

DATE: 02 AUGUST 2022

REQUEST FOR QUOTATION: No. RFQ/HCR/ROK/2022/021
FOR THE SUPPLY AND DELIVERY OF HYBRID SOLAR BACKUP SYSTEM FOR UNHCR SUDAN OPERATIONS

QUOTATION TO BE RECEIVED BY: 09 AUGUST 2022 - 15:00 HRS SUDAN STANDARD TIME

The Office of the United Nations High Commissioner for Refugees (UNHCR) established on December 14, 1950 by the United Nations General Assembly requests your price quotation of **Hybrid Solar Backup System** specified in the **Annex A** - Attached as part of this Request for Quotation (RFQ).

1. REQUIREMENTS

Please include the following price information in your quotation (without VAT).

Annex B: Financial offer form:

No	Items	Quantity	Unit Cost (USD)	Total cost (USD)
1	HYBRID SOLAR BACKUP SYSTEM UPS 15KVA	1		
Total cost in USD				

N/B: UNHCR will request for detailed technical specification from all the bidders in order to confirm conformity to the specification

Delivery lead time:

Please fill in below lines:

Delivery Point: To be delivered in UNHCR Office in Khartoum warehouse located in Mayo Area

Name of Vendor:

Address/Telephone No:

Contact Person:

Delivery time in days:

Total Amount in Words:

Offer Validity Period:

Date:

Signature:

2. RFQ DOCUMENTS-ANNEXES.

The following annexes form an integral part of this Request for Quotation

Annex A: Specification

Annex B: Financial offer form

Annex C: Vendor Registration Form

Annex D: UNHCR General Conditions of Contracts for the Provision of Goods and Services - July 2018

For further information on UNHCR, please see <http://www.unhcr.org>

Annex D: UN Supplier code of conduct

Please note that UNHCR has tax and duty exemption status.

BID VALIDITY: You are requested to hold your offer valid for **90 days** from the deadline for submission. UNHCR will make its best effort to select a firm within this period.

PAYMENT: Payment will be made within **30 days** of receipt in UNHCR, Khartoum office of complete documents in good order after satisfactory delivery of goods/services. UNHCR does not undertake to pay by letters of credit or in advance of delivery.

CURRENCY OF PAYMENT: Payment will be made in the currency in which the purchase order is issued.

IMPORTANT: UNHCR can only facilitate payments through the local banks and not banks outside Sudan and therefore the current market condition must be factored in before submitting your quote

Vendor Registration Form: If your company is not registered with UNHCR you should complete, sign and submit with your technical proposal the Vendor Registration Form (**Annex B**).

Please note that these terms and conditions (**Annex C**) will be strictly adhered to for the purpose of any future contract.

3. CLARIFICATIONS

Bidders are required to submit any request for clarification or any question in respect of this RFQ by e-mail to SUDKH-SU@unhcr.org. The deadline for receipt of questions is 09 October 2021 15:00 HRS Sudan Standard Time. Bidders are requested to keep all questions concise.

4. YOUR OFFER

Your Offer shall be prepared in English.

Please submit your offer using the submission template provided. It should conform to the requirements and contain all information required. The offers not conforming to the requested format will not be taken into consideration for evaluation.

5. RFQ Submission

We would appreciate receiving your quotation on or before **9 August 2022, 15:00 HRS Sudan Standard Time** by return only to email: sudkh-su@unhcr.org.

Please be aware of the fact that the e-mail policy employed by UNHCR limits the size of attachments to a maximum of **10 Mb** so it may be necessary to send more than one e-mail for the whole submission.

Please indicate in the e-mail subject field:

- RFQ Number: **RFQ/HCR/ROK/2022/021**
- Name of your firm:
- Number of e-mails that are sent (example: 1/2, 2/2)

Bids received after the deadline for submission of bids and bids transmitted in any other manner than those indicated above may not be considered.

Information provided by the bidder will constitute the basis for eventual purchase order(s). UNHCR may, at its discretion, extend the deadline for the submission of proposals, by notifying all prospective suppliers in writing. The extension of the deadline may accompany a modification of the solicitation documents prepared by UNHCR at its own initiative or in response to a clarification requested by a prospective supplier.

Your quotation must be valid at least for **90 days**. The standard payment terms of UNHCR is net 30 days upon satisfactory delivery of goods or services and acceptance thereof by UNHCR.

Thank you for your kind attention.

Ibrahima Drame

Supply Officer





UNHCR Representation Office in Khartoum



For further information on UNHCR, please see <http://www.unhcr.org>







Annex A: Technical Specification - Hybrid Solar Backup System, UPS, 15 KVA

Design and Size System Summary								
Rate PV Array	Wp		Rated AC power	VA	15000VA	Rated Batt Bank	Wh	20460
	KWP	21.4		KVA	15KVA		KWh	20.5
PV String ratings	V		AC output Volt & Hz	VA	220-240	Batt bank Voltage V	Vdc	48
	A			Hz	50Hz			

BOQ for Equipment Supply and Installation of PV System				
Lot	Item description	UOM	Qty	
	PV array			
	Monocrystalline or Polycrystalline module of nominal 500Wp or higher, with pre-wired MC4 connectors	Wp	21282	
	Module racking, aluminium extruded or galvanised metal sections on a firm foundation with anti-theft and stainless steel hardwares, estimated to cover approximately 100m2, though it doesn't cover racking rows and columns paces	m2	120	
	wiring- Sealed and waterproof MC4 T/Y branch Housing & Connector Crimp Connector Kit, 1000V TUV or Junction boxes as per string configuration	Pairs	20	
	Wiring- USE-2XLPE (Crossed-linked polythene) Array wire. 4 or 6mm2. determined by string voltages and amparages	m	100	

Battery bank			
<p>Preferably, Lithium Iron Phosphate Battery Solution or Absorbed Glass Matt or Lead acid (Flooded or Sealed), (12v/200AH) cells in combination so that battery bank achieves the required energy storage at 48V, battery bank voltage, based on 20-hour discharge (C20); designed for long life in extreme conditions, including their appropriately sized lugged battery cables and connectors bolts.</p>	KWH	12	
<p>Battery racking system made of Steel or Aluminium, with insulated surfaces</p>	Lump sum	1	

Hybrid inverter/Charger (DC bus) or PV Inverter (AC bus)			
<p>Hybrid 230V/50Hz Inverter single phase; 15KVA/15KW Continuous output at 25°C; 48V battery bank voltage minimum; >95% efficiency; true sine wave; programmable; sealed or designed for >40°C temp extreme conditions, or for outdoor mounting as well</p>	pcs	1	

Charge Controllers or 48DC PV Inverter Maximum power point tracking(MPPT); Minimum output current >100A, Minimum 48V nominal battery bank voltage; 150-250V PV open circuit voltage(Voc); self-consumption <100mA; <100W standby power consumption; >95% efficiency; >5000W max Solar module array input power; programmable; battery temps sensor; sealed and designed for >40°C temps under extreme conditions and applicable for outdoor mounting		Pcs	1	
Monitoring system for on-site and online monitoring Visual monitor; Battery voltages; Battery charge/discharge current; Battery state of charge; Ampere-hour consumed; Alarms; LAN or wifi communication.		Unit		
Surge protection, Earthing, disconnects, fusing Surge arrestor/Surge protection device for protection of DC and AC system device/components		Pcs	2	
Grounding connectors and conductors with roof mounted air termination rods		pcs	2	
Earth wire. Minimum 25mm2		m	30	

Earth electrode conductors and hardwares for bonding	pcs	3	
Disconnects for DC PV array input/out to CC or String Inverter	Pcs	6	
Disconnects for DC Battery bank to/from Inverter >175ADC	pcs	1	
Disconnects for AC power	pcs	2	
Spare parts as recommended by equipment manufacturers (Optional)			
Surge arrestor/Surge protection device	pcs	1	
Disconnect fuses and breakers	pcs	2	
Charge controller boards	pcs	2	
Inverter fans	pcs	1	

Installation Supplies/Miscellaneous items			
Conduits and accessories, trunkings, cable trays/ducts	Unit	1	
Expand nails with Screws, Rawl bolts	Pkts	2	
Cable ties	Pkts	5	
Insulating tapes	Rolls	12	
Integration Switch gears (Charge over switch) Manual or Auto	pcs	1	
Inverter/Charger AC in/out, fine stranded wiring cables >10mm ²	m	50	
Charge controller DC output, fine stranded wiring cables > 35mm ²	m	10	
Inverter/Charger/Battery DC in/out, fine stranded wiring cables >70mm ²	m	15	
DC bus bar, when necessary	pcs		
AC bus bar or AC distribution board.	pcs	1	
Cable lugs >70mm ²	pcs	32	

Shipment and Handling			
From supplier's Warehouse to UNHCR Premises in Damazine. Cost is directly proportional to trip distance, cargo capacity, and feasible shipment mode.	trip	1	
VAT and other locally imposed taxes at the point of sell and during Cargo shipment, from supplier to customer	lump sum	1	

Equipment Housing and Customization			
House or Room or Shade or Space, which should be secured, vented, protected against extreme heat, not exposed to liquid substances ideally of temps at 25°C or lower.	lump sum	1	

Container. Secured, protected against extreme heat, including interior insulation, exterior insulation. Cooled and not exposed to liquid substances	lump sum	1	
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Consultancy, Installation and Commissioning		
Solar Engineer, Technicians, and labour for all components of system installation; module rackings installation, pv module installation and cabling, battery bank installation, power system installation, and commissioning.	lump sum	1
Additional cost to be determined by supplier, incurred by customer for sites outside the company's installation team's commuting zone, to cater for eg. travels, accommodation, visa and other site essential needs.	lump sum	1

