# **TENDER** for Manufacturing the moulds for the newly designed PV Port benches for Ahmedabad – Gujarat Tender Number: 91138058 Date: 19 May 2020 ( Single Envelop Bid System )

## **Brief Tender Notification**

Particulars	Description
Purpose of Tender	To hire the services of a professional company which can manufacture the moulds for newly designed PV Port benches for Ahmedabad – Gujarat.
Tender reference number	91138058
Date of tender announcement	19 May 2020
Last date to submit pre-bid queries by the interested bidders	22 May 2020
Last date to provide clarification to the queries. All the queries will be answered in the form of (Frequently asked question) FAQ and will be uploaded on the website www.tendernews.com	26 May 2020
Last Date and time for submission of bids	05 June 2020
Mode of Submission	Bids to be submitted in sealed envelope as per the given instructions.
Validity of Bids/ Offered Price	90 days from the last date of submission of bids i.e <b>05</b> <sup>th</sup> <b>June 2020.</b> The selected supplier shall not be able to vary from their financial bid until the completion of the Order, if awarded by GIZ.
Address for Bid Submission	The Head of Contracts and Procurement GIZ India, GDCO Office  46, Paschimi Marg,  Vasant Vihar, New Delhi-110057
Location of Site	Ahmedabad.



## **Tender Notice**

GIZ Country Office (India) is soliciting the bids from interested companies for Manufacturing of moulds for newly designed PV Port benches through public tender as per the terms and conditions of the tender documents.

#### **Process of tender submission**

The following documents are attached with the tender applications: -

- 1) Terms of Reference
- 2) Tender and Bidding Conditions
- 3) Sample covering Letter- Annexure- A
- 4) Sample declaration Letter- Annexure- B
- 5) Submission of Documents Annexure "C"
- 6) Detailed List of Specifications Annexure "D"
- 7) Rotomoulding Bench Design Annexure "E"
- 8) 3D Bench Design Annexure "F"
- 9) General Terms & Conditions

Interested bidders are requested to carefully examine all documents and submit the entire tender proposal as instructed in above mentioned documents. Any deviation/ differentiation from the instruction will lead to disqualification of the tenderer from the bidding process.

The bid must reach to GIZ Country Office on or before <u>05<sup>th</sup> June' 2020</u> in a <u>sealed envelope</u> at the below mentioned address favoring: **Head of Contracts and Procurement.** 

GIZ Country Office, German Development Cooperation office, 46 Paschimi Marg, Vasant Vihar, New Delhi- 110057 (India)

Please mark your envelope

- > Tender Ref: "Manufacturing Moulds for PV Port Benches. GIZ India Tender No- 91138058.
- Project Title: GIZ Country OfficeProject No: 16.2080.6-001.00

\*we request all the interested bidders to frequently check the web portal for receiving any latest OR revised information pertain to the above-mentioned tender. Information may be updated such as extension of bid submission dates, method of bid submission etc.



keeping in view the ongoing Covid- 19 situations and its implications nationwide.

<u>In case of seeking any technical/ commercial clarifications pertain</u> to tender:

Please send your queries only via e-mail to <a href="mailto:johney.reberio@giz.de">johney.reberio@giz.de</a> and <a href="mailto:shimpa.kalra@giz.de">Shimpa.kalra@giz.de</a> marking the subject line "Query for Tender No-91138058, Manufacturing moulds for PV Port benches, GIZ India".

- Deadline for sending queries is 22<sup>nd</sup> May'2020
- ➤ The queries will be answered latest by 26<sup>th</sup> May 2020 by email in the form of a single FAQ doc (if required).

Please refrain from making any personal / telephonic / telefax contact on the subject of this tender to any personnel of GIZ India.

We look forward to receiving your offers.

Contracts and Procurement Unit GIZ Country Office

India



#### 1. Context

The target of the National Solar Mission is an installed capacity of 40,000 MW of rooftop solar photovoltaic by 2022. The official statistics of the MNRE show that the currently installed capacity is around 2,800 MW. The contribution from the residential segment is very small (<25%) in the total capacity. To achieve the 40 GW target until 2022 implies close to 8 GW installation every year for next five years.

In order to address the concerns for residential consumers across the country, GIZ has also been requested by MNRE to come out with a standardized GCRT solution which will be able to address the concerns of consumer, DISCOMs and other stakeholders in the country.

To address the challenges with the custom-design rooftop solar power plants, GIZ has developed the concept of a new plug and play rooftop solar power plant called "PV Port and Store". PV Port is a standard plugn-play grid interactive photovoltaic system having a system size of 2 kWp with battery storage designed for 100% self-consumption. Several PV Ports are being manufactured in India under a Pilot Project. The pilot phase is validating the technical concept to move to the next phase which is upscaling and commercialization of PV Ports.

One of the essential components of PV Port and Store is the Rotomolded Benches. The benches contain all the electronics, inverter, batteries in a cavity which is surrounded by water mass. The empty benches offer room for the installation of batteries with potential capacity increase. The benches are made up of UV stabilized plastics and should carry the weight of adults siting on the bench. The water in both the benches is filled on site, allowing easy transport. The advantages of the water filled benches are two folds:

- The weight of the bench is substantially increased with water and thus acts as counterweight to all the uplift force which may be caused due to wind.
- The water surrounding the electronics acts as a fluid cooled heat sink and thermal buffer which improves efficiency and keeps batteries within the permitted temperature range for their 10year warranty conditions. Prototype systems show a delta of 10 degrees Celsius.

GIZ consultant has prepared an improved design of PV Port benches. Such benches are not available in the market. Under this contract GIZ aims to develop capacities to support PV Port rollout by making all the components available off the shelf including the benches for residential consumers. For this objective, GIZ intends to hire a consultant to manufacture the moulds for the newly designed benches.



## 2. Tasks to be performed by the contractor

The key intent of the assignment is to manufacture four sets of moulds to produce PV Port and store benches as per the bench design provided by GIZ (the bench design is provided as Annex-D to this ToR). The approach of the assignment should be to design and simulate the moulds and moulding process parameters to arrive at optimum conditions for getting the benches with the shape as required, such that the moulding process defects, and cooling warpage would be minimal.

#### Task 1: Designing and constructing the mould

The broad scope for the consultant shall be, but not limited to manufacturing of four sets of moulds to produce benches as per the bench design provided by GIZ. The consultant shall adhere to the following guidelines:

- I. Material of Construction of the Moulds will be IS-2062 steel.
- II. Interiors of the moulds would be polished and rust preventive applied after polishing.
- III. Silver colour paint that can withstand 300 degree Celsius on the exteriors to prevent corrosion.
- IV. The mould should be easy to operate.
- V. Moulds of the caps of benches will also have to be prepared. Injection Moulding process can be used for manufacturing these caps.
- VI. Trails of the moulds should be taken to get the test samples of the benches. Issues observed in the product or moulds should be rectified to get an acceptable product.

#### Task 2: Testing of the Benches produced using Mould

The consultant shall carry out tests on these following parameters on the sample benches manufactured using the mould prepared under Task 1:

- I. Uniform Thickness
- II. Compliance with dimensions within product tolerances
- III. Surface Finish
- IV. White Colour
- V. Leak Proof



- VI. Fitment of Cabinets
- VII. Water inlet-outlet lids

The consultant shall prepare a test report highlighting the results of tests on the above-mentioned parameters.

The new design of the PV Port benches is attached as Annexure – D.

3D bench design is attached as Annexure – E.

**Period of assignment**: Timeline of Twelve weeks is provided for execution of this assignment.

## 3. Concept

In the bid, the bidder is required to show how the objectives defined in Chapter 2 are to be achieved. He shall demonstrate his expertise and manufacturing capabilities for executing the assignment.

The bidder is required to commit to manufacturing of PV Port Benches when required by GIZ or an expert/agency appointed by GIZ, using these moulds. The bidder shall maintain his/her inventory of PV Port benches to cater to the demand without delays. The bidder is required to submit the final cost/ range of cost of benches at which he will supply benches to PV Port manufacturers. This cost shall not include any Mould charges and the same will not be charged to PV Port manufacturers.

#### 4. Eligibility Criteria

To be eligible to participate in this tender, the company must have experience in the field of renewable energy product design, manufacturing and validation. The consultant shall meet the following minimum requirements and submit documentary evidence, the reference projects shall not have value more than EUR 20,000.

- i. Company must have developed at least 1 rotomolded product and mould (proof submission mandatory).
- ii. Company must have executed minimum 3 projects in the field of renewable energy in last 3 years (proof submission – mandatory).
- iii. Company must have manufacturing facility in Gujarat (proof submission mandatory).
- The company must have minimum annual turnover of INR
   Lakhs and above during last two financial years (proof submission mandatory)



- v. The agency / company must possess a valid PAN, TIN, and GST Number (proof submission mandatory).
- vi. The agency must have a minimum client list of **05 medium/** large size companies (proof submission mandatory).

#### 5. Personnel concept

The bidder is required to provide personnel who is suited to filling the position described, based on his/her CV, the range of tasks involved and the required qualifications.

The below specified qualifications represent the requirements to reach the maximum number of points.

#### **Design Manager**

#### Experience of Design Manager (34-man days)

- Assessment of new product design
- Design optimization.
- Design and product validation.
- Stress analysis and failure analysis.

#### Qualifications of Design Manager

- Education/training (2.2.1): University qualification (Degree) in Engineering
- Language (2.2.2): Good business language skills in English, Hindi and Gujarati
- General professional experience (2.2.3): 15 Years of experience in Product Design
- Specific professional experience (2.2.4): 1-year experience in Indian Solar Market, especially in product development would be preferred.
- Leadership/management experience (2.2.5): 5 years' experience in project management
- Regional experience (2.2.6): 10 years' experience in projects in India of which 2 years in Gujarat.
- Development Cooperation (DC) experience (2.2.7): 0.5 1year experience in working with DC

#### **Manufacturing Support Staff of minimum 3 members**

## Experience of Manufacturing staff (155-man days)

- Manufacturing of Moulds
- Manufacturing of Products based on Roto-mould Technique
- Carry out maintenance of Moulds



#### Qualifications of Manufacturing Staff

- Education/training (2.2.1): High School Education or Diploma would be preferred
- Language (2.2.2): Hindi and Gujarati
- General professional experience (2.2.3): 1 Years of experience in Product Manufacturing

## 6. Inputs of GIZ

GIZ shall provide the new design of the benches at the beginning of the assignment. Consultant will have to apply appropriate Tapers, chamfers, radiuses, embossing as needed after the approval from Dr. Christoph Muller (Consultant, PV Port & Store).

#### 7. Deliverables

- I. The consultant shall deliver the 4 moulds as per the design by GIZ.
- II. The consultant shall supply Four Test- samples of the benches (one from each mould) to KOSOL ENERGIE PVT LTD (Kalthia house 744, Shiv dham farm, b/h Karnavati club, Sarkhej Gandhinagar Hwy, Ahmedabad, 380058) for product assessment by GIZ or an expert/agency appointed by GIZ. The bidder shall facilitate the transportation & inspection of the benches.
- III. The consultant shall submit the test report highlighting the results of parameters tested according to Chapter 2.

#### 8. Further requirements

- a) Timelines shall be strictly adhered and any delay in any of the deliverable shall be reported and aligned with GIZ in advance.
- b) The design document should be understood properly by the consultant and adhere to the same design for mould manufacturing.
- c) All work results and deliverables must be acceptable to GIZ.

## 9. Payment schedule

Following shall be the payment schedule for the scope under the tender which has to be performed by the contractor:

S.	Deliverables	Payment as	Month
No.		percentage of	



		consulting contract fee	
1	Advance	30%	After signing of the contract
2	Four moulds are successfullly manufactured as per the design and 4 test benches are prepared	30%	8 weeks after signing of the contract
3	Test Report of Benches	40%	10 weeks after signing of the contract
Tot	al	100%	

#### 10. Financial Bid

The Financial bids will be evaluated only in respect of those firms, which meet the technical bid criteria mentioned above by submitting all relevant documents and declaring child labour/blacklisting declaration.

Cost incurred towards submitting the bids in any case, will not be reimbursed/paid by GIZ.

#### 11. Submission of Bids:

- The tender documents duly completed should be submitted in sealed conditions in one envelope and duly superscripted as – Tender for the "Manufacturing moulds for PV Port benches, GIZ India Tender No. 91138058" and shall be sent as per instruction provided in Tender Notice.
- The bids shall be complete in all respect and the bidder shall submit all the relevant documents as described under this tender. If required, GIZ may solicit in writing further information from the bidder.



 The bids received after due Date and Time or in unsealed or incomplete shape or bids submitted by Fax or by Electronic Mail will be summarily rejected.

#### 12. Price Submission

- The price quoted should be exclusive of taxes (GST) and tax rate should be clearly indicated "Price Sheet – Annexure "D" and any such other levies/ taxes that may be should be clearly defined.
- If no mention is made regarding taxes in the price bid, it will be presumed that your rate is inclusive of taxes.

#### 13. OPENING OF TENDERS

Tenders which were not received prior to the submission time and date shall be specified separately in the minutes or addendum thereto.

The following Tenders shall be **DISQUALIFIED:** 

- Bids/Proposals received after deadline of submission.
- Bids/Proposals submitted by fax/email.
- Incomplete Bids.
- Bidders not meeting eligibility/commercial suitability.

#### 14. CANCELLATION OF THE TENDERING ACTION

The Tendering Action can be cancelled, if

- No Tender has been received which corresponds to the tender Conditions.
- There have been substantial changes to the basis of the tendering Action, or
- There are other serious reasons for such a cancellation.

The Bidders shall be informed without delay of the cancellation of the Tendering Action by the GIZ or his authorized representative and of the reasons for the same.

This tender notification does not entail any commitment on the part of GIZ, either financial or otherwise. GIZ reserves the right to accept or reject any or all proposals without incurring any obligation to inform the affected applicant/s of the grounds.



# **Annexure A: Covering letter**

# Covering Letter (To be submitted along with the Proposal/bid on company's Letter Head)

M/s			
To,			
The Head of Contracts and Procurement GIZ India, GDCO Office 46, Paschimi Marg, Vasant Vihar New Delhi – 110 057			
14CW DCIIII — 110 037			
Subject: Offer in response to Tender No. 9	<u>1138058</u>		
Dear Sir/ Madam,			
I/We the undersigned hereby offer to execute the scope of work and accordingly submit our offer in full compliance with terms & conditions of the bid.			
The bid is being submitted as per the instructions mentioned in the tender documents.			
Name of the Contact Person			
Mobile Number			
Email Id			
Land line Number, if any			
Office address			
(Signature and stamp of Bidder)			



#### Annexure B: Declaration by the bidder

#### Declaration by the bidder (to be submitted along with the bid)

I/We the undersigned (herein after referred to as manufacturer) having fully understood the nature of the work and having carefully noted design, specification, terms and conditions, etc. as mentioned in the bid document do hereby declare that,

- All the requirements of the bid document have been understood properly and accordingly agree with all provisions of the bid document and accept all risks, responsibilities and obligations directly or indirectly connected with the performance of the bid.
- All the relevant information with regard to proper execution of the proposed work have been understood, with respect to the proposed specifications, its intended end use, availability of required materials and labour etc.
- 3. Are capable of executing and completing the work as required in the bid and is financially sound to execute the scope of work as per the work execution schedule. We have sufficient experience and are competent enough to perform the contract up to the satisfaction of GIZ. We also give the assurance to execute the scope of work as per the specifications, terms and conditions on award of order.
- 4. We have no collusion with other bidders, any employee of GIZ or team engaged in executing the scope of work.
- We have not been influenced by any statement or promises by any employee of GIZ or anyone from the team engaged by GIZ but only by the bid document.
- We are familiar with all general and special laws, acts, ordinances, rules and regulations of the Municipal, District, State and Central Government that may affect the work, its performance or personnel employed therein.
- 7. We have never been debarred to undertake similar work by any Government undertaking/department, never been blacklisted or our companies' contract been terminated due to poor performance
- 8. The submitted offer shall remain valid for acceptance for 90 days from the last date of submission of bid.
- 9. All the information and the statements submitted with the bid are true to the best of knowledge.
- 10. We are not engaged in any kind of child labour nor any of our partner/suppliers are indulge in any child labour activities.

partner/suppliers are indulge in any child labour activities.
(Signature and stamp of Bidder)
Name:
Seal/Stamp: Date:



# **Annexure C: Submission of Documents**

S. No.	Particular	Document to be attached (Self Attested)		
1	Legal Status	<ul> <li>Documents pertain to the legal status of organisation (Certificate of Incorporation/Registration/Memorandum/Partnership deed etc).</li> <li>Copy of PAN, TIN and GST Registration.</li> </ul>		
2	Financial Statements	Copy of annual statement of income tax return – last two financial year.		
3	References	Reference of 5 established clients (As per the template) for reference check.		
4	Ecological and sustainable parameters	Any ISO, Quality or any Green certification though not mandatory.		
5	Company profile/Business card/Terms & Conditions	Covering letter with terms & conditions on letter head, duly signed and stamped.		

# Five existing clients for reference check

S. No.	Name of the client & address	Contact Person	Contact Number	Email ID	Years of Association
1					
2					
3					
4					
5					

