

TENDER

for

Procurement of Rail Integrated Photovoltaics system (Goods) for Supply, Installation & Commissioning at Kochi Metro Rail Limited

Tender Number: 10055486

Date: 30.09.2026

Brief Tender Notification

Particulars	Description
Purpose of Tender	To select an experienced supplier and EPC for Supply, Installation & Commissioning of Rail Integrated Photovoltaics
Tender reference number	10055486
Date of tender announcement	30.09.2026
Last date to submit pre-bid queries by the interested bidders	12.10.2026
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 respective web portal.	15.10.2026
Last Date and time for submission of bids	3rd November 2026
Mode of Submission	Bids to be submitted via functional email id, as per the instructions given below.
Validity of Bids/ Offered Price	90 days from the last date of submission of bids i.e. The selected supplier will not be able to vary from their financial bid until the completion of the Order, if awarded by GIZ
Address for Bid Submission	The agency has to submit the proposal, on the following email id only. qn_quotation@giz.de The bidder must NOT submit the proposal on any other email id, else the bid will be rejected
Delivery Location and Installation	Kochi, Kerala

Tender Notice

GIZ Country Office (India) is soliciting the bids from a qualified and experienced solar energy developers/manufacturers/EPC companies to submit proposals for Supply, Installation & Commissioning of Rail Integrated Photovoltaics system of around **100kW**, to be installed as pilot demonstration at Kochi Metro Rail Limited, Kochi, Kerala, India as per the terms and condition of tender documents.

Purpose of the Bid

The purpose of the tender is to select a qualified solar developer/manufacturer/EPC company, who can Supply, Installation & Commissioning of Rail Integrated Photovoltaics system of around **100kW AC**, to be installed as pilot demonstration at Kochi Metro Rail Limited, Kochi, Kerala, India.

The detailed address and locations will be shared in this ToR.

Process of tender submission

The following documents are attached with the tender applications: -

- 1) Tender and Bidding Condition Document
- 2) Covering Letter- Annexure- A
- 3) Declaration Letter- Annexure- B
- 4) Price Submission – Annexure-C
- 5) Declaration Compliance with Embargoes – Annexure-D
- 6) Delivery Schedule – Annexure-E
- 7) Technical Specification Submission Sheet – Annexure F
- 8) 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 cover letter must be addressed to

The Head of Procurement
GIZ GmbH
New Delhi – 110 029

- Please mark your email: **Tender Ref: *Procurement of Rail Integrated Photovoltaics system (Goods) for Supply, Installation & Commissioning at Kochi Metro Rail Limited – RFQ Nr. 10055486***

Timelines

a) The bidders must submit the queries on the below-mentioned email id's –

<u>Description</u>	<u>Deadline</u>	<u>Email ID</u>	<u>Remarks</u>
Per-bid Queries from Bidders	12 th Oct'26	Please send it to: sanjay.dhar@giz.de & swarup.mallik@giz.de Please do not send the queries on any other email ids	Please mention the subject line as – “QUERIES FOR TENDER” Procurement of Rail Integrated Photovoltaics system (Goods) for Supply, Installation & Commissioning at Kochi Metro Rail Limited – RFQ Nr. 10055486 Pre-bid queries received after the deadline or sent to any other email id, apart from the given email ids will not be considered
Clarifications given by GIZ	15 th Oct 26		The response will be prepared in form of FAQ and will be uploaded on following web portals. www.dgmarket.com www.tendertiger.com www.tendersontime.com Individual responses to queries shall not be given.
Bid Submission deadline	3 rd Nov'26	Please send the proposal only on the below email id: qn_quotation@giz.de	Bid should be sent only on qn_quotation@giz.de email id only, Bids sent to any other email id/hard copy, will be disqualified.

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

We look forward to receiving your offers.

List of abbreviations

AC - Alternating Current
AJB - Array Junction Box
BOS - Balance of System
BoQ - Bill of Quantities
CP - Control Panel
DC - Direct Current
DCDB - Direct Current Distribution Box
DPR - Detailed Project Report
EPC - Engineering, Procurement and Construction |
GI - Galvanized Iron
HT - High Tension
kW - Kilowatt
kWp - Kilowatt Peak
kWh - Kilowatt-hour
MCB - Miniature Circuit Breaker
MCCB - Molded Case Circuit Breaker
MNRE - Ministry of New and Renewable Energy
MPPT - Maximum Power Point Tracking
O&M - Operation and Maintenance
PR - Performance Ratio
PV - Photovoltaic
RIPV - Rail Integrated Photovoltaics
SCADA - Supervisory Control and Data Acquisition
T&C - Testing and Commissioning
ToR - Terms of Reference
V - Volt
W - Watt
Wp - Watt Peak

Context

1.1 Background

The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH is a federal enterprise that supports the government of Germany in the field of international cooperation for sustainable development. GIZ has a global footprint in over 130 countries and has been operating in India for over 50 years, supporting technical expertise in the areas of national priorities. In collaboration with stakeholders, GIZ's key areas in India include Vocational Education and Training, Environment, Energy, Sustainable Urban Infrastructure, Natural Resource Management and Economic Development.

The German Federal Ministry for Economic Cooperation and Development (BMZ) is funding a dedicated project under its Development Partnership with the Private Sector program (develoPPP). The Development Partnership with the Private Sector (develoPPP) project aims to establish scientific evidence, raise awareness, and build capacities of key stakeholders in the solar energy ecosystem and related fields. Hence, it plans to collaborate with diverse partners, many of whom have already demonstrated their commitment to the project.

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) is leading the implementation of this develoPPP project and a crucial aspect of the project involves developing comprehensive RIPV guidelines and fostering strong research & development (R&D) and industry collaborations with established European partners.

1.2 Project background

India has committed to significantly boosting its renewable energy capacity to 500 GW by 2030 at COP26. With electricity demand projected to grow by nearly 5% annually until 2040 and an urgent need for climate change mitigation, scaling up innovative solar photovoltaic (PV) applications across the country is crucial. The Ministry of New and Renewable Energy has identified building-integrated photovoltaics (BIPV) and rail/road-integrated photovoltaics (RIPV) as key new and innovative solar applications for proliferation.

The project aims to achieve this by:

1. Setting up of demonstration projects of Rail integrated PV technology in India across feasible sites.
2. Generating accessible scientific knowledge on the technical performance, economic viability, and environmental benefits of RIPV in the Indian context.
3. Implementing comprehensive skill development programs to build a skilled workforce for these technologies.
4. Introducing supportive policy reforms and a regulatory framework through evidence-based advocacy.

Purpose of the Tender

GIZ India would like to procure 100kW of AC Rail Integrated PV system for establishing pilot projects in India. In the current scenario, the RIPV ecosystem in India is not fully mature and developed. It is aimed that through the pilots which are planned at government owned

infrastructure, it will help accelerate the exposure of this technology. The bidder is expected to provide RIPV System of certain specifications which shall be ultimately put up as per a formulated design.

Detailed Scope of Work

The scope of work includes **“Supply, Installation & Commissioning of Rail Integrated Photovoltaics system of around 100kW, to be installed as pilot demonstration at Kochi Metro Rail Limited, Kochi, Kerala, India”** as illustrated in Specifications.

The Contractor will carry out and complete the said work under this contract in every respect in conformity with the contract documents and with the direction of and to the satisfaction of the owner's (GIZ is referred to as Owner) and on-site representatives. The contractor will furnish all required labour, packing material and means of transport as listed under Price submission (Annex D), which are necessary and customary to be performed under this contract.

Supply details:

- The selected bidder shall make available the required equipment as specified in table 1 of the 'bill of materials and quantities' section and as per the specifications listed in table 2 of the 'technical specifications' section.
- **Please note that the detailed project report of the RIPV project shall be shared to the winning bidder, based on which the bidder shall proceed as per the work plan mentioned in Annex E.**

The selected bidder will be responsible for the following:

- The responsibility of transportation / loading / unloading / handing over to GIZ. The bidder is expected to supply the RIPV System at the site
- The site is in Kochi, Kerala. Detailed address shall be provided after the bidding process is completed.
- Shipping of equipment shall be in coordination with the designated GIZ member.
- At the shipment site, the selected bidder shall unpack the shipment in presence of GIZ officials and take formal acceptance of material once quality is approved. The shipment must arrive in suitable form of packaging (wooden boxes OR A racks), which is safe for transportation within India. It is upon the bidder to take measures to ensure safe transportation.
- All documentation and formalities regarding transport (Shipment documentation, port rents, etc) shall be taken care by the bidder and must be highlighted in the proposal.
- Pre- Installation technical support: Under this mandate, the supplier shall be required to provide technical support required during installation, if any to GIZ.
- **Made-in-India panels will be given advantage.**

- Once the equipment is dispatched, the supplier shall share all details of consignment including its mode of transport, vehicle details and anticipated arrival schedule of consignment.
- After arrival of consignment, supplier shall inform GIZ staff, who shall arrange for unloading place access for consignment loaded vehicle. Supplier shall also share name, details, and IDs of main point of contact of this team with GIZ staff.
- Supplier shall share details of its unloading, team details and schedule of related activities.
- Pre and post installation support: The contractor must address and promptly respond to pre and post installation troubleshooting services as needed, since the installation will be carried out by the project team and will require technical assistance based on the product design.
- All bidders are expected to submit technical specifications sheet and G.A drawing along with their bids which will be one of the assessment criteria.

The contract agreement **Supply, Installation & Commissioning of Rail Integrated Photovoltaics system** will be executed between the awardee agency/ firm and GIZ. The terms & conditions incorporated therein shall be binding on the agency and valid for a period of 1 year.

Technical Scope of Work:

A. Location – Thripunithura Metro Station, Kochi, Kerala.

B. System type: 130.68 **kWp grid-connected** roof top solar photovoltaic (PV) power plant.

C. Scope: Design, engineering, manufacture, Procurement, supply, installation, testing, and commissioning of 130.68 kWp grid-connected SPV with vertically aligned Solar panels on the elevated metro viaduct on turnkey basis, including Structural, electrical, related minor civil works including the dismantling of the existing handrail installed along the parapet of the viaduct, as required for the execution of the project.

- The equipment and materials for 130.68 kWp Grid Interactive Solar PV Power Plant with associated system (Typical) shall include but not be limited to the Supply, Erection, and Testing & Commissioning of the following:
 - Solar PV modules, of suitable rating in each array.
 - Solar PV modules in array totaling 130.68 kWp including mounting frames, structures, array foundation and module inter connection.
 - String Inverters
 - Array Junction boxes, distribution boxes and Fuse boxes. MCBs, Surge Arrestors
 - Online monitoring system using mobile app / system-based software for module level monitoring. Data acquisition system with remote monitoring facilities.

- Metering and protection
- LT Power and Control Cables including end terminations and other required accessories for both AC & DC power
- Lighting arrestors
- PVC pipes and accessories/trenches
- Tool kit and Earthing kit
- Any other equipment / material required to complete the 130.68 kWp Solar Power Plant.
- Dismantling of existing handrail on the viaduct.
- Receipt, unloading, storage, shifting, erection, testing and commissioning of all supplied material.

D. Design of MMS at elevated metro viaduct for installing vertically aligned PV panel of capacity 130.68 kWp Grid Interactive Solar Power Plant and its associated electrical & Civil-mechanical systems includes the following.

- Design of modular elevated structure.
- Structural design calculations
- Fabrication and erection of structure.
- Submission of Single line diagram, Layout plan, earthing layout
- Earthing design and calculations.
- Any other relevant drawings and documents required under this contract.

E. The items of civil erection work shall be performed with respect to the following but not limited to:

- Erection of MMS at Elevated viaduct and related foundation work.
- Solar PV Array.
- Power Cables
- Baseplate fixing and bolting work for the foundation of mounting structures etc.
- Entire GI cable tray
- The MMS to be provided with gutter to channel the water to the designated location.
- Fabrication, supply & erection of cable trays, support, brackets and accessories.
- Galvanized steel rigid / flexible conduits and accessories, Hume pipes, ferrules, lugs, glands, terminal blocks, cable fixing clamps, nuts and bolts etc. as required.

Any other items not specifically mentioned in the specification, but which are required for erection, testing and commissioning and satisfactory operation of the solar power plant are deemed to be included in the scope of the specification unless specifically excluded.

Materials and accessories, which are necessary or usual for satisfactory and trouble-free operation and maintenance of the above equipment.

Construction Power & Water as required for this contract will be arranged by KMRL.

F. Submission of following documents drawings data design and engineering information to GIZ/ KMRL or its authorized representative for review and approval in three copies.

- Detailed technical specifications of all the equipment.
- Design criteria.
- Design calculations.
- General arrangement and assembly drawing.
- Energy Yield Assessment
- Schematic diagram for entire electric system
- G.A. drawings for all types of structures, LT Panels
- Quality assurance plans.
- Test report (for type, acceptance, and routine tests).
- O&M Instructions manuals and its drawings.

G. All drawings shall be fully corrected to agree with the actual “as built” site conditions and submitted to KMRL after commissioning of the project for record purpose.

H. All work and drawings shall fully conform to KMRL technical and safety requirements.

I. The contractor shall forward to KMRL, schedule for various activities in the form of PERT Chart within a week from the date of issue of work order.

J. The contractor shall provide a detailed training plan for all operation, maintenance procedures, which shall after approval by KMRL, form the basis of the training program. The contractor shall also be responsible for training of KMRL staff.

K. The contractor shall establish a system to maintain an inventory of spare parts and tools, equipment, consumables and supplies for the facilities and operation.

L. The contractor shall employ and coordinate the training of personnel who will be qualified and experienced to operate and monitor the facility and to coordinate operations of the facility with the grid system.

M. The contractor shall take CAR policy and provide adequate insurance coverage during project execution period.

N. Procurement for spares parts, overhaul parts, tools, equipment, consumables, etc. required to operate and maintain the project in accordance with the prudent utility practices and having regarded warranty recommendations are the responsibilities of the contractor.

O. The contractor shall hand over the system to maintain an inventory of spare parts, tools, equipment, consumables and supplies for the facility's operation along with the required inventory to maintain the facility **for one year**.

P. The contractor shall keep in stock the required spares and consumables.

Q. Quality Spares & Consumables: In order to ensure the longevity and safety of the core equipment and optimum performance of the system the contractor should use only genuine spares of high quality standard.

R. Tools and Tackles: The Contractor shall arrange for all the necessary tools and tackles for carrying out all the maintenance work covered under this contract.

Liquidated Damages and Termination of Contract

Except because of force majeure, if the bidder fails to perform the scope of work, to the satisfaction of GIZ, within the time period specified in the delivery schedule or within the extended time period if any, GIZ shall without prejudice to its other remedies under the contract, deduct from the contract price as liquidated damage, a sum equivalent to 1% of the price of the unperformed work/ services for each week of delay until actual completion of work, up to a maximum deduction of 10%. Once the maximum is reached GIZ may consider termination of the contract.

A. SPECIAL CONDITIONS

1. Scope: The scope of work to be carried out under this contract is- The Contractor will carry out and complete the said work under this contract in every respect in conformity with the contract documents and with the direction of and to the satisfaction of the Owner's (GIZ is referred to as Owner) site representative. The contractor will furnish all labour, materials, and equipment (except those to be supplied by the owner) as listed under BOQ and specified otherwise, transportation and incidental necessary for supply, and commissioning of the complete system as described in the technical specifications and as listed in BOQ. This also includes any material, equipment, appliances, and incidental work not specifically mentioned herein or noted on the drawings/documents as being furnished or installed, but which are necessary and customary to be performed under this contract:

- Submission of samples, technical specifications, and G.A drawings of panel.
- Manufacturing of the panels
- Supply of the manufacturing panels at the site.

2. Performance Guarantee: The contractor/ select bidder will perform the work in accordance with the tender documents, and other documents forming part of the contract. At the close of the work and before issue of final certificate of virtual completion, the

contractor will furnish written performance guarantee against defective materials for a period of **one year from date of handing over**. The Contractor will hold himself fully responsible for replacement, free of cost to Owner because of defective product.

3. **Specifications:** The work will be installed as per Bill of Materials and Quantities (BOQ).
4. **Materials & Equipment:** All materials and equipment will conform to the relevant Indian Standards and will be of the approved make and design. Compliance certificate on safety is mandatory. Contractor/ select bidder will be responsible for the safe custody of all materials and will insure them against theft or damage in handling or storage etc.
5. **Completion Certificate:** On completion, a certificate will be furnished by the Contractor countersigned by the supervisor, under whose direct supervision the installation was carried out.
6. **Demonstration to Owner:** At completion, devices subject to manual operation will be operated at least two times in presence of Owner's site representative to demonstrate satisfactory operation.
7. **Warranty / Guarantee :** The bidder shall clearly specify all warranties and guarantees applicable to the equipment, RIPV system.

A. EQUIPMENT LIST/BILL OF MATERIALS AND QUANTITIES

For Procurement of Rail Integrated Photovoltaics system ("Goods") for Supply, Installation & Commissioning at Kochi Metro Rail Limited

Table 1: Procurement of Rail Integrated Photovoltaics system ("Goods") for Supply, Installation & Commissioning.

Item No.	Name of the item	Technical specification	QTY
1	Solar Photovoltaic Modules – 605 Wp	High-efficiency crystalline silicon N-Type TOPCon, dual-glass, bifacial solar PV modules of minimum 605 Wp rating, with anti-reflective coating and module efficiency greater than 22%. Modules shall be suitable for the proposed 130.68 kWp grid-connected SPV system and shall comply with the applicable IEC/IS requirements specified in the tender.	216 Nos.
2	Three-Phase String Inverter – Minimum 25 kW AC	Three-phase grid-connected string inverters suitable for the proposed PV array and compatible with the specified DC optimisers. Inverters shall provide 415 V AC, 3-phase, 50 Hz output and shall incorporate necessary protection, input/output isolation, grid synchronisation, anti-islanding, data logging and monitoring provisions. Total inverter AC capacity shall be minimum 100 kW.	4 Nos.
3	Real-Time Remote	Cloud/web-based monitoring system with data logger and communication interface for remote monitoring of inverter and	1 Set

	Monitoring System	external sensor parameters. The system shall provide string/MPPT/inverter-level monitoring, graphical and statistical comparative analytics, automated fault/anomaly detection, alerts and remote troubleshooting facility.	
4	Visible Isolating Switch / MCCB	Suitable AC isolating switch/MCCB for safe isolation and protection of individual inverter AC circuits, with appropriate voltage, current and breaking capacity. The arrangement shall be coordinated with the LT power interfacing panel and approved electrical SLD.	4 Nos. + 2 Spare
5	LT Power Interfacing Panel / AC Distribution Board	Outdoor-duty LT power interfacing panel having adequate incomers from individual PCUs/string inverters and suitable outgoing connection to the existing Main LT Panel. Panel shall include copper busbar, MCCBs/circuit breakers/isolators, fuses, indicators, voltmeter, ammeter, frequency meter and electronic energy meter, as applicable.	2 Nos.
6	Auto-Reset RCD	Auto-reset residual current protection device suitable for the AC electrical system and coordinated with the inverter and LT protection system. Rating and residual current sensitivity shall be as per the approved electrical design and equipment manufacturer's requirements.	1 No.
7	Surge Protection Device (SPD) Kit	Surge protection arrangement for the SPV system. DC SPDs shall be Type 2 DC SPD conforming to IEC 61643-31, with associated protection and isolation arrangements. Additional AC SPD, where required, shall be provided based on the approved electrical protection scheme.	2 Sets
8	Electrical Plugs, Sockets & Accessories	Electrical plugs, sockets, connectors and associated accessories required for the complete installation. Outdoor components shall be suitable for the environmental conditions at the Metro viaduct and shall be appropriately protected against weather and moisture.	As per requirement
9	Stainless Steel / Approved Module Fasteners & Clamps	Approved fasteners, clamps, nuts, bolts, washers and associated accessories for securing PV modules to the MMS. Fasteners shall be suitable for the outdoor coastal environment and shall prevent damage, vibration and loosening during Metro operation and wind conditions.	Lot
10	Cable Trays, Galvanized Conduits & Accessories	GI cable trays, galvanized steel rigid/flexible conduits, Hume pipes, supports, brackets, clamps and associated accessories for routing and mechanical protection of AC, DC and control cables. DC and AC cables shall be routed separately with appropriate identification.	Lot
11	Module Mounting Structure (MMS) Tables	Factory-fabricated, modular hot-dip galvanized MMS suitable for vertically aligned PV panels on the elevated Metro viaduct. Structure shall be designed for applicable dead, live, wind and seismic loads in accordance with IS 800, IS 875 Parts 1, 2 & 3, IS 2062, IS 808, IS 1161, IS 4923 and IS 4759. Minimum service life shall be 25 years and zinc coating shall be minimum 80 microns.	35 Nos. / As per approved design
12	Viaduct Mounting Interface &	Structural base plates and mounting interfaces for fixing the MMS to the RCC Metro viaduct, including stiffening gussets, approved post-installed chemical anchors, required embedment,	1,015 Nos. or as per

	Structural Fixation Base Plates	non-shrink grout and all associated fastening accessories. The complete anchoring system shall be structurally designed and verified for dead, live, wind and seismic loads.	approved drawings
13	Lightning Protection / Lightning Arrestor System	Lightning protection system comprising suitable lightning arrestors/air terminals, down conductors, mounting arrangements and associated accessories for protection of the PV installation, MMS and electrical equipment, complete with necessary connections to the earthing system.	Lot
14	AC Power Cables	LT power and control cables for interconnection of individual string inverters, LT power interfacing panels and existing Main LT Panel, including cable glands, lugs, ferrules, terminations, identification and all accessories. Cable size and type shall be as per the approved electrical design and voltage-drop/ampacity calculations.	Lot
15	DC Solar Cables & UV-Resistant Cable Clips	Solar DC cables suitable for 1.5 kV DC application, with tinned copper conductors, UV/weather-resistant XLPO/XLPE insulation/sheath and suitable environmental/fire performance. Cables shall comply with IS 17293:2020 and applicable BIS requirements. Complete with UV-resistant cable clips and accessories.	Lot
16	Earthing System & Earthing Materials	Complete earthing system for PV modules, MMS, inverter, LT panels and other non-current-carrying metallic parts, including earth electrodes/pits, earth conductors, strips/cables, clamps, test links and accessories. Each array structure shall be properly earthed and the system shall provide two distinct earth connections for three-phase equipment. Earth resistance shall be demonstrated as ≤ 1 ohm.	Lot
17	Miscellaneous / Balance of System Items	All other materials, accessories, consumables, hardware and items required for complete installation, testing, commissioning and satisfactory operation of the 130.68 kWp grid-connected RIPV system, including items not specifically listed but necessary for completion of the works.	1 Lot

Table 2: Standards

Rail Integrated PV System	
1.	IEC 61215, IEC 61730, IEC 61701 and IEC 62804, IEC 61643-31 as applicable
2	PV Module Mounting Structure (MMS)- IS 800, IS 875 Parts 1, 2 & 3, IS 2062, IS 808, IS 1161, IS 4923 and IS 2629 / IS 4759, IS 104, IS 7215, IS 1367 / 3757.
3	Resistance to corrosion IS 61701
4	General photovoltaic generating systems IS 14153
5	DC Solar Cable & UV-Resistant Cable Clips- IS 17293:2020 and applicable BIS requirements.
6	safety standards (IS 376, IS 732, IS 3043, CEA Regulations).

Notes:

- The bidder must prepare drawings and share for approval before manufacturing.
- The bidders must show the whole list of certifications they will have for RIPV Systems.

Payment Terms

- 30% advance payment shall be paid against bank guarantee only. The bank guarantee shall be valid for a minimum period of 9 months from the date of signing of contract.
- 70% will be made after complete delivery and acceptance on-site
- If the agency cannot submit the Bank Guarantee, advance payment in that case cannot be released. And 100% payment will be made after complete delivery of goods and associated services/installations after issuance of acceptance certificate.

Submission of Bids:

The tender documents duly completed should be submitted with subject line on mail as - ***Procurement of Rail Integrated Photovoltaics system (Goods) for Supply, Installation & Commissioning at Kochi Metro Rail Limited – RFQ Number-xxxxxxxxx***

Technical Bid- Technical proposal (e-Folder) must include the below mentioned documents

1. The bidders must submit the detailed technical specifications (without prices in technical proposal) of the proposed supplies/equipment's. Bidders must submit detailed technical information/specifications on the template, provided with tender package.
2. **Merely attaching the company technical sheets or brochures of the proposed equipment's/supplies will be considered a technically incomplete proposal.**

Bidders are required to provide detailed technical specifications for each item of equipment or supply, clearly demonstrating compliance with the minimum technical requirements outlined in Annexure C.

3. GIZ is proposed the minimum technical specifications/requirements as provided in excel sheets attached with tender package. The bidder must submit the bid for equivalent specifications or more.
4. The bids will be complete in all respects and the bidder will submit all the relevant documents as described under this tender. If required, GIZ may solicit in writing further information from the bidder. The bidders must quote for all the items. In case of partial quoting of items, the bid will be treated as incomplete and shall be rejected.
5. Bidders are requested to send the Technical and Commercial proposal in **separate attachments** (Technical & Financial) in pdf format, in a single mail/multiple emails along with all supporting documents in a compressed folder not exceeding file size of **20 MB** in total. Files/Folder more than 20 MB of size will not be delivered in the above-mentioned email ID's resulting in non-submission of the bids.
6. The bidders can submit the proposal(s)/zip folders either in one email or two emails, based on the file size/bandwidth of folders.
7. Uploading of bids is prohibited on open sources like **google drive, drop box etc.** bidders submitting their bids on these platforms shall be immediately **disqualified**.

8. Any claims of non-receipt of bids/pre-bid queries shall not be considered later in case the bidder fails to produce the delivery receipt of their bids/pre-bid queries sent to the quotation id.
9. In case the bid is not delivered in the gn_quotation@giz.de email, due to any technical glitch or for any other reasons, it would be entirely GIZ's discretion, whether to seek the bid again from the bidder or not, therefore it is imminent to keep read receipt or delivery receipt of all submission for reference.

Price Submission

- a) The prices must be quoted using **Annexures C** provided with the tender package. The commercial proposal must be submitted on the company's official letterhead, duly signed and stamped by an authorized signatory, and accompanied by a covering letter that includes complete company details.
- b) The price quoted should be exclusive of taxes (GST) and tax rate should be clearly indicated in separate column.
- c) If there is no mention of taxes in the price bid, it will be presumed that your rate is inclusive of taxes.
- d) The bidder must propose the quality, brand and equivalent to specifications of the equipments. The rates must be also quoted accordingly.
- e) Any suggestions / options can be submitted on separate sheet, clearly indicating the suggested option.
- f) The agency must quote for all the items/equipments/materials mentioned in the Financial format, partial/incomplete offers will not be evaluated/accepted.
- g) The validity of the offers should be at least for 90 days from the date of deadline for submission of Bid.

The bidder has to include in his bid all costs associated with the (1) transportation, (2) packing and (3) delivering of all items to the consignees at the project locations mentioned in table 1 as specified within the final contract, including the auxiliary components and materials, (4) unloading and (5) transporting of equipment from unloading place at end user/training institution. Packing and transportation may include any intermediate storage of equipment if necessary. Please note that the cost for package, and transportation must not exceed the project value and shall be part of the material.

The bidder may propose any additional works or components that are not included in Annexure C – Pricing template, which they consider essential for ensuring a functional, economical, reliable, and safe refrigeration system. Such proposals should be submitted as a separate document along with the core Technical-cum-Commercial Proposal.

Minimum Eligibility Criteria for participation in tender process

Apart from submitting the technical proposal, the bidders must also submit the following eligibility documents within the technical bid.

Note: The bidder has to submit the documentary evidence for all the below given criteria's, failing which bid may be rejected.

S. No.	Particular	Requirements & Documents to be attached
01	Company Registration	The agency must have a registered office in India with minimum experience of 3 to 5 years in supply and procurement of Solar Photovoltaics Systems. (Mandatory)
02	Average Annual Turnover must be minimum of Indian Rupees One Crore Only in last three financial years.	CA Certificate (Mandatory) Computation of Income Tax for last three financial years ((Mandatory) Audited P&L Account and Balance Sheet for last three F.Y including UDIN no. of CA (Mandatory)
03	Client List	The company must provide client list of 2 small/ medium / large size companies in the past 05 years having worked on producing solar modules of at least 500kW of capacity in total of specialized solar modules.
04	Working Experience	(Mandatory) The bidder's company shall have experience of working in at least 5 projects in solar modules system supply, installation and commissioning. 1. Prior work order/ purchase order/ completion certificate will be attached for at least 2 companies demonstrating the similar nature of work undertaken in the past 3 years with minimum value of INR 700,000 (Rupees Seven Lakhs only) 2. GIZ Experiences, if any: Please give references / or workorder/ or contract of assignments (desirable) 3. Non-GIZ Experiences and other International development cooperation experience: (Please give references / or workorder/ or contract of assignments other than GIZ (desirable)
05	Legal Status	Incorporation Certificate and /or other legal registration documents as per the nature of business (Mandatory)

06	PAN, TIN, GST	Copy of PAN, TIN and GST certificates (Mandatory)
07	Bank details	Copy of Cancelled cheque along with bank details (Mandatory)
08	Organizational Profile	Organisation may submit standard brochure/profile of the organization including the client list for reference purpose (Desirable)
09	References	Organization may provide reference of minimum 02 reputed clients from last 05 years (Desirable)
10	Ecological and sustainable parameters (Desirable)	Organisation should briefly elaborate the business practices adopted towards the sustainability initiatives.
11	Declaration (Mandatory)	The company shall declare that no child labour is engaged in their organisation directly or indirectly (as per Annexure B)
12	Backlisting / Caution Listing (Mandatory)	Self-certification to the effect that the tenderer has not been blacklisted by any company or its contract has been terminated on account of poor performance (as per Annexure B)

Opening and Evaluation of Tenders

- The following Tenders will be **DISQUALIFIED**:
 - Bids/Proposals received after deadline of submission.
 - Bids/Proposals submitted by fax, email IDs except specified email address and in hard copy.
 - Bidders not meeting eligibility/commercial suitability.
- The Financial bids will be evaluated only in respect of those firms, which meet the eligibility & technical bid criteria mentioned above by submitting all relevant documents and declaring child labour/blacklisting declaration.
- Based on the offers presented, the different proposals will be scored for excellence, and final selection will be made of the best of the offers by GIZ
- Any arithmetical error by the Bidder in Price Bid or in the additions or in carrying forward subtotals to the summary or to the Tender will be corrected during the evaluation of the Tenders. In such cases the Tender sum will be adjusted accordingly, and the Bidder will be informed. It will be assumed that the unit price rates entered in the Price Bid are correct.
- GIZ does neither bind himself to accept the lowest Tender or any Tender, nor will he be responsible or pay for expenses or losses, which may be incurred by any Bidder with the preparation of his Tender.

Cancellation of Tendering Action

- The Tendering Action can be cancelled, if.
 - (a) No Tender has been received which corresponds to the Tender Conditions,
 - (b) There have been substantial changes to the basis of the Tendering Action, or
 - (c) There are other serious reasons for such a cancellation.
 - (d) Bid submitted in Hard Copy
- The Bidders will 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.

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

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 Procurement
GIZ India, GDCO Office
Vasant Vihar
New Delhi – 110 057

Subject: Offer in response to RFQ Nr. 10055486

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 Authorized signatory	
Mobile Number of the Authorized signatory	
Email Id of authorised signatory	
Land line Number if any	
Updated Office address	
CIN /Registration Number of Company	
Name of all Directors with DIN/PAN	

(Signature and stamp of Bidder)

Name:

Seal/Stamp:

Date:

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 Service Provider) having fully understood the nature of the work and having carefully noted the scope of work, specification, terms, and conditions, etc. as mentioned in the bid document do hereby declare that,

1. 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.
2. All the relevant information with regard to proper execution of the proposed work has 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 are 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.
5. 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.
6. 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. The submitted offer will remain valid for acceptance for 90 days from the last date of submission of bid.
8. All the information and the statements submitted with the bid are true to the best of knowledge.
9. We are not engaged in any kind of child labour nor any of our partners/suppliers indulge in any child labour activities.
10. 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.
11. Mandatory grounds of exclusion – i.e., the bidder and/or its management has been involved in and convicted of an offence under:
 - a. the Indian Penal Code, 1860;
 - b. the Prevention of Corruption Act, 1988;
 - c. the Prevention of Money Laundering Act, 2002;
 - d. the Unlawful Activities (Prevention) Act, 1967;
 - e. the Immoral Traffic (Prevention) Act, 1956; or
 - f. any other applicable legislation in this regard.

In addition, the bidder is also debarred from the procurement process, if the bidder has committed any fiscal offence including but not limited to the following legislations, which offence/contravention has been established by judicial or administrative decision having final and binding effect:

- a. default in payment of tax under the Income Tax Act, 1961;
- b. default in payment of goods and service tax in compliance with the GST laws;
- c. default in payment of any tax in compliance with the applicable national, state or local legislation;
- d. default in payment of employee benefits under the labour and employee legislations such as provident fund, professional tax, labour welfare cess etc.; or
- e. default in compliance with the Foreign Contribution (Regulation) Act, 2010.”

Sub-point (a) and (b) above (concerning the Indian Penal Code, 1860 and the Prevention of Corruption Act, 1988) have been prescribed as grounds for debarment of a bidder, under rule 151(1) of the General Financial Rules, 2017 as well.

(Signature and stamp of Bidder)

Name:

Seal/Stamp:

Date:

Annexure C: Price bid submission

Separate excel sheet enclosed with the tender document.

Annexure D: Declaration Compliance with Embargoes – Annexure-D

The bidder is required to submit the duly signed & stamped 'Compliance with Embargoes' declaration and must be part of technical proposal. By signing the declaration, the bidder affirms that they have thoroughly reviewed the document and are in full compliance with the regulations stipulated therein."

Annexure E: Delivery Schedule

All works shall be carried out according to implementation and workflow description (contractors' responsibility), conform to the end user's requirements (beneficiary) to minimize interferences and to be agreed on prior to execution.

Implementation, milestones and workflow sheet, starting with the date of contract countersignature. The bidder shall indicate the foreseen number of calendar weeks within this "milestones and workflow sheet".

Milestone	Completion time (weeks) To be completed by the contractor, effecting from the date of contract award!	Activities	Reporting
	D0 (Week 0)	Date of Purchase Order / Award of Contract	
1	D0 + 3 weeks	System design & engineering Approval of drawings/BOQ	Mail approval
2	D0 + 9 weeks	Complete Procurement of materials and delivery to the site	Delivery Challan
3	D0 + 15 weeks	Dismantling of the existing handrail and Installation of RIPV System. Installation, Testing & Commissioning of RIPV System. O&M training to KMRL staff	Draft Report
4	D0 + 16 weeks	Demonstration of the project Project completion report with all necessary documentation and Complete handover	Final Report

Name of the Supplier:

Signature & Stamp

Date

Location & Delivery of performance

S.No	Location	Address
1	Kerala	Thripunithura Metro Station, Kochi, Kerala.