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Tender for inviting quotations from the manufacturer/authorized distributor for the complete set of Air Handling Unit (AHU) as per TERI's requirement and installation for plant tissue culture lab at Guyana.

TERI/MAT/2023–24/016

Tender Date: 20-03-2024

Last Date for Submission of Bids: 11-04-2024

**The Energy and Resources Institute (TERI)
6-C, Darbari Seth Block
IHC Complex, Lodhi Road
New Delhi – 110003, India**

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About TERI:

TERI is an independent, multi-dimensional organization, with capabilities in research, policy, consultancy and implementation. We are innovators and agents of change in the energy, environment, climate change and sustainability space, having pioneered conversations and action in these areas for over five decades.

General Information


TERI invites Bids from Prospective Bidder through tendering for inviting quotations from the manufacturer / authorized distributor for the complete set of Air Handling Unit (AHU) with installation at Guyana, as per the details given in tender document.

The tender document is available on TERI's, website: <http://www.teriin.org/Announcements/> from 11th March, 2024. Interested bidders may view/download the Bid document and submit their Bid up to the date and time mentioned in the table.

Schedule of activities:-

Sl. No.	Item	Tender No.	Quantity Required	Fee of Tender Document	Earnest Money Deposit
1	AHU as per specification mentioned below at Guyana	<u>TERI/MAT/2023-24/016</u>	1 nos.	10,000.00	25,00,000.00


Sl No.	Milestone	Date and Time (dd-mm-yyyy; hh:mm)
1	Release of tender	20.03.2024
2	Last date for submission of technical and financial bid	11.04.2024; 15:00 hrs
5	Opening of technical bid	12.04.2024; 11:00 hrs
6	Shortlisted firms on the basis of technical evaluation	12.04.2024; 15:00hrs
7	Financial bid opening of only of technically qualified bidders	15.04.2024; 11:00 Hrs
8	Finalization of Bidder	Intimation to be given only to finalized Bidder(s)

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9	Venue of opening of technical and financial details	The Energy and Resources Institute, 6C, Darbari Seth Block, India Habitat Centre, Lodhi Road, New Delhi – 110 003
10	Project Time frame	One year

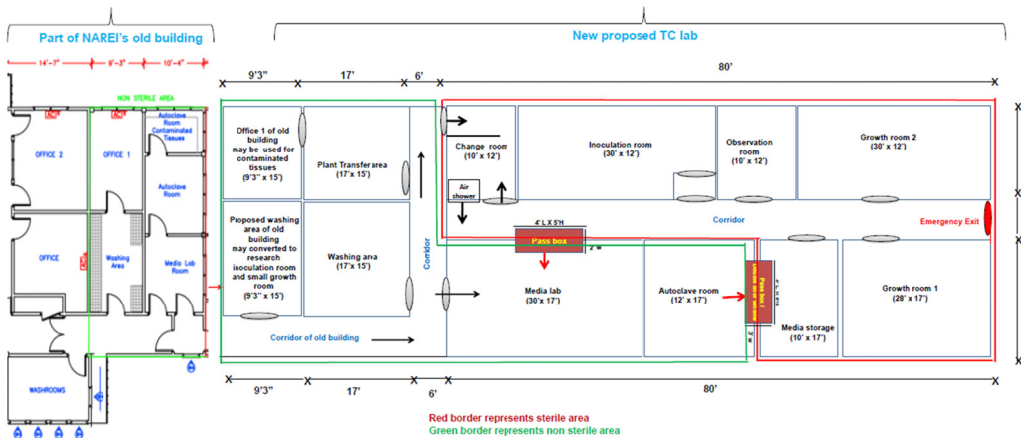
Specific environmental conditions of clean area

1. Cleanroom's temperature band should be between 25 ± 2 °C.
2. Clean room RH band should be maintained between 50-60%. The ambient humidity at Guyana ranges from 70-80%.
3. Cleanroom class in different sections: Inoculation room class 10,000 whereas plant growth room class 100,000.
4. Lighting (Lumens or Lux) requirements in different rooms: 4000 to 5000 lux in plant growth room.
5. Outside ambient temperature at Guyana: 15 °C minimum and 35 °C maximum.
6. All clean area flooring should be epoxy 2 mm flooring.
7. Clean area should have positive pressure.

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Supply, Installation and Commissioning of AHU setup (with AHU, BMS, chiller, humidifier, ducting, insulation, hepa filter, electrical work, pass box, air shower and other related equipment's without civil at our Site at Guyana lab for clean area (approx. size 2100 sqf.)

Layout of plant tissue culture lab:



(Scope of Work for Vendors)

- (i) Supply, Installation, commissioning, and testing, Training at Site (complete details attached as per our requirement is attached. We need the details as per our Requirement.
- (ii) Timely submission of invoice along with the required documents for timely release of payment.
- (iii) Conduction of Technical Training, in association with TERI.
- (iv) Provision of 5 years comprehensive on-site warranty for the above said AHU.
- (v) Facilitation of site visit of any authorized official of TERI / Project sponsor.
- (vi) Sharing of report regarding the performance, connectivity etc. of the system, on monthly basis.

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Place / Date:

(Signature and seal of the Firm)

FINANCIAL BID

Name of the Company / Firm / NGO:

Supply, Installation and Commissioning of AHU setup (with AHU, BMS, chiller, humidifier, ducting, insulation, hepa filter, electrical work, pass box, air shower and other related equipment's without civil at our Site at Gayana lab for clean area (approx. size 2100 sqf.)
Comprehensive onsite warranty for 5 years the solar system.


Table: Summary sheet of work

Sl. No.	Item	HSN Code	Price per unit in INR	Remark
1	HVAC - LOW SIDE WORKS			
2	HVAC - HIGH SIDE WORKS Installation and commissioning			
3	CLEANROOM PARTITION WORK			
4	CLEANROOM LIGHT			
5	EPOXY FLOORING			
6	CLEANROOM EQUIPMENTS WORKS			


NOTES:

1. WOODEN PACKING, CUSTOMS, DOCUMENTATION, THC, BL, ETC.
2. SEA FREIGHT - MUMBAI, INDIA TO GEORGETOWN, GUYANA - CONTAINERS
3. CUSTOMS & INTERNAL MOVEMENT OF CARGO GEORGETWON TO SITE - CLIENT'S SCOPE
4. GST if applicable on the above said line items


(Signature of Bidder with seal)

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ANNEXURE I					
M/S TERI					
HVAC LOW SIDE WORKS BOQ					
Sr. No.	ITEM DESCRIPTION			UNIT	QTY
1	AIR HANDLING UNITS (Make - Systemair) EUROVENT				
	Supply, Installation, testing & commissioning of 43 mm thick PUF insulation having density of 40 kg/m ³ double skin Air handling units with 0.6 mm thick precoated outer G.I. skin and 0.6mm thick plain inner G.I. skin in recirculating configuration				
	Thermal break profile at corners and at joints for double skin air handling units				
a	With Filters with quick filter fixing arrangement				
b	Drain pan in 1.2 mm SS 304 construction with 13 mm thick nitrile rubber insulation				
c	Fan section with Plug Type / Belt Driven Fan, VFD Compatible TEFC Motor.				
d	Marine light & Limit switch				
e	CHW Cooling Coil with 4/6 row deep				
h	EU-3 Fresh Air Filter (20 Micron)				
f	EU-4 Prefilter (10 Micron)				
g	EU-7 Fine Filter (3 Micron)				
	System Number	FAN capacity in CFM	Static Pressure		
1.1	AHU-01	6500	80 mmwg	NOS	1
1.2	AHU-02	6600	125 mmwg	NOS	1
1.3	AHU-03	2700	125 mmwg	NOS	1
1.4	AHU-04	3600	125 mmwg	NOS	1
1.5	AHU-05	2700	125 mmwg	NOS	1
3	SHEET METAL WORKS (MAKE - JSW / ESSAR / EQ)				
3.1	Supply, delivery, Installation & testing of Galvanised Sheet (GI) Ducting with proper duct sealing etc with RTV duct Sealant, complete with supports.				
3.1.1	24 Guage			SQFT	10000
3.1.2	22 Guage			SQFT	
3.2	AL Volume Control Damper			SQFT	90
3.3	GI FIRE Damper			SQFT	50
3.4	Fusible Link			NOS	5

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3.5	M.S Angle Frame and Support Work	KG	1500
3.6	Canvas Connection	NOS	5
4	GRILLES		
4.1	Supply Air Grill with Volume Controlled Damper	SQFT	35
4.2	Return Air Grill with Volume Controlled Damper	SQFT	35
5	DUCT INSULATION		
	Supply, delivery, Installation of Cross linked closed cell polyethyelene with Aluminium foil .Rubber Based adhesive to be used for fixing duct insulation on duct.		
5.1	Supply Air Ducting with 19 mm thick Insulation.	SQFT	5500
5.2	Return Air Ducting with 13 mm thick Insulation.	SQFT	5500
5.3	Return Air Ducting with 9 mm thick Insulation.	SQFT	1076
6	TERMINAL HEPA ASSEMBLY (MAKE - MECHMAARK)		
	HEPA FILTER + HEPA BOX + SS.304 PERFORATED SHEET		
	HOODED TYPE MINI PLEAT GEL SEAL HEPA FILTERS H14 Filter Mini pleat of 0.3 Micron , Efficiency : 99.999% , comprises specially treated glass fiber media with machine pleated aluminium seperators.		
6.1	610 x 610 x 105 deep HEPA Filter - Capacity 1000 CFM	NOS	2
6.2	450 x 450 x 105 deep HEPA Filter - Capacity 550 CFM	NOS	23
6.3	300 x 300 x 105 deep HEPA Filter - Capacity 300 CFM	NOS	12
6.4	Connections for filters & Risers	NOS	69
7	MAGNEHELIC GUAGE		
	MAGNEHELIC GUAGE FOR PRESSURE DIFFERENTIAL WITH ACCESSORIES		
7.1	0-60 Pa (Across Room)	NOS	8
7.2	0-10 MM/ 0-25 MM / 0- 50MM (Across AHU)	NOS	10
9	ELECTRICAL HEATER		
9.1	1.5 KW	NOS	5
9.2	3 KW	NOS	5
9.3	4.5 KW	NOS	
9.4	Thyristor Controller for Heater	NOS	5

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10	ELECTRICAL PANEL (MAKE - SCHNEIDER / EQ)		
10.1	SITC of Electrical Control Panel for AHU, Condenser with VFD provision	NOS	5
10.2	VFD - 1.5 KW	NOS	
10.3	VFD - 2.2 KW	NOS	
10.4	VFD - 4 KW	NOS	2
10.5	VFD - 5.5 KW	NOS	2
10.6	VFD -9 KW	NOS	1
10.7	VFD -11 KW	NOS	
10.8	DDC/PLC PANEL	NOS	5
	Main DB Panel & incomer connections are in client's scope		
11	DUCT MOUNTED TEMP & RH SENSOR (MAKE -TEREN / RADIX)	NOS	5
12	PID CONTROLLERS (MAKE RADIX)	NOS	10
13	AIRSTAT	NOS	5
14	ELECTRICAL POWER AND CONTROL CABLING (MAKE - POLYCAB / EQ)		
14.1	Supply & Installation of Electrical Power Cabling, Control Cabling, Earthing, GI Perforated Cable Tray with support, etc. for AHU	LOT	1
15	HVAC Validation & Qualification documentation		
15.1	Documentation DQ, IQ, OQ, PQ	LOT	1
15.2	Validation comprising of Calculation of no of Air Changes, DOP Testing, Particle Count, Recovery Test, Air Balancing & Pressure Balancing wherever required.	LOT	1

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ANNEXURE II			
M/S TERI			
HVAC HIGH SIDE WORKS BOQ			
Sr. No.	ITEM DESCRIPTION	UNIT	QTY
1	CONDENSING UNITS (MAKE - VOLTAS / EQ)		
	Air cooled condensing unit comprising of Scroll / Reciprocating compressor and air cooled condenser (R-407C / R-410A / R-32)		
1.1	10 TR	NOS	
1.2	7.5 TR	NOS	5
1.3	5 TR	NOS	2
2	Refrigerant piping for condensing units	RFT	350
3	32MM PVC Drain Pipe with Nitrile Rubber Insulation	RMT	90
4	Miscellaneous items like , controls for condensing units like expansion valves , Hand shut off valves , catch all dryers etc.	LOT	1
5	First charge of refrigerant gas - Client's Scope	KG	64
6	Structural support on external wall for mounting condensing units.	LOT	1

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ANNEXURE III					
CLEAN ROOM WORKS BOQ					
Sr. No.	Item	Description	-	Unit	Qty.
1		FALSE CEILING	-		
1.1	POWDER COATED CEILING PANEL	Supply & Fixing of Modular Ceiling Panels		SQM	380
		Sheet Thickness	0.8		
		Panel Thickness	50		
		Infill	PUF		
1.2		Accessories like supports alongwith necessary ceiling supports, G.I. threaded rods, nut-bolts, fasteners.		SQM	380
2		WALL PANEL	-	-	-
2.1	POWDER COATED WALL PANEL	Supply & Fixing of Modular Wall Panels		SQM	452
		Sheet Thickness	0.8		
		Panel Thickness	80		
		Infill	PUF		
2.2		Accessories like supports alongwith necessary wall supports,fasteners.		SQM	452
3		RISER PANEL	-		
3.1	POWDER COATED INBUILT RISER WALL PANEL	Supply & Fixing of Modular Wall Panels		SQM	105
		Sheet Thickness	0.8		
		Panel Thickness	80		
		Infill	PUF		
3.2		Accessories like supports alongwith necessary ceiling supports, G.I. threaded rods, nut-bolts, fasteners.		SQM	105
4	Clean Room Doors	GI Powder Coated double skin door with 44 mm leaf thickness made of 0.80 mm GI sheet for door leaf with HONEYCOMB infill and door frame made out of 1.20mm thick GI profile.			
4.1	Single Leaf Door	750*2100 mm		NOS	
4.2	Single Leaf Door	1000*2100 mm		NOS	13
4.3	Emergency Single Leaf Door	1000*2100 mm		NOS	1


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		One side D Handle		NOS	
		Mortise Lock		NOS	
		Push Plate		NOS	
		Concealed type Bottom Drop seal		NOS	
		Door Closer		NOS	
		Double Glazed Glass		NOS	
5	Double glazed View Panels	Double glazed view panel using Toughened Glass of 5 mm thickness (1000X1000)	-	NOS	15
6	Ceiling / Wall Cutout	Cutouts to be done at site for Grills / Lights	-	NOS	100
7	AL Coving	R-50 / 65 (WALL -WALL & WALL - CEILING)	-	RMT	500
8	AL 3D / 2D CORNER	R-50/ 65	-	NOS	75
9	AL TRUSS	Aluminium Truss For Ceiling Support	-	RMT	70
10.1	Return Air Riser Accessories	SS304 Perforated Sheet	-	SQFT	96
10.2		Filter - 10 Micron	-	NOS	32
10.3		AL Damper	-	NOS	32
11	PVC Conduit in Wall Panel	25 MM	-	RMT	90


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ANNEXURE IV					
M/S TERI					
CLEAN ROOM LIGHT & MODULAR SOCKET					
Sr. No.	DESCRIPTION			Unit	Qty.
1	PHARMA GRADE CLEAN ROOM LIGHT - BOTTOM OPENABLE - MS POWDER COATED FRAME - 45W (MAKE PMEA)			NOS	110
2	SINGLE PHASE MODULAR SWITCH SOCKET FOR CLEAN ROOM			NOS	40
3	SHEATHED FLEXIBLE COPPER CONTROL CABLES				
3.1	4C x 1.5 SQMM CU			RMT	800
3.2	2C x 1.5 SQMM CU			RMT	1100
4	D B PANEL FOR LIGHT			NOS	1
5	LED tube light (4 feet) with socket for Plant Growth Room			NOS	1000

ANNEXURE V				
M/S TERI				
EPOXY FLOORING WORK BOQ				
Sr. No.	Item	Description	Unit	Qty.
1	Epoxy FLOORING	2 MM SCREED + 1 MM TOP COAT	SQMT	380
2	Epoxy COVING	75 MM	RMT	350

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ANNEXURE VI				
M/S TERI				
CLEANROOM EQUIPMENTS WORKS BOQ				
Sr. No.	Item	Description	Unit	Qty.
1	Dynamic Passbox - 1200mm X 1200mm X 1500 mm (2 Door)		NOS	2
2	Air Shower		NOS	1
3	SS304 Cross Over Bench			
3.1	3000 MM		NOS	1
4	SS Dustbin		NOS	10
5	SS Lockers		NOS	4
6	Garment Cubicles		NOS	2
7	Air Curtain			
7.1	L-900 MM		NOS	2
8	Sanitizer Dispenser		NOS	2
9	Stool		NOS	15
10	Door interlocking			
10.1	2 Door		NOS	1

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AGREEMENT

TERI / Contract / 2023-24 / NO. _____

This AGREEMENT is made and entered into on __ day of _____ 2024 (hereinafter called the ‘Effective Date’).

BY and BETWEEN

The Energy and Resources Institute, a society registered under the Indian Societies Act XXI of 1860 with its registered address at Darbari Seth Block, Habitat Place, Lodhi Road, New Delhi – 110 003, India (hereinafter referred to as “TERI” which expression shall include their successors and permitted assigns) of the **first part**;

And

.....re
 gistered under, with its registered address at

, India (hereinafter referred to as “**Supplier**” which expression shall include their successors and permitted assigns) of the **other part**;

Agreement reference no is purchase order no which is _____ dated _____ amounting to Rs _____ (Rs _____ Only)


TERI and the Supplier shall hereinafter collectively be called “**the Parties**” and individually referred to as “**the Party**”

WHEREAS

TERI is undertaking the task for setting of Lab at Guyana detailed scope of work and terms and conditions, mentioned hereinafter in this document, hereinafter called the Work which expression shall include all agreed modifications thereof.


Now, therefore, this Agreement witnessed as follows:

1. **Specification, Terms and conditions:** No Deviation from Specification, Terms & Conditions of RFQ allowed for the supply, installation, commissioning and maintenance of the hybrid solar charging unit (HSCU) for power loom being installed at the site.
2. The Agreement shall be on turn-key basis. The work shall be completed within the stipulated time from the date of placement of work order. However ‘TERI’ may in case of urgency ask the Supplier to complete the work earlier, with the mutual consent of the Parties. In case the Supplier fails to execute the said work within stipulated time, ‘TERI’ will be at liberty to get


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the work executed from the open market without calling any further tender/e-tender and without any notice to the Supplier , at the risk and cost of the Supplier . Any additional cost incurred by ‘TERI’ shall be recovered from the Supplier. If the cost of executing the work as aforesaid shall exceed the balance due to the Supplier , and the Supplier fails to make good the additional cost, ‘TERI’ may recover it from the Supplier’s pending claims against any work in ‘TERI’ or in any lawful manner.

3. In the interest of the work, agreement executed between the Supplier and TERI, may be extended to a mutually agreed period, if the need arises so. It shall be the sole responsibility of the supplier to get verified the quality and quantity of the supplied material at the site of delivery.
4. **Warranty period:** The material supplied shall be under on-site warranty for a period of minimum 60 months for hybrid solar charging unit (HSCU) for power loom from the date of installation at site. Warranty certificate(s) shall be submitted along with the material.
5. **Price reduction for delayed delivery:** In the event of delay affecting the delivery within agreed period, unless concurrence for the delay has been given by TERI on request of the Supplier, a reduction in the price shall be levied @ 1% of the total order value per week or part thereof subject to a maximum of 10% of the total order value inclusive of all taxes and levies.
6. **Quality Assurance:** The Supplier shall establish, document and maintain an effective quality assurance program. Within 7 days from the date of purchase order, a detailed quality assurance programme shall be submitted by the supplier to TERI for approval. The Quality Assurance Program should be comprehensive and must include all aspects from manufacturing to commissioning / trial run of systems. Approved quality assurance programme will form the basis of all future inspections/ audits undertaken by TERI after the supply of materials and within the warranty coverage.
7. **Inspection:** Inspection will be done by TERI representative at the beneficiary’s premises. TERI shall have free access to the Supplier’s works during the supply, installation and commissioning of systems. All testing arrangements shall be the responsibility of the supplier. TERI reserves the right to inspect the material during supply / installation / commissioning as per specifications and test protocols. Internal inspection report and inspection certificate must accompany the supply. All arrangements for Pre Dispatch Inspection (PDI) will be done by the supplier.
8. TERI reserves the right to cancel any order placed on basis of this tender in case of strike, accident or any other unforeseen contingencies causing stoppage of work at TERI or to modify the order without liability for any compensation and or claim of any description.
9. In case order placed by TERI based on the quotation/bid/tender submitted by the bidder/supplier is not executed by the supplier/bidder, TERI may buy the ordered goods from elsewhere and recover the additional amount that TERI may have to spend in procuring the stores plus 10% to cover the overhead & incidental expenses.
10. **Replacement of rejected material:** Any material supplied against order placed on the basis of this tender and found to be defective at any time during the project life on inspection or differing from approved samples or make or specifications will be replaced by the Supplier free of cost or full refund made for the amount paid by TERI including freight and insurance and other incidental charges at our discretion.


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11. **Liquidated damages:** If the Supplier fails to perform the services within the time periods specified in the Agreement, the 'TERI' shall without prejudice to its other remedies under the Agreement deduct from the contract price as liquidated damage, a sum equivalent to 1.0% of the price of the unperformed services for each week (For the purposes of calculation of delay, part of week shall be treated as week) of delay until actual performance up to a maximum deduction of 10% of the delayed services. Once the maximum is reached, 'TERI' may consider termination of the Agreement. In the case of violation of Agreement, TERI may confiscate pending payments/ dues of the Supplier assigning specific reasons and shall also have the power to debar/ blacklist the Supplier in similar circumstances. TERI may also invoke performance/security bank guarantee.
12. The Supplier shall have to comply with all the rules, regulations, laws and by-laws for the time being in force and the instructions if any, of the beneficiaries, in whose premises the work has to be done. 'TERI' shall have no liability in this regard.
13. **Insurance:** Transit Insurance, storage insurance and erection insurance of the materials and equipment's for setting up the hybrid solar charging unit (HSCU) for power loom shall be arranged by the Supplier for the total supply [Risk should be covered till the handing over of Units to beneficiary]. In case of any damage/ loss/ pilferage/ non-delivery during transit, the Supplier shall lodge and settle the claim with the insurance agency. The Supplier shall also arrange replacement of the damaged/ lost/ pilfered items expeditiously pending settlement with insurance agency, if any, so as not to hamper the erection and commissioning work of the hybrid solar charging unit (HSCU) for power loom. The resultant loss if any due to failure of Supplier to comply with the above shall be to the account of Supplier.
14. **Labour Engagement:** The Supplier shall be responsible to provide all wages and allied benefits to the labour engaged for execution of the project work. The supplier shall remain liable to the authorities concerned for compliance of the existing rules and regulations of the government for this purpose including regulations against employing child labour etc. and shall also remain liable for any contravention thereof.
15. **Safety Codes and Regulation:** The Supplier shall adhere to safe installation and commissioning practices and guard against hazardous and unsafe conditions and shall comply with safety rules of the Government of India. In addition, the Supplier shall adhere to and be bound by the applicable safety codes, rules and regulation for the work to be carried out. A separate log to be maintained by Supplier.
16. **Adjudication:** The High court at New Delhi and Courts subordinate thereto, shall alone have jurisdictions to the exclusion of all other courts.
17. The Supplier shall not, without the consent in writing of 'TERI', transfer, assign or sublet the work under the contract or any substantial part thereof to any other party.
18. 'TERI' shall have at all reasonable time access to the works being carried out by the Supplier under the Agreement. All the work shall be carried out by the Supplier to the satisfaction of 'TERI'.
19. If any question, dispute or difference what so ever shall arises between 'TERI' and the Supplier, in the connection with the agreement except as to matters, the decisions for which have been specifically provided, either party may forthwith give to the other notice in writing of existence of such question, dispute or difference and the same shall be referred to the sole arbitration of the Director-General, TERI or a person nominated by him. This reference shall be governed by the Indian Arbitration and Conciliation Act 1996, and the rules made there

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under. The award in such arbitration shall be final and binding on both the parties. Work under the agreement shall be continuing during the arbitration proceedings unless the ‘TERI’ or the arbitrator directs otherwise.

20. TERI’ may at any time by notice in writing to the Supplier either stop the work all together or reduce or cut it down. If the work is stopped all together, the Supplier will only be paid for work done and expenses distinctly incurred by him as on preparation or the execution of the work up to the date on which such notice is received by him. Such expenses shall be assessed by ‘TERI’, whose decision shall be final and binding on the Supplier. If the work is cut down, the Supplier will not be paid any compensation what so ever for the loss or profit which he might have made if he had been allowed to complete all the work included in the Agreement.
21. **Risk, Accident and Damages:** The Supplier shall take due precaution to avoid damages to any pipelines, Railway lines, roads, canals, cables, culverts, bridges, drains, sewer, telegraph and telephone lines, water mains, dykes, poles, pillars, fences, wires, supports and embankments and other underground or over ground works, structural or constructions whatsoever and shall at his own cost and initiative forthwith restore and repair any damage thereto the satisfaction of TERI and / or the person or authority concerned relative to the line, pipe or other works, construction of installation as the case may be.
22. **Observation of Environmental Regulations and Protection:** The Supplier shall ensure that its servants and agents and sub-contractors and their servants and agents shall duly comply with all environmental laws, rules and regulations and the conditions of any permit, permission, consent and or no-objection granted in this behalf by any authority with respect to or concerning the work and shall independently so organize and conduct their operations as not to cause any hazard or pollution to health, life, property or environment including (but not limited to) discharge of any noxious substance or effluent into the atmosphere or into the earth or into any drain, canal, stream, river, pond, lake or other water body.
23. **Compliance with regulations:** The Supplier shall comply with all applicable laws or ordinances; codes approved technical standards, rules and regulations and shall procure all necessary Government permits & licenses etc. at its own cost. All compliances (State Govt. /Central Govt./ International /GST/Local - VAT/WCT/ESI/PF/Labour law etc.) is to be met by the Supplier and the same is to be produced by the Supplier at the time of payment.
24. **Demurrage and Wharfage:** All demurrage, Wharfage and other expenses incurred due to delayed clearance of the material or any other reason shall be to the account of the Supplier.
25. **Indemnity:** Supplier shall indemnify and at all times keep TERI indemnified and harmless against any direct loss to it or any claims by any third person, for any personal injury to anybody or loss to property, movable or immovable, caused by or attributable to any act or omission of the supplier or any of his officer, employee, agent or professional etc. while performing or purporting to perform this Agreement.
26. The Supplier shall provide one copy system pass book containing instruction manual/routine maintenance manual and maintenance record of the systems with each unit supplied or installed, this shall be in both English and Hindi language. The draft of passbook shall be approved by TERI.
 - The following minimum details must be provided with manual:
 - a. About the complete photovoltaic system including PV modules, battery loom and electronics
 - b. Dos and Don’ts

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- c. Clear instructions on regular maintenance and troubleshooting of the system
- d. Name and address of the contact person in case of non-functioning of the system.

27. Installation and service:


The following inspection procedures and tests are required:

- i) 'TERI' or its representative shall have the right to inspect and/or to test the goods to confirm their conformity to the contract. The special conditions of Agreement and/or the Technical specifications shall specify what inspections and test the 'TERI' required.
- ii) 'TERI', its duly authorized representative shall have at all reasonable times access to the Supplier's premises or works and shall have the power at all reasonable time to inspect and examine the materials and workmanship of the works.
- iii) The Supplier shall give the 'TERI', 15 day's written notice of any material being ready for testing. It shall be mandatory that such notice should reach 'TERI' within 30 days of placement of work order. Such tests shall be on the Supplier's accounts/ expenses except for the expenses of the inspector. 'TERI' reserves the full rights, to waive off inspection of material.
- iv) The Supplier is required to get the entire lot of the ordered material inspected at one time, before the supply of the materials.
- v) All arrangements for the inspection of materials will be done by Supplier.
- vi) The inspection by 'TERI' and issue of dispatch instruction there of shall in no way limit the liabilities and responsibilities of the Supplier in respect of the agreed quality assurance programme forming a part of the contract
- vii) The complaints within warranty period should be attended to within a maximum timeframe of 7 calendar days.

28. Termination: TERI by written notice, may terminate this Order for default, in whole or in part, if the Supplier: (a) fails to make a delivery in accordance with the Order's schedule, (b) fails to comply with any of the terms of this Order, (c) fails to make progress so as to endanger performance of this Order, (d) fails to provide adequate assurances of future performance, (e) ceases to conduct its operations, or (f) has any proceeding or lawsuit under bankruptcy, liquidation, or insolvency law brought against it.

29. Warranty: The supplier shall warrant as per standards for quality that anything to be furnished shall be new, free from all defects and faults in material, workmanship and manufacture, shall be of the highest grade and consistent with established and generally accepted standards for material of the type ordered, shall be in full conformity with the specifications, drawing or samples, if any and shall if operable, operate properly.

- **Performance of Equipment:** In addition to the warranty as already provided, the Supplier shall guarantee satisfactory performance of the system and shall be responsible for the period or up to the date specified after the equipment has been accepted by the 'TERI' to the extent for any defects that may develop such defects and shall be removed at its own cost when called upon to do so by the 'TERI'.

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34. Delivery

Delivery of materials: All the materials as specified in the purchase order should be delivered at the sites of installation within Six (6) weeks. Transit insurance and storage insurance till the handing over of all materials will be within the scope of work. The Supplier should provide the manufacturer’s warranty on all components supplied.

Delivery time for installation and commissioning: Installation should be completed within Ten (10) weeks from the date of purchase order. The systems will be deemed commissioned only after successful trial run of the system for three (3) days from the date of installations. Warehousing and storage of all components will be in the scope of work till the commissioning of all systems as per the purchase order.

35. On-site Warranty:

The Supplier is responsible for complete on-site warranty of the installed AHU systems for 5 (five) years from the date of installation including all preventive and corrective maintenance services. It is mandatory for the Supplier to send authorized service engineer at Guyana for installation. The scope of work for on-site warranty services will further include the following:

- a) All preventive maintenance and repair activities associated with hybrid solar charging unit (HSCU) for power loom.
- b) Supplier will create provision for receiving and recording all complaints, attending the complaints, stocking essential spares, provisioning trained service personnel, recording monthly logs of all activities, etc.
- c) The complaints should be attended at the earliest. Monthly log of the complaints received and rectified must be maintained and submitted to TERI on quarterly basis.
- d) Supplier shall provide to its service station all normal tools and testing equipment needed for maintenance of the Units at its own cost.
- e) During the first 5-year period, the repair works will have to be carried out at the artisan premise/ production centres except in exceptional circumstances where the equipment or any component may be required to be taken out for repair, for which specific written permission should be obtained from TERI. In such cases, standby arrangements are required to be made by the Supplier. All products have valid product warranty and hence on-site repair and maintenance service needs to be provided after getting replenishment of spares from respective product manufacturer.

If the Supplier fails to attend the complaint at the earliest, a reasonable penalty of five percentages (5%) may be deducted.

If the work of the Supplier is found unsatisfactory or if the Supplier dishonors the contract or fails to perform the contract, TERI shall be entitled to terminate the Agreement and TERI’s decision will be final and binding on the Supplier. In that case, the payment of last invoice amount will not be done in addition to the above penalty charges and other remedial measures as deemed fit by TERI.

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The Supplier shall submit the bill along with the verification report counter-signed by TERI representative.

36. Payments:

The payments shall be made as per the following terms and conditions:

All the payment shall be released from TERI head office, New Delhi on submission of requisite documents.

37. Documents:

Following documents need to be submitted to TERI for processing of payments:

A. 1st Payment: 10% advance payment against PI after the PO acknowledgement.

B. 2nd Payment (50% payment against delivery.):

- a) Invoice of complete material supplied along with proof of delivery at site (sign and stamp of person who has received and verified the materials)
- b) Delivery challan(s) & E way bill


C. 3rd Payment (30%): after the installation

- a) Complete list of installation location verified by TERI representative
- b) Deposit & realization confirmation of the co-funding amount in full (100%) , with respect to each artisan beneficiary
- c) The warranty certificates for complete system (as per Purchase Order)
- d) Complete system warranty certificate from the supplier
- e) All reports should be stamped and signed by the authorized representative of the contractor / bidder
- f) Invoice of installation and commissioning as per purchase order.
- g) Proof for the establishment of service center for the sites (photo, registration docs).
- h) Commissioning and handover certificate (as prescribed), counter- signed by TERI.
- i) Minimum two (2) photographs (dated) for each premise in soft copy of the system. Photos should be clear and of minimum postcard size. Photo should cover all the components supplied at site.

D. 4th Payment (10%): after the two years from the installation.

38. Force majeure

- Notwithstanding the provisions of clauses contained in this deed; the Supplier shall not be liable for forfeiture of its performance security, liquidated damages, termination for default, if he is unable to fulfill his obligation under this deed due to event of force majeure circumstances.

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- For purpose of this clause, ‘Force majeure’ means an event beyond the control of the Supplier and not involving the Supplier’s fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of Government either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes
- However, if a force majeure situation arises, the Supplier shall immediately notify ‘TERI’ in writing. The decision of the competent authority of TERI in above conditions shall be final.

39. Any work which is not covered under this Agreement but is essentially required for the completion of job (To the satisfaction of TERI) shall be carried out by the Supplier as extra item or which payment shall be made separately at the rates decided by TERI.

- Supplier shall be responsible for immediate replacement/rectification. The damaged component may be repaired or replaced by new component.
- The Supplier shall submit verified quarterly maintenance report regularly to TERI within 15 days of period ending six months. Failing which payment for such period will not be released or recommended.

The interested manufacturer / authorized distributor are requested to please send their technical and financial proposal through closed envelop by 11th April 2024 on the below given address:

***Mr. Manoj Kumar Tiwari
Head-Materials
The Energy and Resources Institute (TERI),
6C, Darbari Seth Block,
IHC Complex, Lodhi Road,
New Delhi – 110003.***