### **REQUEST FOR QUOTATION (RFQ)**



## FABRICATION, DELIVERY AND INSTALLATION OF THREE (3) SETS OF ELECTRIC DISTILLERS (150L CAPACITY EACH)

RFQ Reference: RFQ-074-PHL-2021	Date: 10 August 2021

#### **SECTION 1: REQUEST FOR QUOTATION (RFQ)**

UNDP kindly requests your quotation for the provision of goods, works and/or services as detailed in Annex 1 of this RFQ.

This Request for Quotation comprises the following documents:

Section 1: This request letter

Section 2: RFQ Instructions and Data

Annex 1: Schedule of Requirements

Annex 2: Quotation Submission Form

Annex 3: Technical and Financial Offer

When preparing your quotation, please be guided by the RFQ Instructions and Data. Please note that quotations must be submitted using Annex 2: Quotation Submission Form and Annex 3 Technical and Financial Offer, by the method and by the date and time indicated in Section 2. It is your responsibility to ensure that your quotation is submitted on or before the deadline. Quotations received after the submission deadline, for whatever reason, will not be considered for evaluation.

Thank you and we look forward to receiving your quotations.

Issued by:	
Signature:	
Name:	Robert Quilala
Title:	Procurement Associate
Date:	10 August 2021

#### **SECTION 2: RFQ INSTRUCTIONS AND DATA**

Deadline for the Submission of Quotation Method of Submission	Bidders shall adhere to all the requirements of this RFQ, including any amendments made in writing by UNDP. This RFQ is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement  Any Bid submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Bid by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this RFQ.  UNDP reserves the right to cancel the procurement process at any stage without any liability of any kind for UNDP, upon notice to the bidders or publication of cancellation notice on UNDP website.  24 August 2021, 5PM Manila Time If any doubt exists as to the time zone in which the quotation should be submitted, refer to <a href="http://www.timeanddate.com/worldclock/">http://www.timeanddate.com/worldclock/</a> .  Quotations must be submitted as follows:  ☑ email address: bids.ph@undp.org  Bid submission address: RFQ-074-PHL-2021  ■ File Format: pdf  ■ File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard.  ■ All files must be free of viruses and not corrupted.  ■ Max. File Size per transmission: 5MB  ■ Mandatory subject of email: RFQ-74-PHL- FABRICATION, DELIVERY AND INSTALLATION OF THREE (3) SETS OF ELECTRIC DISTILLERS
	<ul> <li>Multiple emails must be clearly identified by indicating in the subject line "email no. X of Y", and the final "email no. Y of Y.</li> <li>It is recommended that the entire Quotation be consolidated into as few attachments as possible.</li> </ul>
Cost of preparation of quotation	UNDP shall not be responsible for any costs associated with a Supplier's preparation and submission of a quotation, regardless of the outcome or the manner of conducting the selection process.
Supplier Code of Conduct, Fraud, Corruption,	All prospective suppliers must read the United Nations Supplier Code of Conduct and acknowledge that it provides the minimum standards expected of suppliers to the UN. The Code of Conduct, which includes principles on labour, human rights, environment and ethical conduct may be found at: <a href="https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct">https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct</a> Moreover, UNDP strictly enforces a policy of zero tolerance on proscribed practices, including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors to observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at <a href="http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti">http://www.undp.org/content/undp/en/home/operations/accountability/audit/office_of_audit_andinvestigation.html#anti</a>
Gifts and Hospitality	Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches, dinners or similar. In pursuance of this policy, UNDP: (a) Shall reject a bid if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question; (b) Shall declare a vendor ineligible, either indefinitely or for a stated period, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract.

Conflict of	UNDP requires every prospective Supplier to avoid and prevent conflicts of interest, by disclosing to UNDP	
Interest	if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design,	
	specifications, cost estimates, and other information used in this RFQ. Bidders shall strictly avoid conflicts	
	with other assignments or their own interests, and act without consideration for future work. Bidders	
	found to have a conflict of interest shall be disqualified.	
	· ·	
	Bidders must disclose in their Bid their knowledge of the following: a) If the owners, part-owners, officers,	
	directors, controlling shareholders, of the bidding entity or key personnel who are family members of	
	UNDP staff involved in the procurement functions and/or the Government of the country or any	
	Implementing Partner receiving goods and/or services under this RFQ.	
	The eligibility of Bidders that are wholly or partly owned by the Government shall be subject to UNDP's	
	further evaluation and review of various factors such as being registered, operated and managed as an	
	independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate	
	and access to information in relation to this RFQ, among others. Conditions that may lead to undue	
	advantage against other Bidders may result in the eventual rejection of the Bid.	
General	Any Purchase Order or contract that will be issued as a result of this RFQ shall be subject to the General	
Conditions of	Conditions of Contract	
Contract	Select the applicable GTC:	
	☐ General Terms and Conditions / Special Conditions for Contract.	
	Applicable Terms and Conditions and other provisions are available at <a href="UNDP/How-we-buy">UNDP/How-we-buy</a>	
Special	☑ UNDP may opt to cancel PO/Contract if the delivery/completion is delayed by [indicate number of days]	
Conditions of		
Contract		
Eligibility	A vendor who will be engaged by UNDP may not be suspended, debarred, or otherwise identified as ineligible	
	by any UN Organization or the World Bank Group or any other international Organization. Vendors are	
	therefore required to disclose to UNDP whether they are subject to any sanction or temporary suspension	
	imposed by these organizations. Failure to do so may result in termination of any contract or subsequently issued to the vendor by UNDP.	
	Subsequently issued to the vertual by other.	
	It is the Bidder's responsibility to ensure that its employees, joint venture members, sub-contractors, service	
	providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP.	
	Bidders must have the legal capacity to enter a binding contract with UNDP and to deliver in the country,	
	or through an authorized representative.	
Currency of	Quotations shall be quoted in PHP or USD Equivalent	
Quotation Joint Venture,	If the Bidder is a group of legal entities that will form or have formed a Joint Venture (JV), Consortium or	
Consortium or	Association for the Bid, they shall confirm in their Bid that : (i) they have designated one party to act as a	
Association	lead entity, duly vested with authority to legally bind the members of the JV, Consortium or Association	
Association	jointly and severally, which shall be evidenced by a duly notarized Agreement among the legal entities, and	
	submitted with the Bid; and (ii) if they are awarded the contract, the contract shall be entered into, by and	
	between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member	
	entities comprising the joint venture, Consortium or Association.	
	Refer to Clauses 19 – 24 under <u>Solicitation policy</u> for details on the applicable provisions on Joint Ventures,	
	Consortium or Association.	
Only one Bid	The Bidder (including the Lead Entity on behalf of the individual members of any Joint Venture, Consortium	
	or Association) shall submit only one Bid, either in its own name or, if a joint venture, Consortium or	
	Association, as the lead entity of such Joint Venture, Consortium or Association.	
	Bids submitted by two (2) or more Bidders shall all be rejected if they are found to have any of the following:	
	a) they have at least one controlling partner, director or shareholder in common; or b) any one of them	
	receive or have received any direct or indirect subsidy from the other/s; or	
	b) they have the same legal representative for purposes of this RFQ; or	

	c) they have a relationship with each other, directly or through common third parties, that puts them in a
	position to have access to information about, or influence on the Bid of, another Bidder regarding this RFQ
	process;
	d) they are subcontractors to each other's Bid, or a subcontractor to one Bid also submits another Bid under
	its name as lead Bidder; or
	e) some key personnel proposed to be in the team of one Bidder participates in more than one Bid
	received for this RFQ process. This condition relating to the personnel, does not apply to subcontractors
	being included in more than one Bid.
Duties and	Article II, Section 7, of the Convention on the Privileges and Immunities provides, inter alia, that the United
taxes	Nations, including UNDP as a subsidiary organ of the General Assembly of the United Nations, is exempt
	from all direct taxes, except charges for public utility services, and is exempt from customs restrictions, duties, and charges of a similar nature in respect of articles imported or exported for its official use. All
	quotations shall be submitted net of any direct taxes and any other taxes and duties, unless otherwise
	specified below:
	All prices must:
	<ul> <li>☑ be exclusive of VAT and other applicable direct taxes</li> </ul>
	a be exclusive of that and other approache an est taxes
Language of	English
quotation	Including documentation including catalogues, instructions and operating manuals.
Documents to	Bidders shall include the following documents in their quotation:
be submitted	☑ Annex 2: Quotation Submission Form duly completed and signed
	☐ Annex 3: Technical and Financial Offer duly completed and signed and in
	accordance with the Schedule of Requirements in Annex 1
	⊠Company Profile.
	⊠Registration certificate;
	⊠List and value of projects performed for the last 5 years plus client's contact details who may be contacted
	for further information on those contracts;
	☑ Certificate of Site Inspection from MMSU
	☐ Other -warranty certificates/after sales service for the goods as required in the ToR or BOM.
Quotation	Quotations shall remain valid for 90 days from the deadline for the Submission of Quotation.
validity	
period	
Price	No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors
variation	shall be accepted at any time during the validity of the quotation after the quotation has been received.
Partial Quotes	Not permitted     ■
Alternative	☐ Not permitted
Quotes	
Payment	☑Other: Refer to Terms of References
Terms Conditions for	Descing Inspection of Complete Installation
Release of	<ul><li>☑ Passing Inspection ofComplete Installation</li><li>☑ Passing all Testing</li></ul>
Payment	
. aye	<ul> <li>☑ Completion of Training on Operation and Maintenance [see Terms of Reference for requirements)</li> <li>☑ Written Acceptance of Goods, Services and Works, based on full compliance with RFQ requirements</li> </ul>
	written Acceptance of Goods, Services and Works, based on full compliance with KFQ requirements
Contact	E-mail address: procurement.ph@undp.org
Person for	Attention: Quotations shall not be submitted to this address but to the address for quotation submission
corresponden	above. Otherwise, offer shall be disqualified.
ce,	Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission,
notifications	unless UNDP determines that such an extension is necessary and communicates a new deadline to the
and	Proposers.
clarifications	

Clarifications	Requests for clarification from bidders will not be accepted any later than 4 days before the submission deadline. Responses to request for clarification will be communicated by email the latest by 19 August 2021			
Evaluation method	☑The Contract or Purchase Order will be awarded to the lowest priced substantially compliant offer			
Evaluation				
criteria	☑ Full acceptance of the General Conditions of Contract			
	© Comprehensiveness of after-sales services			
	□Earliest Delivery /shortest lead time			
Right not to accept any	UNDP is not bound to accept any quotation, nor award a contract or Purchase Order			
quotation				
Right to vary	At the time of award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease)			
requirement	the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer,			
at time of	without any change in the unit price or other terms and conditions.			
award				
Type of Contract to be				
awarded				
Expected date	15 September 2021			
for contract award.				
Publication of	UNDP will publish the contract awards valued at USD 100,000 and more on the websites of the CO and the			
Contract Award	corporate UNDP Web site.			
Policies and				
procedures				
UNGM	Any Contract resulting from this RFQ exercise will be subject to the supplier being registered at the			
registration	appropriate level on the United Nations Global Marketplace (UNGM) website at www.ungm.org.			
	The Bidder may still submit a quotation even if not registered with the UNGM, however, if the Bidder is			
	selected for Contract award, the Bidder must register on the UNGM prior to contract signature.			

#### **ANNEX 3: SCHEDULE OF REQUIREMENTS**

# TERMS OF REFERENCE FABRICATION, DELIVERY, AND INSTALLATION OF THREE (3) SETS OF ELECTRIC DISTILLERS (150L CAPACITY EACH)

#### A. Background

The Development for Renewable Energy Applications Mainstreaming and Market Sustainability (DREAMS) Project is a five-year project being implemented by the Department of Energy (DOE) through its Renewable Energy Management Bureau (REMB) in partnership with the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP).

The objective of the DREAMS Project is to reduce GHG emissions through the promotion and facilitation of the commercialization of renewable energy (RE) markets through the removal of barriers, which also leads to the increase in investments in RE-based power generation projects. The DREAMS project offers a Support Facility for RE (SF4RE) to LGUs, ECs, NPC-SPUG, QTPs, NPPs, BAPAs and RE developers to leverage investments for their RE projects to increase RE-based installed capacity.

The DREAMS project approved the proposal of Mariano Marcos State University (MMSU) under the SF4RE for the "Deployment of Solar Powered Distillers for Bioethanol Production used as a Main Agent for Bio-based Products in Response to Covid19 Emerging Needs" in the Municipality of Aparri, Cagayan Province.

#### B. Stakeholders of the Project

The project will be implemented together with Mariano Marcos State University (MMSU) and the Local Government Unit (LGU) of Aparri, Cagayan Province and the Cagayan Electric Cooperative. The DREAMS Project Management Unit (PMU) shall maintain overall project coordination.

#### C. Objective

The objective is to support the Productive Use of Renewable Energy. The RE Facility will run Distillery Plants for Bioethanol in three (3) communities/areas located in Aparri Cagayan (Brgy. Bisagu, Brgy. Linao and Brgy. Navagan). Each distiller will be powered by a 12 kWp Grid-tie Solar Power System which will be supplied and to be installed by a different supplier/ contractor.

#### D. Scope of Work and Methodology of the Required Services

The work involves fabrication, delivery, installation, testing and commissioning must be done within 150 days from the date of Notice to Proceed. In particular, the Firm/Contractor shall

- i) fabricate based on the design provided (see section D.1), deliver, install, testing and commission the distillers to the identified 3 communities in Aparri, Cagayan (Brgy. Bisagu, Brgy. Linao and Brgy. Navagan).
- ii) together with MMSU provide a cumulative of 5-days training with the LGU and communities on the operation and maintenance of the distillers to be delivered before commissioning or during the 4months maintenance support as may be agreed upon.
- iii) after commissioning, provide at least 4 months of operation and maintenance support together with MMSU.

- iv) provide 1 year after-sales services for repair and maintenance to be indicated in a contract with MMSU starting from the date of commissioning.
- v) provide 1-year warranty on major parts and workmanship of the distillers and controllers starting from date of commissioning.

#### 1. Fabrication of 3 units of 150L Capacity Electric Distiller

The 3 units of Solar Powered Distiller (SPD) ready MMSU Reflux Distiller shall comply with the following specifications:

- a. SPD ready MMSU Reflux Distiller composed of 150-liter capacity stainless sheet kettle, stainless tube column, flooded type U-tube condenser, frame, cooling tower, bench top, piping system.
- b. 150-liter capacity insulated kettle. Made up of 2mm thick SS304 sheet wall, 3mm thick SS304 base, with two vents (1inch dia SS pipe sch 40) installed with two bronze gate valves and one pressure gage, one drain tap (1inch SS pipe sch 40) installed with bronze gate valve. With installed 10 pcs 1kW electric heater (and 4pcs. spare). With 4inches dial face temperature gauge.
- c. Column. 4inches dia SS Tube, 2.0 mm, with condenser on top portion, packing material strainer/support at the bottom, installed with 4inches dial face temperature gauge, ferrol clamp connection to kettle and on topmost cover, with 1/2inch dia SS pipe Sch 20 tap/connection/nipple to ethanol line and 1inch SS nipple/tap cooling tower line. Insulated.
- d. Flooded type Condenser. 4 inches dia GI Pipe shell, ½ inch dia Sch20 SS pipe U-tube, MS flanged bolt cover.
- e. Cooling Tower. 1.25 cu.m (2mm) MS sheet reservoir, with MS plate and 2" angle bar frame. Painted with epoxy primer and green/blue color/finish.
- f. Frame/Distiller Housing. Made up of 2inches angle bar structure and flat bar/angle bar supports. Modularized into two parts. Provision of pump installation port and support of column. Painted with epoxy primer and green & blue color/finish.
- g. Bench Top/table. This is where the kettle and column assembly are installed. Made up of the combination 5mm MS plate and 4inches angle bar. Painted with epoxy primer and green color/finish.
- h. Piping System. PVC pipes in the cooling water line, GI pipe and SS tube in the ethanol line with 1HP pump.
- i. Drawings and photo (similar only) of the Column & Kettle with imbedded electric heater & of the Cooling Tower are shown below.



Column and Kettle with embedded Electric heater (sample picture)



Cooling Tower (sample picture)

## Estimated Bill of Materials for the 3 Units of 150L Capacity Electric Distiller

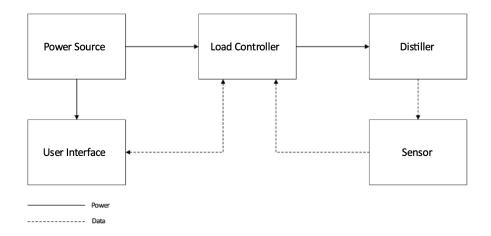
RN	Quantity	Unit	Item	
A. Cooling tower and accessories				
1	10	pcs	12 mm PVC pipe, blue	
2	10	pcs	25 mm PVC pipe, blue	
3	2	pcs	100 mm dia x 2mm thick SS Tube	
4	3	lot	PVC valves and fittings foot valve, elbow, tees, solvent, teflon, etc.	
5	12	pcs	12mm dia x 100 mm lg SS nipple	
6	10	pcs	25mm dia x 100 mm lg SS nipple	
7	3	sheets	1mm MS sheet	
8	3	sheets	2mm MS sheet	
9	3	sheets	5mm MS plate	
10	3	lot	SS valves and fittings	
11	10	pcs	25 mm, Sch 20 Gl pipe	
12	1	pcs	100 mm dia, sch 40 GI pipe	
13	5	pcs	25 mm dia SS pipe	
14	15	pcs	1 inch MS angle bar	
15	60	pcs	2 inches angle bar, MS	
16	10	pcs	1-inch flat bar	
B. Kettle ar	nd column			
17	7	sheets	2mm thick SS304	
18	4	sheets	3mm thick SS304	
19	2	sheets	1mm MS sheet	
20	7	sheets	2mm MS sheet	
21	75	pcs	12mm dia x 32 mm long SS bolts and nuts with plain and lock washers	
22	120	pcs	12mm dia x 32 mm long steel bolts and nuts with plain and lock washers	
23	4	pcs	100 mm dia x 2mm thick SS Tube	

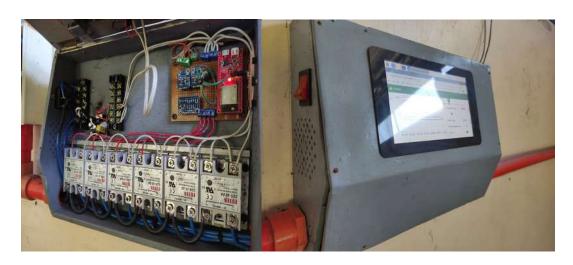
24	45	pcs	thermo reader/controller, 2-inch square	
25	6	pcs	magnetic contactor, 5A	
26	45	pcs	1 kW electric heater as required type	
27	6	pcs	30Amp circuit Breaker	
28	3	box	12 AWG	
29	6	pcs	1HP, 220V jet pump	
30	3	lots	switches, relays, indicator lamps	

#### 2. Assembly of 3 Units Proprietary Controllers of the 3 Solar Powered Distillers

The Firm (Contractor) will supply the materials, tools and accessories for the proprietary controllers and assemble the 3 controllers in accordance with the block diagram, materials and accessories provided below:

#### a. Block diagram





#### b. Materials, tools and accessories for the 3 controllers

Below specifications must be strictly followed.

No.	UNIT	ITEM	QTY
1	pcs	Current Sensor - ACS773LCB-100B-PFF-T	12
2	pcs	1528-1461-ND - ADS1115 16-Bit ADC - 4 Channel with Programmable Gain Amplifier	12
3	pcs	Raspberry Pi 4 Model B SBC - Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz, 4GB LPDDR4-3200 SDRAM Memory, 2.4 GHz and 5.0 GHz IEEE 802.11ac wireless, Bluetooth 5.0, BLE, Gigabit Ethernet, 5V DC via USB-C connector (minimum 3A*), OpenGL ES 3.0 graphics	3
4	pcs	Raspberry Pi Accessory, Raspberry Pi 4 Model B Official PSU, USB-C, 5.1V, 3A, UK Plug, Black	5
5	pcs	Daughter Board, Raspberry Pi 7" Touch Screen Display, 10 Finger Capacitive Touch	4
6	pcs	128GB MicroSDXC UHS-I Class10 U1	4
7	pcs	ESP32 DevKitC V4	5
8	reel	Wire, Stranded, Hook Up, UL1015, PVC, Blue, 18 AWG, 0.81 mm², 100 ft, 30.5 m	2
9	pcs	DC AXIAL FAN, 40MM, 12V, 170mA	8
10	pcs	DC Axial Fan, 12 V, DC, 80 mm, 25 mm, 38.6 cu. ft/min, 65.58 m³/h	6
11	pcs	AC/DC Open Frame Power Supply (PSU), ITE & Medical, 2 Output (5V, 12V), 40 W, 85V AC to 264V AC	3
12	pcs	Solid State Relay SSR-40 DA DC-AC 40A/250V 3-32VDC/24-380VAC	30
13	pcs.	Thermal Gap Pad, silicone, 2W/m·K, 300 x 200mm 2mm, Self-Adhesive	10
14	pcs	Hex Standoff, Nickel Plated, Brass, M3, Hex Male-Female, 15 mm, 21 mm	20
15	box	High temp wire sleeve insulation, 500dC,1/2inch diameter, white, 100ft	3
16	box	Fork / Spade Tongue Terminal, SVE Series, 12AWG to 10AWG, 6 mm², M5, #10, Vinyl, Pack of 100	1
17	sheet	Non-Ceramic Millboard Thermal Insulating Sheet, 1m x 1m x 3mm, Maximum Operating Temperature: +800°C	4
18	pcs	Stainless Steel Concealed Hinge Screw, 40mm x 2.5mm	5

No.	UNIT	ITEM	QTY
19	Unit	5GHz 300Mbps 13dBi Outdoor CPE   P2P AP   Point to Point Access Point includes POE Adapter and POE Cable	6
20	Unit	AX50 AX3000 Dual Band Gigabit Wi-Fi 6 Router, 4× Antennas, Intel Dual-Core CPU, 1× Gigabit WAN Port + 4× Gigabit LAN Ports, USB 3.0 Port, 1024-QAM, OFDMA, HT160	3
21	set	13 mm (1/2") Cordless Hammer Driver Drill with 18V LXT® Lilon 5.0Ah Battery, Charger and Carrying Case	1
22	set	216 Piece Drill Bit Maintenance Tool Kit with Case includes HSS, Masonry, Brad Point, Flat Wood, Screwdriver Bits, Nut Drivers and others	1

#### 3. Delivery, Installation, Testing and Commissioning

- a. The Firm (Contractor) will deliver, install, test and commission the 3 fabricated distillers and assembled controllers in the 3 communities in Aparri Cagayan.
- b. The Firm (Contractor) must complete the delivery, installation, testing and commissioning of the 3 distillers and controllers not later than 100 days from the date of contract signing.
- c. The Firm (Contractor) is allowed to outsource subcontractor for the fabrication of the distiller to other fabricator – with experiences of fabricating the similar distiller components. The contractor shall submit a request for approval from PMU prior to subcontracting explaining the justification of the subcontracting.
- d. All fabricated components of the distiller and assembled controllers must be inspected before delivery and installation to Aparri Cagayan.

#### 4. Training, Maintenance and after Sale Service

- a. The Firm (Contractor), in partnership and leadership of MMSU, will conduct hands-on training or capacity building for the community and LGU's designated staff on operating and maintaining the distillers and controllers as part of commissioning, and operation and maintenance support.
- b. At the minimum, the training should be equivalent to a cumulative total of 10 full days. The training may be conducted anytime between the fabrication and operation and maintenance period. The topic will include basic installation and operation skills, system troubleshooting, and basic maintenance of both the distillers and controllers. The Firm (Contractor) will provide 3 hard copies and a soft copy (e-copy) of the operating and maintenance manual. The training design and contents of the training modules and/or learning materials will be developed and provided by MMSU with approval of PMU.

c. The Firm (Contractor) will provide at least 1-year warranty on major parts and workmanship of the distillers and controllers.

Major Parts/ Workmanship			
Distillers	Controllers		
Kettle	Board		
Column	Relay		
Cooling Tower	Display		
Piping			

Within the warranty period, the defective major parts or works should be repaired or be replaced if beyond repair. The cost of the inspections, testing, repairs, and replacements including the logistics will be at the expense of the Firm (Contractor).

The Firm (Contractor) must inspect the reported defect/s within 10 working days from the date the Firm (Contractor) received a formal communication (by letter or email) from the LGU or the owner of the facility (distiller and controller) or the community operating the distiller and controller.

The repair must be completed within 15 working days and if replacement is required it must be completed within 20 working days form the receipt of formal communication.

The Firm (Contractor) shall submit the terms and conditions for the warranty as part of its bid proposal.

- c. The Firm (Contractor) will provide at least 90 calendar days (3months) of operation and maintenance support together. The Contractor may employ/hire technical experts to provide the maintenance support. The operation support is in the form of technical assistance on operating the distillers and controllers wherein the operator/s is needing clarification or additional guidance on operating the distillers or controllers and may be done on-site or through telephone/cellphone, teleconferencing, email other communication platforms. The maintenance support is in the form of supervising the operator/s in conducting their maintenance activities as stated in the operation and maintenance manual provided. The Firm (Contractor) shall submit the terms and conditions for the operation and maintenance support as part of its bid proposal.
- d. The Firm (Contractor) will provide at least 1-year of after sales services such as supply of parts, repairs and replacements under the expense of the LGU or owner of the facility (distiller and controller) or the community operating the distiller and controller including the cost of inspection and logistics if not covered by the warranty. The Firm (Contractor) must supply/deliver the parts within 10 working days from the receipt of order and payment. In case of repairs and

replacements the Firm (Contractor) must do the repair or replacement within 20 working days from the receipt of order and payment of the parts/materials, the balance will be paid once the repair or replacement is completed. The Firm (Contractor) shall submit the terms and conditions for the after sales services as part of its bid proposal.

#### E. Expected Outputs and Deliverables

Deliverables/ Outputs	Estimated calendar days to Complete	Target Due Dates
Work Plan based on Inception Planning with the DREAMS Project, MMSU & LGU of Aparri.	7	Not later than 10 days after Bidder has been notified to receive the award
Fabricated and assembled 3 electric distillers with 150L capacity of each distiller and per specifications stated in D.1 and stated in D.2	120	Not later than 120 days upon receipt of the official Notice to Proceed
Delivered, Installed, Tested and Commissioned the 3 distillers and 3 controllers to 3 communities in Aparri Cagayan (Brgy. Bisagu, Brgy. Linao and Brgy. Navagan). The distillers should be working for 5 straight days.  Started conduct of hands-on training for the LGU and communities operating the distillers and	30	Not later than 150 days upon receipt of the Notice to Proceed
controllers.		
Provision of Operations and maintenance support as per agreement in the work plan and the maintenance agreement.	90	To commence from the acceptance date of the commissioning.
Total duration (calendar days) (150 days from planning till commissioning and 90 days for training and maintenance support after commissioning)	240	

Review and Approvals of above deliverables *will* be done *by* DREAMS Project Manager, DREAMS Project National Project Director-DOE, MMSU, LGU of Aparri, UNDP Project Manager and UNDP Programme Analyst as may be appropriate based on the deliverable and agreement in the Work Plan.

#### F. Institutional Arrangement/ Governance and Accountability

A Local Project Team shall be formed during the Inception Planning. At the minimum, it shall be composed of the Firm's Project Manager, focal person from MMSU, focal person from LGU Aparri, representative from CAGELCO 2, and focal persons from the DOE and DREAMS Project.

The work of the Firm will be supervised by the UNDP DREAMS Project Manager with technical support from the MMSU.

#### G. Duration of the Work

The contract period (awarding to completion of maintenance period) will be from 15<sup>th</sup> September 2021 to 15th May 2022.

#### H. Facilities to be provided by the Project

The LGU through each Barangay recipients will provide a secure area for the temporary storage of the materials and equipment for the installations of the solar powered distiller.

In light of the COVID-19 pandemic and declaration of State of Public Health Emergency in the Philippines, all work of the FIRM shall be done within the guidelines and protocols set by the LGU.

#### I. Scope of Price Proposal and Schedule of Payments

The lump sum amount must be "all inclusive" of expenses, e.g., supplies, reproduction, meals, lodging, and other local travel fares. The contract price is fixed regardless of changes in cost components.

Deliverable	Payment
Signed Contract between UNDP and Contractor and Approved Work Plan including the agreement on the terms and conditions in Maintenance and Operational support and Service and Warranty Conditions	10%
Completion of fabrication and assembly works on the 3 distillers and acceptance and certification by MMSU)	50%
Completion and acceptance of delivery, installation, testing, commissioning 3 project sites, certified by MMSU and LGU  Approved final operations and maintenance manual with the as-built plans/designs, endorsed by MMSU  Signed warranty, operation and maintenance support, and after-sales	20%
agreement, endorsed by MMSU	

Completion and acceptance of trainings at the 3 project sites	20%
Completion of operations and maintenance support, and submission of certification/s as confirmed by the MMSU that the Contractor has no pending liabilities with the MMSU, LGU, Community and Electric Cooperative.	
Total	100%

Review and Approvals of above deliverables *will* be done *by* DREAMS Project Manager, DREAMS Project National Project Director-DOE, MMSU, LGU of Aparri, UNDP Project Manager and UNDP Programme Analyst as may be appropriate based on the deliverable and agreement in the Work Plan.

#### J. Key Performance Indicators and Service Level.

Key services required	Frequency	Minimum standard/requirement
Status report based on Inception plan or work breakdown structure	Monthly	Based on agreed upon format during the inception planning  Copy furnished MMSU & LGU Focal person
Project Management Report	At most 4x during the period (from Contracting to Completion of Maintenance period)	Approved by the focal person of MMSU  Signed Minutes of Meeting (if any) that happened during the period being covered by the report
Completion Report	end of the project	Clearance from MMSU that the Firm has no further commitment or pending issues with the MMSU and LGU  Checklist of all soft copies of documents and reports submitted to DREAMS PMU and MMSU and the LGU duly validated by both agencies.

Non-submission of these documents (either in hard or soft copies) will lead to deferment of payments due to the Firm. For purposes of documentation, soft copies of the reports are acceptable but duly signed hard copies of the reports must be submitted as part of the final requirement for final payment.

#### K. Qualifications of the Successful Firm Contractor and its Key Personnel

The bidder should have experiences on fabricating the same or similar distillers. The bidder should have at least fabricated one (1) distillers with the same or similar specifications or similar metal works in the last 5 years.

The bidders must physically inspect the actual the distillers to be fabricated and must submit a confirmed certificate of inspection from the unit that is managing the MMSU Reflux Distiller. (See Annex A for Sample Certificate of Inspection)

The proposed project team must comprise of:

Project Manager - Senior Level Executive or Officer permanent or regular employee of the Firm and have been part on fabrication and installation works of the Firm of similar nature

- 1. Project Manager Senior Level Executive or Officer permanent or regular employee of the Firm and have been part of fabricationand installation works of the Firm of similar nature.
- 2. Lead Metal Worker Can also be the Project Manager.
- 3. At least 3 skilled metal worker
- 4. Electrician for the controllers minimum 2 years' experience in assembly of controllers and can be outsourced if not available at the Bidder's company.

#### L. Criteria for Selection of the Best Offer

Only Bidders that pass the minimum qualification in Section K will be considered for technical and financial evaluation.

The technical evaluation will be on a Pass or Fail basis, i.e., Bidder must submit all the required documents, supply the required materials in the BOM (see Section D and Section M).

The lowest financial bid from "technically compliant and responsive" bidder will be considered for award.

#### J. Documents required to be submitted:

- 1. Portfolio/list of at least one (1) similar completed and/or ongoing works in the past 5 years (optional to attach actual pictures; max of 2 pictures per project).
- 2. Audited Financial Statements for the Fiscal Year 2019 and 2020 or 2018 and 2019 if the 2020 FS is not available.
- 3. Technical and financial proposal based on the BOM (See Basic Template Annex A).
- 4. Certificate of inspection from the office that is managing the Distillery at MMSU. (See Annex A)
- 5. Certificate of inspection from the office that is managing the Distillery at MMSU. (See Annex A)
- 6. Warranty Bond to be requested by UNDP and 1 year after sales service agreement on parts and labor as stated in Section D.4d of the TOR.
- 7. NON-submission of any of these documents shall be a ground to declare that the Bidder failed in its offer

#### **Delivery Requirements**

	Delivery Requirements				
Delivery date and time	Bidder shall deliver the goods within 150 days after Contract signature.				
DPU delivery at place including unloading  This Incoterm requires that the seller delivers the goods, unloaded, at the name place.  The Seller covers all the costs of transport (export fees, carriage, unloading from carrier at destination port and destination port charges) and assumes all risk unlarrival at the destination place.					
Customs clearance (must be linked to INCOTERM  Exact Address(es) of Delivery Location(s) Distribution of shipping documents (if using	□ Not applicable Shall be done by: □ Name of organisation □ Supplier/bidder □ Freight Forwarder  MMSU Appari, Cagayan Province  Supplier/bidder				
freight forwarder)					
Packing Requirements	Supplier/bidder				
Training on Operations and Maintenance	required				
Warranty Period	Refer to Terms of References (ToR)				
After-sales service and local service support requirements	Refer to Terms of References (ToR)_				
Preferred Mode of Transport	Other [please specify] supplier will provide				

#### **ANNEX 2: QUOTATION SUBMISSION FORM**

Bidders are requested to complete this form, including the Company Profile and Bidder's Declaration, sign it and return it as part of their quotation along with Annex 3: Technical and Financial Offer. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.

Name of Bidder:	Click or tap here to enter text.		
RFQ reference:	Click or tap here to enter text.	Date: Click or tap to enter a date.	

#### **Company Profile**

Item Description	Detail
Legal name of bidder or Lead entity for JVs	Click or tap here to enter text.
Legal Address, City, Country	Click or tap here to enter text.
Website	Click or tap here to enter text.
Year of Registration	Click or tap here to enter text.
Legal structure	Choose an item.
Are you a UNGM registered vendor?	☐ Yes ☐ No If yes, insert UNGM Vendor Number
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	⊠ Yes □ No
Does your Company hold any accreditation such as ISO 14001 or ISO 14064 or equivalent related to the environment? (If yes, provide a Copy of the valid Certificate):	⊠ Yes □ No
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	⊠ Yes □ No
Does your organization demonstrate significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues (If yes, provide a Copy)	Yes □ No

Is your company a member	er of the	⊠ Yes □ No				
Bank Information		Bank Name: Cl	ick or tap here t	o enter text.		
		Bank Address: Click or tap here to enter text.				
		IBAN: Click or	tap here to ente	r text.		
		SWIFT/BIC: Cli	ck or tap here to	enter text.		
		Account Curre	Account Currency: Click or tap here to enter text.			
		Bank Account Number: Click or tap here to enter text.				
		Previous rele	vant experience	e: 3 contracts		
Name of previous	Client	& Reference	Contract	Period of activity	Types of activities	
contracts	contracts Contact De including e-				undertaken	

#### **Bidder's Declaration**

Yes	No	
		Requirements and Terms and Conditions: I/We have read and fully understand the RFQ, including the RFQ Information and Data, Schedule of Requirements, the General Conditions of Contract, and any Special Conditions of Contract. I/we confirm that the Bidder agrees to be bound by them.
		I/We confirm that the Bidder has the necessary capacity, capability, and necessary licenses to fully meet or exceed the Requirements and will be available to deliver throughout the relevant Contract period.
		<b>Ethics</b> : In submitting this Quote I/we warrant that the bidder: has not entered into any improper, illegal, collusive or anti-competitive arrangements with any Competitor; has not directly or indirectly approached any representative of the Buyer (other than the Point of Contact) to lobby or solicit information in relation to the RFQ; has not attempted to influence, or provide any form of personal inducement, reward or benefit to any representative of the Buyer.
		I/We confirm to undertake not to engage in proscribed practices, , or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we have read the United Nations Supplier Code of Conduct: <a href="https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct">https://www.un.org/Depts/ptd/about-us/un-supplier-code-conduct</a> and acknowledge that it provides the minimum standards expected of suppliers to the UN.
		Conflict of interest: I/We warrant that the bidder has no actual, potential, or perceived Conflict of Interest in submitting this Quote or entering a Contract to deliver the Requirements. Where a Conflict of Interest arises during the RFQ process the bidder will report it immediately to the Procuring Organisation's Point of Contact.
		<b>Prohibitions, Sanctions:</b> I/We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium members or subcontractors or suppliers for any part of the contract is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists and have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization.

Yes	No	
		<b>Bankruptcy</b> : I/We have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future.
	П	Offer Validity Period: I/We confirm that this Quote, including the price, remains open for acceptance
		for the Offer Validity.
		I/We understand and recognize that you are not bound to accept any Quotation you receive, and we
		certify that the goods offered in our Quotation are new and unused.
		By signing this declaration, the signatory below represents, warrants and agrees that he/she has been
		authorised by the Organization/s to make this declaration on its/their behalf.

Signature:	
Name:	Click or tap here to enter text.
Title:	Click or tap here to enter text.
Date:	Click or tap to enter a date.

# ANNEX 3: TECHNICAL AND FINANCIAL OFFER – FABRICATION, DELIVERY AND INSTALLATION OF THREE (3) SETS OF ELECTRIC DISTILLERS (150L CAPACITY EACH)

Bidders are requested to complete this form, sign it and return it as part of their bid along with Annex 2: Quotation Submission Form. The Bidder shall fill in this form in accordance with the instructions indicated. No alterations to its format shall be permitted and no substitutions shall be accepted.

Name of Bidder:	Click or tap here to enter text.		
RFQ reference:	Click or tap here to enter text.	Date: Click or tap to enter a date.	

Currency of the Quotation: Click or tap here to enter text.							
INCOTERMS: Click or tap here to enter text.							
Item   Qty   Unit   Unit Cost   Amount							
I. Coo	bling tower and accessories						
1	12 mm PVC pipe, blue	10	pcs				
2	25 mm PVC pipe, blue	10	pcs				
3	100 mm dia x 2mm thick SS Tube	2	pcs				
4	PVC valves and fittings foot valve, elbow, tees, solvent, teflon, etc.	3	lot				
5	12mm dia x 100 mm lg SS nipple	12	pcs				
6	25mm dia x 100 mm lg SS nipple	10	pcs				
7	1mm MS sheet	3	sheets				
8	2mm MS sheet	3	sheets				
9	5mm MS plate	3	sheets				
10	SS valves and fittings	3	lot				
11	25 mm, Sch 20 GI pipe	10	pcs				
12	100 mm dia , sch 40 GI pipe	1	pcs				
13	25 mm dia SS pipe	5	pcs				
14	1 inch MS angle bar	15	pcs				
15	2 inches angle bar, MS	60	pcs				
16	1 inch flat bar	10	pcs				
II. Ket	ttle and column						
17	2mm thick SS304	7	sheets				
18	3mm thick SS304	4	sheets				
19	1mm MS sheet	2	sheets				
20	2mm MS sheet	7	sheets				
21	12mm dia x 32 mm long SS bolts and nuts with plain and lock washers	75	pcs				
22	12mm dia x 32 mm long steel bolts and nuts with plain and lock washers	120	pcs				
23	100 mm dia x 2mm thick SS Tube	4	pcs				
24	thermo reader/controller, 2 inch square	45	pcs				
25	magnetic contactor, 5A	6	pcs				
26	1 kW electric heater as required type	45	pcs				
27	30Amp circuit Breaker	6	pcs				

28	12 AWG	3	box		
29	1HP, 220V jet pump	6	pcs		
30	switches, relays, indicator lamps	3	lots		
III. Controllers					
31	Current Sensor - ACS773LCB-100B-PFF-T	12	pcs		
32	1528-1461-ND - ADS1115 16-Bit ADC - 4 Channel with Programmable Gain Amplifier	12	pcs		
33	Raspberry Pi 4 Model B SBC - Broadcom BCM2711, Quad core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz, 4GB LPDDR4-3200 SDRAM Memory, 2.4 GHz and 5.0 GHz IEEE 802.11ac wireless, Bluetooth 5.0, BLE, Gigabit Ethernet, 5V DC via USB-C connector (minimum 3A*), OpenGL ES 3.0 graphics	3	pcs		
34	Raspberry Pi Accessory, Raspberry Pi 4 Model B Official PSU, USB-C, 5.1V, 3A, UK Plug, Black	5	pcs		
35	Daughter Board, Raspberry Pi 7" Touch Screen Display, 10 Finger Capacitive Touch	4	pcs		
36	128GB MicroSDXC UHS-I Class10 U1	4	pcs		
37	ESP32 DevKitC V4	5	pcs		
38	Wire, Stranded, Hook Up, UL1015, PVC, Blue, 18 AWG, 0.81 mm², 100 ft, 30.5 m	2	reel		
39	DC AXIAL FAN, 40MM, 12V, 170mA	8	pcs		
40	DC Axial Fan, 12 V, DC, 80 mm, 25 mm, 38.6 cu.ft/min, 65.58 m³/h	6	pcs		
41	AC/DC Open Frame Power Supply (PSU), ITE & Medical, 2 Output(5V, 12V), 40 W, 85V AC to 264V AC	3	pcs		
42	Solid State Relay SSR-40 DA DC-AC 40A/250V 3-32VDC/24-380VAC	30	pcs		
43	Thermal Gap Pad, silicone, 2W/m·K, 300 x 200mm 2mm, Self-Adhesive	10	pcs.		
44	Hex Standoff, Nickel Plated, Brass, M3, Hex Male-Female, 15 mm, 21 mm	20	pcs		
45	High temp wire sleeve insulation, 500dC,1/2inch diameter, white, 100ft	3	boxes		
46	Fork / Spade Tongue Terminal, SVE Series, 12AWG to 10AWG, 6 mm², M5, #10, Vinyl, Pack of 100	1	box		
47	Non-Ceramic Millboard Thermal Insulating Sheet, 1m x 1m x 3mm, Maximum Operating Temperature: +800°C	4	sheet		
48	Stainless Steel Concealed Hinge Screw, 40mm x 2.5mm	5	pcs		
49	5GHz 300Mbps 13dBi Outdoor CPE   P2P AP   Point to Point Access Point includes POE Adapter and POE Cable	6	Unit		

50	AX50 AX3000 Dual Band Gigabit Wi-Fi 6 Router, 4× Antennas, Intel Dual-Core CPU, 1× Gigabit WAN Port + 4× Gigabit LAN Ports, USB 3.0 Port, 1024-QAM, OFDMA, HT160	3	Unit		
51	13 mm (1/2") Cordless Hammer Driver Drill with 18V LXT® Li-Ion 5.0Ah Battery, Charger and Carrying Case	1	set		
52	216 Piece Drill Bit Maintenance Tool Kit with Case includes HSS, Masonry, Brad Point, Flat Wood, Screwdriver Bits, Nut Drivers and others	1	set		
	Sub-Total				
IV.	Other Cost				
	Cost Materials				
	Cost of manpower				
	Cost of logistics				
	Cost of training				
	Insurance Price				
	Other Charges (pls specify)				
	Total Final and All-inclusive Price			_	

#### **Compliance with Requirements**

	You Responses			
	Yes, we will comply	No, we cannot comply	If you cannot comply, pls. indicate counter - offer	
Minimum Technical Specifications			Click or tap here to enter text.	
Delivery Term (INCOTERMS)			Click or tap here to enter text.	
Delivery Lead Time			Click or tap here to enter text.	
Warranty and After-Sales Requirements			Click or tap here to enter text.	
Validity of Quotation			Click or tap here to enter text.	
Payment terms			Click or tap here to enter text.	
Other requirements [pls. specify]			Click or tap here to enter text.	

#### Other Information:

Estimated weight/volume/dimension of the	Click or tap here to enter text.
Consignment:	
Country/ies of Origin:	Click or tap here to enter text.
(if export licence required this must be submitted	
if awarded the contract)	

I, the undersigned, certify that I am duly authorized to sign this quotation and bind the company below in event that the quotation is accepted.

Exact name and address of company

Company NameClick or tap here to enter text.

Address: Click or tap here to enter text.

Click or tap here to enter text.

Phone No.:Click or tap here to enter text.

Email Address:Click or tap here to enter text.

Authorized Signature:

Date: Click or tap here to enter text.

Name: Click or tap here to enter text.

**Functional Title of Authorised** 

Signatory: Click or tap here to enter text.

Email Address: Click or tap here to enter text.

