |  |  |  |  |  |
| Copy of TIN registration – **Compulsory** |  |  |  |  |  |
| Copy of VAT registration – **Compulsory** |  |  |  |  |  |
| Past contracts/ POs as proof of experience – **Compulsory** |  |  |  |  |  |
| Bid bond/ security (CPO/ bank guarantee) with a value of ETB 100,000 – **Compulsory**  |  |  |  |  |  |

|  |  |  |
| --- | --- | --- |
| **To be filled in by NRC bid committee only** | **Eligible** | **Ineligible** |
| **Outcome of administrative eligibility check.** |  |  |

Company name and stamp: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# SECTION 3: General terms & conditions (Envelope 1)

1. **SCOPE OF BID**
	1. The bid is based on the scope of the assignment as determined in Bid Data Sheet (Section 2). The instruction to bidders should be read in conjunction with the Bid Data Sheet.
	2. The bid is open to bidders registered in Ethiopia on condition that they meet the eligibility criteria
2. **CORRUPT PRACTICES**
	1. Norwegian Refugee Council requires Employees, Bidders and Service Providers, to observe standards of ethics during procurement and the execution of contracts. In pursuit of this, Norwegian refugee Council defines, for the purposes of this provision, the terms set forth below as follows:
		1. “Corrupt practice” includes the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
		2. “Fraudulent practice” includes a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Norwegian Refugee Council, and includes collusive practices among Bidders prior to or after bid submission designed to establish bid prices at artificial, non-competitive levels and to deprive the Norwegian Refugee Council of the benefits of free and open competition;

In any case where fraud or corruption is identified, NRC will:

* reject any bids where the Bidder has engaged in corrupt or fraudulent practices in competing for the Contract;
* remove bidding service providers who engage in fraudulent or corrupt practices, from our prequalified list
* liaise with District Officials to report if fraudulent or corrupt practices are identified
* terminate contract
	1. Any communications between a Bidder and the Norwegian Refugee Council related to matters of alleged fraud or corruption must be made in writing and addressed to the Country Director in Ethiopia
1. **ELIGIBLE BIDDERS**
	1. A Bidder shall meet the following criteria to be eligible to participate in NRC procurement of services:
		1. the bidder must provide of:
			1. Copy of renewed business license registration certificate
			2. Copy of Tax Identification Number (TIN) registration certificate
			3. Copy of Value Added Tax (VAT) registration certificate (if VAT is to be charged)
			4. Bid guarantee (Casher’s Payment Order – CPO)
		2. the bidder has submitted all documents requested in Condition 13 of the current Section
		3. the bidder is not subject to sanctions imposed by the United Nations, European Union (or any of its member states) or United States of America
		4. the bidder, at the time of bid, is not:
			1. insolvent;
			2. in receivership;
			3. bankrupt; or
			4. being wound up
		5. The bidder’s business activities have not been suspended;
		6. The bidder is not the subject of legal proceedings for any of the circumstances in 3.1.4; and
		7. The bidder has fulfilled his or her obligations to pay taxes and social security contributions. A Bidder, and all parties constituting the Bidder including sub-contractors, shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified.
	2. A Bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if 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, or influence the decisions of the Norwegian Refugee Council regarding this bidding process; or
	3. A Bidder whose circumstances in relation to eligibility change during a procurement process or during the execution of a contract shall immediately inform the Norwegian Refugee Council.
	4. NRC reserves the right to refuse a bid at any time if the bidder or one of its sub-contractors provided material support or resources to any individual or entity that commits, attempts to commit, advocates, facilitates, or participates or is found guilty of fraud, active corruption, collusion, coercive practice, bribery, involvement in a criminal organization or illegal activity, or immoral human resources practices, including but not limited too: child labour, non-discrimination, freedom of association, payment of the legal national minimum wage, and forced labour.
2. **BID GUARANTEE (BID SECURITY BOND)**
	1. As part of its bid, the bidder shall submit a bid guarantee equivalent to the value stipulated in the Bid Data Sheet in Section 2. The guarantee should take the form of a Cashier’s Payment Order (CPO) issued by a reputable bank. Equivalent financial instruments from reputable banks are also acceptable. The bid guarantee amount is for the entire tender regardless of which lot/ how many lots are being applied to.
	2. The bid bond is required to ensure that only serious Bidders participate and to protect against the risk of Bidder’s conduct, which would warrant the bond’s forfeiture
	3. Any bid that is received that is not secured with a bid guarantee will be declared ineligible and will not be considered further
	4. Unsuccessful Bidder’s bid bond will be returned as promptly as possible but not later than the date of expiration of the period of bid validity
	5. Successful Bidder’s bid bonds will be returned on contract signature and receipt of performance bond
	6. The bid security will be forfeited:
		1. if a bidder withdraws its bid after the deadline for the submission of bid or otherwise during the period of bid validity specified by the Bidder in the Bid; or
		2. in the case of a successful Bidder, if the Bidder fails:
			1. to sign the final contract within 10 days of award; or
			2. to furnish performance bond after contract award
3. **JOINT VENTURES, CONSORTIA AND ASSOCIATIONS**
	1. Bids submitted by a joint venture, consortium or association of two or more firms as partners must be made clear in the submitted bid. A copy of the formal agreement between the partners will need to be submitted with bid. NRC reserves the right to exclude bids submitted by join ventures, consortia or associations in case there is a risk that the partnership fails to deliver the required services.
4. **ONE BID PER BIDDER PER WORK**
	1. Each Bidder shall submit only one Bid per contract. A Bidder who submits or participates in more than one bid per contract will cause all the bids with the Bidder’s participation to be rejected.
5. **COST OF BIDDING**
	1. The Bidder shall bear all costs associated with the preparation and submission of his Bid, and the Norwegian Refugee Council shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
6. **INSPECTION**
	1. NRC is obliged to ensure that its procurement decisions are clearly justified and documented and keeping within the Donors mandatory principles. In that regard, full and on-the-spot access must be granted to representatives of NRC, the Donor or any organisation or person mandated by it, to premises belonging to NRC or its service providers. The right to access shall include all documents and information necessary to assess, or audit the implementation of the contract
7. **OBTAINING AND COMPLETING BIDDING DOCUMENTS**
	1. Bidders are able to obtain the bidding documents either from:
		1. From the NRC website: <https://www.nrc.no/procurement/>
		2. Or bidders can pick-up in person the ITB documents from Logistics Department from Monday to Friday 08:30 to 15:00 from the locations listed in the Bid Data Sheet Section 2.
	2. The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document may result in the rejection of the bid.
8. **CLARIFICATION OF BIDDING DOCUMENT**
	1. A prospective Bidder requiring any clarification of the Bidding Document shall contact the Norwegian Refugee Council in writing. The Norwegian Refugee Council will respond in writing to any request for clarification before the deadline for clarification of bids. The Norwegian Refugee Council shall forward copies of its response to all Bidders who have acquired the Bidding Document, including a description of the inquiry but without identifying its source.
9. **AMENDMENT OF BIDDING DOCUMENT**
	1. At any time, prior and until 48 hours prior to the deadline for submission of bids, the Norwegian Refugee Council may amend or cancel the Bidding Document by informing the bidders in writing.
	2. To give prospective Bidders reasonable time in which to take an amendment or cancellation into account in preparing their bids, the Norwegian Refugee Council can, at his discretion, extend the deadline for the submission of bids.
10. **LANGUAGE OF BID**
	1. The bid, as well as all correspondence and documents relating to the bid shall be written in English.
	2. Supporting documents and printed literature that are part of the bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Bid, such translation shall govern.
	3. Any translations must be performed by a translator holding a license to translate, recognized by the Courts and Government of Ethiopia.
11. **DOCUMENTS COMPRISING THE BID**
	1. The bid submitted by the Bidder shall comprise the following:
* **Envelope 1 (Eligibility and technical)**
	+ Section 1: Cover letter
	+ Section 2: Bid Data Sheet
	+ Section 3: General terms & conditions
	+ Section 4: Ethical Standards
	+ Section 5: Service specification
	+ Section 6: Capacity and lead time
	+ Section 7: Bidding form & declaration
	+ Renewed business license registration certificate (Commercial registration)
	+ Tax Identification Number (TIN) registration certificate (Tax registration)
	+ Value Added Tax (VAT) registration certificate (if VAT is to be charged)
	+ Bid guarantee (Cashier’s Payment Order – CPO)
	+ Proof of past experience/ references (Contracts/ POs/ completion certificates/ etc.)
* **Envelope 2 (Financial)**
	+ Section 8: Priced offer
	1. All forms must be completed without any alterations to the format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.
	2. Failure to separate the financial elements of the bid (priced offer and/ or any information that indicates the financial value of the bid) from the rest of the bid will automatically be declared ineligible.
1. **BID PRICE FOR SERVICE CONTRACT**
	1. All lots can be awarded to a single bidder, different bidders to different lots or selected lots to a single bidder. As such all should be considered individually with any additional discounts applied if awarded more than one lot. Unless otherwise specified in the Bid Data Sheet, all duties, taxes and other levies payable by the service provider under the contract, shall be included in the total bid price submitted by the bidder.
	2. For those bidders who are VAT registered, VAT must be specified.
	3. The bid price shall include the cost of manpower, the profit of the bidder, use of machinery and any other recurring cost to complete the requested services.
	4. The priced offer submitted by Bidders shall be checked for arithmetical errors and for what might be considered unreasonable rates during the evaluation. Where errors are identified one or more of the following steps may be taken:
		1. By default the financial evaluation of the bid will be based on the unit rate of the line item,
		2. If any rates are considered to be unrealistic or unreasonable they may be altered by mutual agreement, provided that no alteration shall be made in the amount of the Bid.
		3. If any arithmetical errors are detected in an otherwise acceptable bid, and the Bidder, on being so notified, is prepared to confirm his bid and if the Bidder is subsequently awarded the contract, then the Bid shall be altered to reflect the difference.
	5. The Bidder is reminded that it is entirely his responsibility to ensure the accuracy of his bid. No alteration will be made to the bid after its submission on the grounds of any arithmetical errors subsequently discovered except as provided above.
2. **CURRENCIES OF BID AND PAYMENT**
	1. All prices shall be quoted by the Bidder in Ethiopian Birr (ETB), unless otherwise stated. Similarly, all payments will be made in the same currency.
	2. By default payment will be made within 30 days of completion of delivery and submission of all necessary documentation (copy of Purchase Order, Goods Received Note/ Delivery Note, formal invoice). Failure to provide all necessary documents will result in delays
3. **BID VALIDITY**
	1. Bids shall remain valid for a period of 90 calendar days after the date of the bid submission deadline as prescribed by Norwegian Refugee Council. A bid valid for a shorter period shall be rejected as non-compliant.
	2. In exceptional circumstances, prior to the expiration of the bid validity period, the Norwegian Refugee Council may request Bidders in writing to extend the period of validity of their bids. A Bidder must confirm in writing his acceptance of the extension.
4. **ALTERNATIVE BIDS**
	1. Bidders shall submit offers that comply with the requirements of the bidding documents, including the service specification. Alternative bids shall not be considered unless otherwise indicated in Section 8 – Priced offer where details are provided in Support to Section 5 – Service specification (Envelope 1).
5. **FORMAT AND SIGNING OF BID**
	1. The Bidder shall prepare one set of bid documents per contract that he wishes to bid for. The bidder should hold a copy of the documents with himself, for reference purposes.
	2. All pages of the submitted tender dossier must be completed, signed and stamped by the bidder
	3. Any corrections/ amendments must be initialled and stamped by the bidder
6. **SEALING AND MARKING OF THE BID**
	1. The complete bid documents **must be submitted in TWO separate sealed envelopes** that shall be hand delivered at the following NRC Offices not later than the due date indicated in Section 2: Bid Data Sheet.
* **Envelope 1 (Eligibility and technical)**
	+ Section 1: Coverletter
	+ Section 2: Bid Data Sheet
	+ Section 3: General terms & conditions
	+ Section 4: Ethical Standards
	+ Section 5: Service specification
	+ Section 6: Capacity and lead time
	+ Section 7: Bidding form & declaration
	+ Business license registration certificate (Commercial registration)
	+ Tax Identification Number (TIN) registration certificate (Tax registration)
	+ Value Added Tax (VAT) registration certificate (if VAT is to be charged)
	+ Bid guarantee (Cashier’s Payment Order – CPO)
	+ Proof of past experience/ references (Contracts/ POs/ completion certificates/ etc.)
* **Envelope 2 (Financial)**
	+ Section 8: Priced offer
	1. The envelopes shall:
		1. be addressed to the Norwegian Refugee Council, in the location specified in the Bid Data Sheet
		2. bear the Invitation to Bid (ITB) reference number
		3. no other markings should be on the envelope
	2. If envelopes are not sealed and marked as required, the Norwegian Refugee Council will reject the bid
1. **DEADLINE FOR SUBMISSION OF BIDS**
	1. Bids must be received by the Norwegian Refugee Council at the address given and no later than the date and time indicated in the Bid Data Sheet.
2. **CERTIFICATES OF CONFORMITY/ QUALITY ASSURANCE**
	1. To the extent possible quality certificates detailing the applicable standards should be submitted with the bid.
3. **LATE BIDS**
	1. The Norwegian Refugee Council shall not consider any bid that arrives after the deadline for submission as stipulated in the Bid Data Sheet. Any bid received by the Norwegian Refugee Council after the deadline for submission of bids shall be declared late and declared ineligible.
4. **WITHDRAWAL AND REPLACEMENT OF BIDS**
	1. A Bidder may withdraw or replace its bid after it has been submitted at any time before the deadline for submission of bids by sending a written notice, signed by an authorized representative. Any corresponding replacement of the bid must accompany the respective written notice. All notices must be:
		1. submitted as with Clauses 20 and 21, and in addition, the envelopes shall be clearly marked “WITHDRAWAL” or “REPLACEMENT” and
		2. received by the Norwegian Refugee Council prior to the deadline for submission of bids, in accordance with the Bid Data Sheet
	2. After the opening of bids, modifications to bids must be documented and any discussions reported in writing. A bid may be withdrawn at any stage, with written notice. Withdrawal after the Award Letter has been issued will result in the forfeiture of the Bid Guarantee/ Bond.
5. **CONFIDENTIALITY**
	1. Information relating to the examination, evaluation, comparison, and post-qualification of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until information detailing the best evaluated Bidder is communicated to all Bidders.
	2. Any effort by a Bidder to influence the Norwegian Refugee Council in the examination, evaluation, comparison, and post-qualification of the bids or contract award decisions may result in the rejection of its bid.
	3. From the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Norwegian Refugee Council on any matter related to the bidding process, it should do so in writing.
6. **CLARIFICATION OF BIDS**
	1. Norwegian Refugee Council may, at its discretion, ask any Bidder for a clarification of its Bid. The Norwegian Refugee Council’s request for clarification and the response shall be in writing. Any clarification submitted by a Bidder that is not in response to a request by the Norwegian Refugee Council shall not be considered. All requests for clarifications shall be copied to all bidders for information purposes. No change in the price or substance of the bid shall be permitted, except to confirm the correction of errors.
7. **BIDS VALIDATION**
	1. The Norwegian Refugee Council’s determination of a Bid’s validity is to be based on the contents of the bid itself, which cannot be corrected if determined to be invalid
	2. A valid bid is one that complies with all the terms, conditions, and specifications of the Bidding Document, without deviation or omission, which affects, or could affect;
	3. the scope, quality, or performance of the services specified in the Contract; or
	4. limits in any substantial way, the Norwegian Refugee Council’s rights or the Bidder’s obligations under the Contract
8. **EVALUATION OF BID**
	1. The Norwegian Refugee Council shall examine the legal documentation and other information submitted by Bidders to verify eligibility, and then will review and score bids according to the following criteria;
		1. Price in comparison to NRC established rate (Financial evaluation)
		2. Quality control of the submitted specifications (Technical evaluation)
		3. Overall timeframe for the service (Technical evaluation)
		4. Earlier experiences and documentation proven in the tender documents, related to the services required under this contract. (Technical evaluation)
		5. In case of two service providers being scored the same in the evaluation, the one with the highest technical ranking will be awarded the contract
	2. Anti-money laundering, anti-bribery, anti-corruption and anti-terrorism legislation applicable in some jurisdictions may require NRC to verify the identity of the bidder prior to financial transactions.
	3. NRC reserves the right to use online screening tools to check the bidder’s record with regards to their possible involvement in illegal or unethical practices.
	4. Norwegian Refugee Council reserves the right to reject all bids, and re-tender if no satisfactory bids are submitted
9. **AWARD PROCEDURE**
	1. The Norwegian Refugee Council shall award the Contract in writing, with an award letter, to the Bidder whose offer has been determined to be the best, before the end of the bid validity period
	2. Any bidder who has not been awarded a contract, will be notified in writing detailing the reasons why their bid was not selected and will have their Bid Guarantee returned to them
	3. Until a formal contract is prepared and executed, the Award Letter shall constitute a binding agreement between the bidder and NRC.
	4. The Award Letter will state the sum that the Norwegian Refugee Council will pay the Service Provider in consideration of the services as prescribed in the Contract, and in accordance with the Bid.
	5. The Bidder is thereafter required to submit a Letter of Acceptance together with a performance bond, confirming their wish to proceed with a contract.
	6. If the awarded bidder fails to submit the required performance bond and sign the awarded contract they will forfeit their bid guarantee
10. **PERFORMANCE BOND (PERFORMANCE SECURITY)**
	1. The successful bidder is required to submit a performance bond valued at 20% of the contract value and is required to ensure delivery according to the contract agreement.
	2. The performance bond must be valid for at least three months more than the duration of the contract/ maximum delivery lead time.
	3. Failure to submit the required performance bond will result in the bid guarantee being forfeit.
11. **SIGNING OF CONTRACT**
	1. Upon receipt of the Letter of Acceptance and performance bond, the Norwegian Refugee Council shall call the successful Bidder to sign the Contract.
	2. Within an agreed timeframe, the successful Bidder shall sign, date, and return the Contract to the Norwegian Refugee Council.

# SECTION 4: Ethical Standards (Envelope 1)

NRC as a humanitarian organisation expects the suppliers and service providers to have high ethical standards. Any organization supplying goods to NRC valued at over USD10,000 in one year must sign this declaration. This declaration will be kept on file for a period of 7 years and should be updated every year or more often as appropriate.

NRC staff may perform checks to verify that these standards are adhered to. Should NRC deem that the supplier fails to meet or is not taking appropriate steps to meet these standards, any and all contracts and agreements with NRC may be terminated.

Anyone doing business with Norwegian Refugee Council shall as a minimum;

1. Comply with all laws and regulations in effect in the country or countries of business, AND;
2. Meet the ethical standards as listed below, OR;
3. Positively agree to the standards and be willing to implement changes in their organisation.
4. **ANTI-CORRUPTION AND COMPLIANCE WITH LAWS AND REGULATIONS:**
	1. The supplier confirms that it is not involved in any form of fraud, corruption, collusion, coercive practice, bribery, involvement in a criminal organization or other illegal activity.
	2. Where any potential conflict of interest exists between the supplier or any of the suppliers staff members with any NRC staff member, the supplier shall notify NRC in writing of the potential conflict. NRC shall then determine whether action is required. A conflict of interest can be due to a relationship with a staff member such as close family etc.
	3. The supplier will immediately notify senior NRC management if exposed for alleged corruption by representatives of NRC.
	4. The supplier shall be registered with the relevant government authority with regard to taxation.
	5. The supplier shall pay taxes according to all applicable national laws and regulations.
	6. The supplier warrants that it is not involved in the production or sale of any weapons including anti-personnel mines.
5. **CONDITIONS RELATED TO EMPLOYEES:**
	1. No workers in our company will be forced, bonded or involuntary prison workers.
	2. Workers shall not be required to lodge “deposits” or identity papers with their employer and shall be free to leave their employer after reasonable notice.
	3. Workers, without distinction, shall have the right to join or form trade unions of their own choosing and to bargain collectively.
	4. Persons under the age of 18 shall not be engaged in work which is hazardous to their health or safety, including night work.
	5. Employers of persons under the age of 18 must ensure that the working hours and nature of the work does not interfere with the child’s opportunity to complete his/ her education.
	6. There shall be no discrimination at the work place based on ethnic background, religion, age, disability, gender, marital status, sexual orientation, union membership or political affiliation.
	7. Measures shall be established to protect workers from sexually intrusive, threatening, insulting or exploitative behaviour, and from discrimination or termination of employment on unjustifiable grounds, e.g. marriage, pregnancy, parenthood or HIV status.
	8. Physical abuse or punishment, or threats of physical abuse, sexual or other harassment and verbal abuse, as well as other forms of intimidation, shall be prohibited.
	9. Steps shall be taken to prevent accidents and injury to health arising out of, associated with, or occurring in, the course of work, by minimizing, so far as is reasonably practicable, the causes of hazards inherent in the working environment.
	10. Wages and benefits paid for a standard working week shall meet, at a minimum, national legal standards or industry benchmark standards, whichever is higher. Wages should always be enough to meet basic needs.
	11. Working hours shall comply with national laws and benchmark industry standards, whichever affords greater protection. It is recommended that working hours do not exceed 48 hours per week (8 hours per day).
	12. Workers shall be provided with at least one day off for every 7 day period.
	13. All workers are entitled to a contract of employment that shall be written in a language they understand.
	14. Workers shall receive regular and documented health and safety training, and such training shall be repeated for new workers.
	15. Access to clean toilet facilities and to potable water, and, if appropriate, sanitary facilities for food storage shall be provided.
	16. Accommodation, where provided, shall be clean, safe and adequately ventilated, and shall have access to clean toilet facilities and potable water.
	17. No Deductions from wages shall be made as a disciplinary measure.
6. **ENVIRONMENTAL CONDITIONS:**
	1. Production and extraction of raw materials for production shall not contribute to the destruction of the resources and income base for marginalized populations, such as in claiming large land areas or other natural resources on which these populations are dependent.
	2. Environmental measures shall be taken into consideration throughout the production and distribution chain ranging from the production of raw material to the consumer sale. Local, regional and global environmental aspects shall be considered. The local environment at the production site shall not be exploited or degraded by pollution.
	3. National and international environmental legislation and regulations shall be respected.
	4. Hazardous chemicals and other substances shall be carefully managed in accordance with documented safety procedures.

# SECTION 5: Service specifications (Envelope 1)

**Note** that if the services that are proposed differ from these then bidders are required mark this clearly in the priced offer and to submit a separate service specification document.

**Lot 1:**

|  |  |  |
| --- | --- | --- |
| **#** | **Service** | **Specifications** |
|  | Renewable Solar Inverter (RSI) 22 KW, 3 phase solar pump controller | * Digital control for fully automatic operation and protective functions
* LED indicator lights
* Control inputs for low level (dry running protection) and remote control.
* Maximum power point tracking (MPPT) (for maximum solar energy conversion efficiency) with fast response speed and stable operation
* Protection against reverse polarity, overload and over temperature.
* Low voltage disconnects for battery operation.
* Intelligent power module (IPM) for the main circuit
* Ambient temperature for using: -10 to +60˚C
 |
|  | Multi-crystalline Solar module 24v DC (Module rating should at least be 250W) | * High Efficiency multi crystalline solar cells with minimum of 18%
* 18.5% energy conversion rates to provide maximum power even under weak light
* High Transmission rate tempered glass with an anti-reflection coating to increase the power output and provide mechanical strength.
* Industry leading 25-year linear performance warranty adds value by guaranteeing power output on an annual basis.
* Very low degradation rate of performance (0.7% loss per a year)
* certified for a maximum static load on the back of the module of up to 2400 Pa (i.e. wind load) and a maximum static load on the front of the module of up to 2400 Pa
* Independent tests should validate resistance to adverse environmental factors such as salt mist, ammonia, and blowing sand.
* From hot climates to low-light conditions should deliver superior energy yield in a wide range of temperatures and irradiances.
 |
|  | Solar panel structure | * The panel support structure should be made of steel with minimum ground clearance of 1.5m, fabricated from 2" diameter Galvanized steel circular section stand and 40x40x2mm L-section horizontal painted mild steel beam with all galvanized bolts, nuts and washers.
* GS stand medium class pipe should be 2.5” standard pipe
* 1.5” Standard medium class GS pipe should be used to support frame
* Minimum side of the structure should be at least 2.5 meters above the ground
* Structure should be installed 70cm to the ground
* Frame should be installed at 15cm dig from ground
 |
|  | DC Breaker | * Wiring up to 6 PV-strings in parallel
* DC rated disconnect switch enclosed
* Enclosure class IP 54
* Meets the requirements for CE
 |
|  | Lockable Metal box for solar pump controller and breaker  | * Metal box made of hardened steel, painted with anti-rust paint, with locks and able to accommodate Controller/RSI, DC breaker/PV Disconnect
 |
|  | Surge Protection | * Max. voltage: 30 V DC
* Max current 8/20μs: 500 A
* Enclosure class: IP20
* Ambient temperature: max. 80°C (176°F)
* Wire size: 2 x 1.5mm² (AWG 16)
* Meets the requirements for CE
 |
|  | Water level relay with relay base (complete with adapters)  | * Max. operating temperature 70 °C
* Enclosure class: IP54
* Cable length: 4 m
* Wire size: 2x 1.0mm² or AWG 17,
* waterproofed
* Mounted in vertical position
* Meets the requirements for CE
 |
|  | 6mm2 single core cable for DC lines | * PVC SUBMERSIBLE 99% copper cable
 |
|  | 16mm2 x 1 core earth cable  | * PVC/SWA 99% copper armoured cable
 |
|  | Extra cable from Generator to solar panel area | * PVC/SWA 99% copper armoured cable
 |
|  | Earth rod c/w clamp | * 5/8 100% copper earth rod
 |
|  | Change over switch for connection with the generator during lower sunshine hours complete with lockable metallic box |  |
|  | Equipment transportation to site up to treatment center.  |  |
|  | Installation of solar panels, electrical connection, Hybridization, testing, commissioning and training pump operators.  |  |
|  | Design and production (printed in full colour and bound) of maintenance charts, record keeping books and facility data plate - well laminated | Data plate to have technical details of the site, service contact numbers( Size A1) |

**Lot 2: Technical Specs for similar items as per LOT 1**

|  |  |  |
| --- | --- | --- |
| **#** | **Service** | **Specification** |
|  | RSI inverter , 7.5kw, with lockable well ventilated enclosure  | * Digital control for fully automatic operation and protective functions
* LED indicator lights
* Control inputs for low level (dry running protection) and remote control.
* Maximum power point tracking (MPPT) (for maximum solar energy conversion efficiency) with fast response speed and stable operation
* Protection against reverse polarity, overload and over temperature.
* Low voltage disconnects for battery operation.
* Intelligent power module (IPM) for the main circuit
* Ambient temperature for using: -10 to +60˚C
 |
|  | Surge Protector  | * Max. voltage: 30 V DC
* Max current 8/20μs: 500 A
* Enclosure class: IP20
* Ambient temperature: max. 80°C (176°F)
* Wire size: 2 x 1.5mm² (AWG 16)
* Meets the requirements for CE
 |
|  | Other installation materials and accessories/equipment/fittings |  |
|  | DC breakers or PV Disconnect 440-40-6 |  |
|  | 6mm2 single core cable for DC line  |  |
|  | 16mm2 single core cable for earthing  |  |
|  | Cable Splicing kit (Set) |  |
|  | Earthling rod C/W clamp |  |
|  | Supply and erect a panel support structure made of 4'' Pipe Class A poles, drilled plates 160\*160\*8mm, 50x50x3mm rafters, 50x50x3mm SHS struts and ties, 40x40x4mm angle iron, 150 tilt and lower end to be minimum 3m above ground level to support the quantity of panels above. All joints to be bolt and nuts with spot welding |  |
|  | Change over switch (set) |  |
|  | Well probe complete with cable waterproof cable from the borehole to the RSI, should be compatible with supplied RSI.* (1.5 mm2 4-cores PVC/SWA 99% copper armored cable from control panel to well head for WELL PROBE
* 0.75 mm2 2-core PVC round hardened submersible WELL PROBE cables waterproof
 | * Max. operating temperature 55°C
* Enclosure class: IP68
* Submersion depth: max 50 m (164 ft)
* Cable length: 1.5 m
* Wire size: 2 x 0.75 mm² or AWG 19, waterproofed
* Must be mounted in a vertical position
* Meets the requirements for CE
 |
|  | Multi-crystalline soar module 24v DC ( minimum per module, 250w) | As per LOT 1 |
|  | Transportation to the site |  |
|  | Installation, testing and Commissioning |  |
|  | Design and production (printed in full colour and bound) of maintenance charts, record keeping books and facility data plate - well laminated | * Data plate to have technical details of the site, service contact numbers( Size A1)
 |

# SECTION 6: Warranty and lead time (Envelope 1)

**Lot 1:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Requested Item** | **Requested QTY** | **Requested UoM** | **Financial bid submitted? (Yes/ No)** | **Physical sample provided? (Yes/No)** | **Warranty in years** | **Lead time for full QTY (Calendar days)** |
|  | Renewable Solar Inverter (RSI) 22 KW, 3 phase solar pump controller | Pcs | 1 |  |  |  |  |
|  | Multi-crystalline Solar module 24v DC (Module rating should at least be 250W) | Watts | 25,500 |  |  |  |  |
|  | Solar panel structure  | Lump sum  | 1 |  |  |  |  |
|  | DC Breaker | Pcs | 1 |  |  |  |  |
|  | Lockable Metal box for solar pump controller and breaker  | Pcs | 1 |  |  |  |  |
|  | Surge Protection | Pcs | 1 |  |  |  |  |
|  | Water level relay with relay base (complete with adapters) | Pcs | 1 |  |  |  |  |
|  | 6mm2 single core cable for DC lines | Meter | 150 |  |  |  |  |
|  | 16mm2 x 1core earth cable  | Meter | 20 |  |  |  |  |
|  | Extra cable from Generator to solar panel area  | Meter | 30 |  |  |  |  |
|  | Earth rod c/w clamp | Pcs | 1 |  |  |  |  |
|  | Change over switch for connection with the generator during lower sunshine hours  | Pcs | 1 |  |  |  |  |
|  | Equipment transportation to site up to treatment center.  | Lump sum | 1 |  |  |  |  |
|  | Installation of solar panels, electrical connection, Hybridization, testing, commissioning and training pump operators.  | Lump sum | 1 |  |  |  |  |
|  | Design and production (printed in full colour and bound) of maintenance charts, record keeping books and facility data plate - well laminated | LS | 1 |  |  |  |  |

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| Notes |
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**Lot:2**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Requested Item** | **Requested QTY** | **Requested UoM** | **Financial bid submitted? (Yes/ No)** | **Physical sample provided? (Yes/No)** | **Warranty in years** | **Lead time for full QTY (Calendar days)** |
|  | RSI inverter , 7.5kw, with lockable well ventilated enclosure ( Technical specs as LOT 1) | 1 | Pcs |  |  |  |  |
|  | Surge Protector  | 1 | Pcs |  |  |  |  |
|  | Other installation materials and accessories/equipment  | 1 | Lump sum |  |  |  |  |
|  | DC breakers or PV Disconnect 440-40-6 | 1 | Set |  |  |  |  |
|  | 6mm2 single core cable for DC line  | 100 | Meter |  |  |  |  |
|  | 16mm2 single core cable for earthing  | 20 | Meter |  |  |  |  |
|  | Cable Splicing kit (Set) | 1 | Set |  |  |  |  |
|  | Earthling rod C/W clamp | 1 | Pc |  |  |  |  |
|  | Supply and erect a panel support structure  | 1 | Set |  |  |  |  |
|  | Change over switch (set) | 1 | Pc |  |  |  |  |
|  | Water level sensor complete with cable waterproof cable from the borehole to the RSI, should be compatible with supplied RSI | 1 | Pc |  |  |  |  |
|  | Multi-crystalline soar module 24v DC ( minimum per module, 250w) | 10,850 | Watts |  |  |  |  |
|  | Transportation to the site | 1 | LS |  |  |  |  |
|  | Installation, testing and Commissioning | 1 | LS |  |  |  |  |
|  | Design and production (printed in full colour and bound) of maintenance charts, record keeping books and facility data plate - well laminated | 1 | LS |  |  |  |  |

# SECTION 7: Bidding Form & Declaration (Envelope 1)

1. **THE SERVICE PROVIDER’S BID**

To: Norwegian Refugee Council

Sir / Madam,

We offer to execute the Services in accordance with all requirements of the current Invitation to Bid, Conditions of Contract and any other Binding requirements accompanying this Bid. We, the undersigned, verify that we are in compliance with all applicable laws and regulations, and meet the ethical standards as listed above or positively agree to these ethical standards and are willing to implement necessary changes in the organization.

This Bid signed by our authentic representative and your written award of it shall constitute the formation of a binding contract between us.

**We understand that you are not bound to accept the lowest or any bid received.**

|  |  |
| --- | --- |
| Registered company name: |  |
| Any other trading names: |  |
| Any associated companies (cross holding/ joint ownership/ shareholding/ etc.) |  |
| Name of Signatory: | Date of Signing: |
| Title of Signatory: | Name of Bidder: |
| Signature & stamp: | Tel N°: |
| Email: |
| Address: |

|  |  |
| --- | --- |
| Bank name (to be used for this contract) |  |
| Account number |  |

1. **PAST EXPERIENCE/ REFERENCES**

| **N.** | **Services executed\*** | **Name and contact information of the client** | **Date of the work** | **Value of the Contract** |
| --- | --- | --- | --- | --- |
| 1 |  |  |  |  |
| 2 |  |  |  |  |
| 3 |  |  |  |  |
| 4 |  |  |  |  |
| 5 |  |  |  |  |
| 6 |  |  |  |  |

**\* Please attach proof of successful completion of the contracts (i.e. certificates of completion, references, etc.)**

# SECTION 8: Priced offer (Envelope 2)

**Lot 1:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Item** | **Specification** | **UoM**  | **Quantity** | **Unit price (ETB) Excl. VAT** | **Unit price (ETB) Incl. VAT** | **Total (ETB) Incl. VAT** |
|  | Renewable Solar Inverter (RSI) 22 KW, 3 phase solar pump controller | * Digital control for fully automatic operation and protective functions
* LED indicator lights
* Control inputs for low level (dry running protection) and remote control.
* Maximum power point tracking (MPPT) (for maximum solar energy conversion efficiency) with fast response speed and stable operation
* Protection against reverse polarity, overload and over temperature.
* Low voltage disconnects for battery operation.
* Intelligent power module (IPM) for the main circuit
* Ambient temperature for using: -10 to +60˚C
 | Pcs | 1 |  |  |  |
|  | Multi-crystalline Solar module 24v DC (Module rating should at least be 250W) | * High Efficiency multi crystalline solar cells with minimum of 18%
* 18.5% energy conversion rates to provide maximum power even under weak light
* High Transmission rate tempered glass with an anti-reflection coating to increase the power output and provide mechanical strength.
* Industry leading 25-year linear performance warranty adds value by guaranteeing power output on an annual basis.
* Very low degradation rate of performance (0.7% loss per a year)
* certified for a maximum static load on the back of the module of up to 2400 Pa (i.e. wind load) and a maximum static load on the front of the module of up to 2400 Pa
* Independent tests should validate resistance to adverse environmental factors such as salt mist, ammonia, and blowing sand.
* From hot climates to low-light conditions should deliver superior energy yield in a wide range of temperatures and irradiances.
 | Watts | 25,500 |  |  |  |
|  | Solar panel structure  | * The panel support structure should be made of steel with minimum ground clearance of 1.5m, fabricated from 2" diameter Galvanized steel circular section stand and 40x40x2mm L-section horizontal painted mild steel beam with all galvanized bolts, nuts and washers.
* GS stand medium class pipe should be 2.5” standard pipe
* 1.5” Standard medium class GS pipe should be used to support frame
* Minimum side of the structure should be at least 2.5 meters above the ground
* Structure should be installed 70cm to the ground
* Frame should be installed at 15cm dig from ground
 | Lump sum | 1 |  |  |  |
|  | DC Breaker | * Wiring up to 6 PV-strings in parallel
* DC rated disconnect switch enclosed
* Enclosure class IP 54
* Meets the requirements for CE
 | Pcs | 1 |  |  |  |
|  | Lockable Metal box for solar pump controller and breaker  |  | Pcs | 1 |  |  |  |
|  | Surge Protection | * Max. voltage: 30 V DC
* Max current 8/20μs: 500 A
* Enclosure class: IP20
* Ambient temperature: max. 80°C (176°F)
* Wire size: 2 x 1.5mm² (AWG 16)
* Meets the requirements for CE
 | Pcs | 1 |  |  |  |
|  | Water level relay with relay base (complete with adapters)  | * Max. operating temperature 70 °C
* Enclosure class: IP54
* Cable length: 4 m
* Wire size: 2x 1.0mm² or AWG 17,
* waterproofed
* Mounted in vertical position
* Meets the requirements for CE
 | Pcs | 1 |  |  |  |
|  | 6mm2 single core cable for DC lines |  | Meter | 150 |  |  |  |
|  | 16mm2 x 1core earth cable  |  | Meter | 20 |  |  |  |
|  | Extra cable from Generator to solar panel area  |  | Meter | 30 |  |  |  |
|  | Earth rod c/w clamp |  | Pcs | 1 |  |  |  |
|  | Change over switch for connection with the generator during lower sunshine hours  |  | Pcs | 1 |  |  |  |
|  | Equipment transportation to site up to treatment center.  |  | Lump sum | 1 |  |  |  |
|  | Installation of solar panels, electrical connection, Hybridization, testing, commissioning and training pump operators.  |  | Lump sum | 1 |  |  |  |
|  | Design and production (printed in full colour and bound) of maintenance charts, record keeping books and facility data plate - well laminated |  | LS | 1 |  |  |  |
|  | **TOTAL** |  |  |  |  |  |  |

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**LOT:2**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **#** | **Item** | **Specification** | **UoM** | **Quantity** | **Unit price (ETB) Excl. VAT** | **Unit price (ETB) Incl. VAT** | **Total (ETB) Incl. VAT** |
|  | RSI inverter , 7.5kw, with lockable well ventilated enclosure ( Technical specs as LOT 1) |  | Pcs | 1 |  |  |  |
|  | Surge Protector (Technical Spec as LOT 1) |  | Pcs | 1 |  |  |  |
|  | Other installation materials and accessories/equipment  |  | Lump sum | 1 |  |  |  |
|  | DC breakers or PV Disconnect 440-40-6 |  | Set | 1 |  |  |  |
|  | 6mm2 single core cable for DC line  |  | Meter | 100 |  |  |  |
|  | 16mm2 single core cable for earthing  |  | Meter | 20 |  |  |  |
|  | Cable Splicing kit (Set) |  | Set | **1** |  |  |  |
|  | Earthling rod C/W clamp |  | Pc | 1 |  |  |  |
|  | Supply and erect a panel support structure  |  | Set | 1 |  |  |  |
|  | Change over switch (set) |  | Pc | 1 |  |  |  |
|  | Water level sensor complete with cable waterproof cable from the borehole to the RSI, should be compatible with supplied RSI. |  | Pc | 1 |  |  |  |
|  | Multi-crystalline soar module 24v DC ( minimum per module, 250w) |  | Watts | 10,850 |  |  |  |
|  | Transportation to the site |  | LS | 1 |  |  |  |
|  | Installation, testing and Commissioning |  | LS | 1 |  |  |  |
|  | Design and production (printed in full colour and bound) of maintenance charts, record keeping books and facility data plate - well laminated |  | LS | 1 |  |  |  |
|  | **TOTAL** |  |  |  |  |  |  |