

INVITATION TO BID: ITB/HCR/SYR/24/326

FOR THE ESTABLISHMENT OF A FRAME AGREEMENT FOR THE SUPPLY & DELIVERY OF SOLAR RECHARGEABLE FANS

Annex - A: Technical Specifications of Solar/Rechargeable Fans

Item#01: 12-inch Solar/Rechargeable Fan

- Manual/Brochure must be attached (Arabic and English) including all technical specifications and illustrate the assembly method of all parts. (*bidder to confirm that there would be an Arabic version of the Manual/Brochure upon delivering the items to the UNHCR Warehouses*).
- Size: 12-inch (should be mentioned in catalogue/Brochure).
- The fan must be designed for running and for charging its battery through both electric and solar energy. (should be mentioned in catalogue/Brochure).
- Minimum Three (3) speed oscillating fan, the fan needs to rotate **up to 90 degrees** in the **horizontal** direction. (Should be mentioned in catalogue/Brochure) (i.e., low speed and high speed).
- AC/DC function: Switching button between DC and AC (should be mentioned clearly in the catalogue / Brochure). Also Plug & Play function for automated switching between DC and AC is accepted.
- USB socket to be placed in the body of fan for charging electronic devices.
- An ON/Off battery charging indicator should be provided. A "charging level" indicator should also be provided, OR an indicator to indicate both cases: when the battery is empty and when it is full.
- Children finger protector (fabric material to cover fan mesh).
- Base lamp should contain at least twelve (12) white LED's. (should be mentioned in catalogue/Brochure).
- Overcharge protection is required.
- All electrical components including the battery, charging circuits etc.; **should be fully compatible** and assembled inside fan's body.
- Adjustable multi-angle, the **vertical** adjustment range is **up to 90 degrees**.
- Rechargeable Battery Capacity: 12V with Ah capacity enough to run the fan for 5 hours at least at highest speed (AGM). (should be mentioned in catalogue/Brochure).
- Battery service life: 500 DoD@ 50 % at least (should be mentioned clearly in the catalogue / Brochure).
- Connections should consider easy replacement of the battery in case the battery died.
- Fan motor: should be made of pure brass and with power-saving design. (Should be mentioned in catalogue/Brochure).
- The fan's Battery capacity, controller/charger capacity and fan motor power should be compatible together to optimum performance, (should be mentioned in catalogue /Brochure).
- Operating Time: min five (5) hours at least on the highest speed after fully charged (should be mentioned in catalogue/Brochure **and will be tested**).
- UNHCR blue logo to be **printed** on the front surface (the center/front side) of the rechargeable fan, logo to be printed (not a sticker) on the final product.
- AC Input Voltage for charging from the grid: 220 -240 V 50/60 Hz, (should comply with volt of battery and fan's motor) (charging methods of AC).
- Charging Cable: the length of the charging cable to be **150 cm at least**.

- CONTROLLER (Charger- regulator):
 - The controller should switch between solar charging via the solar panel and the AC charging when plugged in, giving the priority to the AC power.
 - The controller should be with high-performance battery overcharge, over discharge, overload, and short circuit protection (should be mentioned in catalogue/Brochure).
 - The battery must be fully charged within 5 hours or less of regular solar brightness or via AC power (should be mentioned in catalogue/Brochure).

Item#02: 16-inch Solar/Rechargeable Fan

- Manual/Brochure must be attached (Arabic and English) including all technical specification and illustrate the assembly method of all parts. (*bidder to confirm that there would be an Arabic version of the Manual/Brochure upon delivering the items to the UNHCR Warehouses*).
- Size: 16-inch (should be mentioned in catalogue/Brochure).
- The fan must be designed for running and for charging its battery through both electric and solar energy. (should be mentioned in catalogue/Brochure).
- Minimum Three (3) speed oscillating fan, the fan needs to rotate **up to 90 degrees** in the **horizontal** direction. (Should be mentioned in catalogue/Brochure) (i.e., low speed and high speed).
- AC/DC function: Switching button between DC and AC (should be mentioned clearly in the catalogue / Brochure). Also Plug & Play function for automated switching between DC and AC is accepted.
- USB socket to be placed in the body of fan for charging electronic devices.
- An ON/Off battery charging indicator should be provided. A "charging level" indicator should also be provided, OR an indicator to indicate both cases: when the battery is empty and when it is full.
- Children finger protector (fabric material to cover fan mesh).
- Base lamp should contain at least twelve (12) white LED's. (should be mentioned in catalogue/Brochure).
- Overcharge protection is required.
- All electrical components including the battery, charging circuits etc.; **should be fully compatible** and assembled inside fan's body.
- Adjustable multi-angle, the **vertical** adjustment range is **up to 90 degrees**.
- Rechargeable Battery Capacity: 12V with Ah capacity enough to run the fan for 5 hours at least at highest speed (AGM) (should be mentioned in catalogue/Brochure).
- Battery service life: 500 DoD@ 50 % at least (should be mentioned clearly in the catalogue / Brochure).
- Connections should consider easy replacement of the battery in case the battery died.
- Fan motor: should be made of pure brass and with power-saving design. (Should be mentioned in catalogue/Brochure).
- The fan's Battery capacity, controller/charger capacity and fan motor power should be compatible together to optimum performance, (should be mentioned in catalogue /Brochure).
- Operating Time: min five (5) hours at least on the highest speed after fully charged (should be mentioned in catalogue/Brochure and **will be tested**).
- UNHCR blue logo to be **printed** on the front surface (the center/front side) of the rechargeable fan, logo to be printed (not a sticker) on the final product.
- AC Input Voltage for charging from the grid: 220 -240 V 50/60 Hz, (should comply with volt of battery and fan's motor) (charging methods of AC).

- Charging Cable: the length of the charging cable to be **150 cm at least**.
- CONTROLLER (Charger- regulator):
 - The controller should switch between solar charging via the solar panel and the AC charging when plugged in, giving the priority to the AC power.
 - The controller should be with high-performance battery overcharge, over discharge, overload, and short circuit protection (should be mentioned in catalogue/Brochure)
 - The battery must be fully charged within 5 hours or less of regular solar brightness or via AC power (should be mentioned in catalogue/Brochure).

SOLAR PANEL:

- Cell: Poly or Mono –Crystalline Silicon solar cells.
- Aluminum Frame
- Power 50 watts at least
- Internal Diodes
- IP: 65 at least
- Cable 2x2.5 sq*mm at least Cu/ rainy or NYY (3 meters at least).

Sample:

- Maximum one sample for each offered item must be submitted (Partial bidding for only one of the two items is accepted).
- It's essential to provide an **identical sample** that is precisely similar to the items that will be delivered during the implementation of the contract.
- Sampled fan **preferably** be assembled. (*disassembled samples are also accepted*).
- Samples should be clearly labelled with UNHCR Tender Reference and the name of the Bidder. Samples will be tested by UNHCR upon evaluation process against charging time, running time and other specifications.

Warranty:

The Minimum acceptable warranty period is **one (1) year** (for each item).

Packing Instructions:

As secondary packing, the whole fan items and solar panel to be packed using “Expanded Polystyrene (EPS)” .

Each piece should be placed in a minimum five layered roadworthy cartoon box.

Each carton box corresponding to the dimension of the rechargeable fan.

Content to be printed on the box:

- Name of the item (“SOLAR RECHARGEABLE FAN”).
- UNHCR Visibility: (Blue logo) should be printed on the box (preference white color as background), Dimension of logo on the box should be minimum 20 x 15 cm to be printed in the 4 sides of the box (excluding top and bottom).
- Purchase Order (“PO”) to be printed on 2 sides of the box (excluding top and bottom).



Note: Colors on the above pictures are solely indicative (no color preference)

 **Estimated annual Quantity:**

- (125,000) Rechargeable and solar rechargeable fans divided by size as follows:
(100,000) for 12-inch Solar Rechargeable Fan, (25,000) for 16-inch Solar Rechargeable Fan.
- Minimum weekly delivery capacity is 5,000 units per each lot.