REQUEST FOR PROPOSAL (RFP)

NAME & ADDRESS OF FIRM	DATE: April 19, 2021
	REFERENCE: RFP-BD-2021-011

Dear Sir / Madam:

We kindly request you to submit your Proposal for **Hiring firm for Feasibility Study on Waste to Value Conversion in Five Urban Local Bodies in Bangladesh-UNCDF.**

Proposals shall be submitted on or before 4.30 p.m. (local time) on Monday, May 03, 2021

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Proposals may be submitted on or before the deadline indicated by UNDP in the e-Tendering system. Bids must be submitted in the online e-Tendering system in the following link: https://etendering.partneragencies.org; using your username and password. If you have not registered in the system before, you can register now by logging in using

Username: event.guest
Password: why2change

and follow the registration steps as specified in the system user guide.

Your Proposal must be expressed in the English, and valid for a minimum period of 90 days.
You are kindly requested to indicate whether your company intends to submit a Proposal by clicking on "Accept Invitation" in the system.

In the course of preparing and submitting your Proposal, it shall remain your responsibility to ensure that it submitted into the system by the deadline. The system will automatically block and not accept any bid after the deadline. Kindly ensure attaching the required supporting documents (*with file name less than 60 characters*) in pdf format which must be free from any virus or corrupted files. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation.

The Financial Proposal and the Technical Proposal files MUST BE COMPLETELY SEPARATE and uploaded separately in the system and clearly named as either "TECHNICAL PROPOSAL" or "FINANCIAL PROPOSAL", as appropriate. Each document shall include the Proposer's name and address**. The file with the "FINANCIAL PROPOSAL" must be encrypted with a password** so that it cannot be opened nor viewed until the Proposal has been found to pass the technical evaluation stage. Once a Proposal has been found to be responsive by passing the technical evaluation stage, UNDP shall request via email the Proposer to submit the password to open the Financial Proposal. The Proposer shall assume the responsibility for not encrypting the financial proposal.

PLEASE DO NOT PUT THE PRICE OF YOUR PROPOSAL IN THE 'LINE ITEMS' IN THE SYSTEM. INSTEAD PUT 1 AND UPLOAD THE FINANCIAL PROPOSAL AS INSTRUCTED ABOVE.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail, and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the Proposal. At the time of Award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:
http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html

UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link :
https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unscc/conduct_english.pdf

Thank you and we look forward to receiving your Proposal.

Sincerely yours,

Krishna Raj Adhikari
Senior Operations Manager
19 April 2021

Annex 1

Description of Requirements

<table>
<tr><td>Context of the Requirement</td><td>The consulting firm/organization/research institute is required to conduct a comprehensive feasibility study on value conversion possibilities (especially energy generation) from municipality wastes. This would entail the assessment of quantity and quality of municipal waste, capacity of the municipality to collect, sort and deliver waste for processing, identification of suitable value conversion technology, evaluation the existing legal framework, social context, engagement of relevant stakeholders to set up optimal waste to value / energy plant(s), and propose detailed design and plant specifications in these areas. The focus of the study is for five urban local bodies: four (4) municipalities, namely Cox’s Bazaar, Habiganj, Brahmanbaria, Dinajpur and one (1) City Corporation Mymensingh.
<table>
<tr><td>Technical analysis</td><td>Commercial analysis</td><td>Financial analysis</td><td>Legal analysis</td><td>ESIA</td></tr>
<tr><td>Cost forecasts, timing, technologies, different options and specifications, solutions, outline etc.</td><td>Demand analysis, forecast of revenues and sensitivities, possible sources of revenue, stakeholder consultation plan etc.</td><td>Value for money (VfM), cost of finance, levels of profitability and affordability, project and equity IRRs and sensitivities etc.</td><td>Confirming compliance with existing laws and regulations, identifying any specific legal waivers or required changes to regulations or ordinances</td><td>Identifying risks, mitigation options, cost estimates and proposed allocation</td></tr>
</table></td></tr>
<tr><td>Implementing Partner of UNDP</td><td>- Local Government Division, Ministry of Local Government Rural Development & Cooperatives,
- Municipality</td></tr>
<tr><td>Brief Description of the Required Services</td><td>The Scope of Works of the consultancy firm/organization/research institute for each of the selected municipality shall be:

Technical
➢ Needs assessment: Desk review of most up to date secondary data sources to discuss present status of waste management services in the targeted areas including existing municipal WTE projects such as electricity generation, coal or compost production etc. Review the existing regulatory framework and Ministry engagement and find the policy gaps. This</td></tr>
</table>

	situation analysis includes institutional, legal and financial, (how the current waste management services are financed by the municipalities i.e. LG annual budget and actual expenditure, payments made by households and commercial entities, billed & actual), as well as technical (current service quality and efficiency) and environmental aspects for all value from waste options in light of conditions in the target areas. Compare the findings with best practices in solid waste operations and identify areas for improvements. ➢ Primary data collection from the mentioned municipalities directly (sampling, surveys, focus groups, interviews, lab testing, etc) of relevant waste substrates (annual production, seasonal variety, composition and characteristics, sources, collection, transportation and disposal system, regional distribution and coverage, contamination, etc.,) and data on value or energy sector (local demand for energy or recycled products, grid development, regulatory issues, etc.); ➢ Analysis of data: testing and estimation of importance of waste streams (annual amount of waste production, waste characteristics (e.g. organic, plastic, paper, glass etc), calorific value, moisture contain, regional variance and other aspects, feasibility of constant supply), potential of waste streams as feedstock for different energy production possibilities (incineration, thermal treatment, non-thermal treatment, co-processing, etc) and possible scope of plants (utility size, off grid etc.) OR for additional value production possibilities (sorting, treatment, packaging, selling rates and volumes). Laboratory test to know calorific value and moisture content. ➢ Assess and recommend potential waste separation mechanism (include appropriate methodology if sorting is advised to be done at source) and waste routing options to transport waste to relevant station. Define specification of the transportation trucks and their expected life. ➢ Based on the above information, forecast waste volumes and characteristics for at least the project duration (to be used in financial projections). A low, medium, and high scenario should be reflected. ➢ Develop possible proposal with appropriate options and technologies on energy/value from waste of these five municipalities suited to the Bangladesh conditions discussing the following issues: ➢ Suitability and recommendation of most feasible technology and appropriate options (detailed justification on proposed solution) along with relevant environmental, social and public health impact ➢ Possible energy output and use of products (kW, gas, heat, steam, integration in energy grid etc.) OR possible valuable by-product outputs and use of products (fertilizer, building materials, etc) under consultation with PDB and Power Grid Companies of Bangladesh ➢ Possible energy demand and market rate from sale of electricity OR demand for additional value products and market rate from sale of by-products under consultation with relevant private sectors who buy the bi product

	➢ If sale of energy is the suggested product, detail the tariff approval process and the methodology and identify any room for improvements ➢ Design and BOQ of technical specification of proposed plant ➢ Suitability of the proposed site from a technical, environmental, geographical and social point of view (connectivity, restrictions specific to plant development, other requirements) ➢ Provide a list and specifications of all necessary technical equipment required as per the proposed project (type, quantity, capacity etc.) ➢ References for suggested scenarios, technology providers. EPC contractors etc. ➢ Identification of potential project risks, mitigation measures and proposed allocation or responsible entity **Social, ecological and logistical** ➢ Social aspects (impacts on waste fees, employment, alternative uses/users of feed stock e.g. informal waste sector, acceptability issues etc.) and roles of Municipalities and elected representative and concern waste management department of the Municipality ➢ Ecological aspects (effect on greenhouse gas emissions, treatment and disposal of residues, air pollution control etc.) under consultation with Ministry of Environment and Ministry of Health. ➢ Estimation of GHG potential ➢ Logistical aspects (feed stock supply, transportation, storage, location, costs, etc.), municipality's capacity assessment and required support for procurement of improved waste management equipment and capacity building support. Identify how municipality raises finance from this WTV project, profit sharing mechanism with the private commercial energy producers. ➢ Assess the potential for private sector engagement in waste collection & transportation; and/or other waste management components and outline potential transaction structures for such participation and an overall project governance structure **Financial feasibility** ➢ Financial aspects (estimation of investment costs related to waste collection (stations, necessary containers etc), waste transportation (e.g transfer stations if relevant, trucks), supporting infrastructure, technology and plant development, operation & maintenance costs of municipal waste management services and implementation of WTV plant). Based on the proposed WTV scenario, recommend potential financing mechanism and financing strategy, including waste collection fee, feed-in tariff rates for energy and/or revenue from sale of by-products, gate fee etc.) The proposed tariff structure should be accompanied with a user's affordability and willingness to pay assessment. ➢ Suggestion of a business model for operation

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Legal feasibility

- Regulatory aspects (permissions or licensing, monitoring of plant security, compliance with environmental laws, etc.)
- Necessary conditions/steps to be taken to facilitate the implement the process This should include all tasks required for project implementation and timeline.
- Legal issues on foreign investment including loan provision

Process/institutional feasibility

- Identification of relevant project stakeholders with their potential concerns/interest, engagement activities undertaken during the study, action plan or suggestion for further consultations around the project cycle etc.
- Policy workshops/dialogues/seminars as appropriate with relevant government departments and ministries including Power Development Board and/or Power Grid Company of Bangladesh Ltd.
- Consultative workshop with Development partners interested in waste to value investment (e.g. EU, GIZ, World Bank, ADB, FCDO)

The **consultancy firm/organization/research institute** will be responsible for delivering the outputs and will be accountable to UNCDF Country Focal Point and Programme Specialist.

</td></tr>
<tr><td>List and Description of Expected Outputs to be Delivered</td><td>
<table>
<tr><td>Submission of Inception Report</td><td>One Month after signing the Contract</td></tr>
<tr><td>Submission of Interim Report</td><td>Three Month after signing the Contract</td></tr>
<tr><td>Submission of Final Report</td><td>Two Month after signing the Contract</td></tr>
</table>
</td></tr>
<tr><td>Person to Supervise the Work/Performance of the Service Provider</td><td>The consultancy firm/organization/research institute will work under the overall guidance of UNCDF’s Country Focal Point and Programme Specialist. The consultant (firm) will be responsible for delivering the tasks mentioned. UNCDF Bangladesh country staff will provide backstopping support and guidance to the consultant (firm) during the assignment.</td></tr>
<tr><td>Frequency of Reporting</td><td>As indicated in the TOR</td></tr>
<tr><td>Progress Reporting Requirements</td><td>As indicated in the TOR</td></tr>
<tr><td>Location of work</td><td>☐ Exact Address/es [pls. specify]
As indicated in the TOR.</td></tr>
<tr><td>Expected duration of work</td><td>06 Months</td></tr>
<tr><td>Target start date</td><td>May 2021</td></tr>
<tr><td>Latest completion date</td><td>November 2021</td></tr>
<tr><td></td><td>As indicated in the TOR.</td></tr>
</table>

Travels Expected	
Special Security Requirements	☐ Security Clearance from UN prior to travelling ☐ Completion of UN's Basic and Advanced Security Training ☐ Comprehensive Travel Insurance ☐ Others *[pls. specify]* ☒ N/A
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	☐ Office space and facilities ☐ Land Transportation ☒ Others as per TOR.
Implementation Schedule indicating breakdown and timing of activities/sub-activities	☒ Required ☐ Not Required
Names and curriculum vitae of individuals who will be involved in completing the services	☒ Required ☐ Not Required
Currency of Proposal	☒ United States Dollars ☐ Euro ☒ Local Currency (BDT) (Conversion rate UNORE May 2021)
Value Added Tax on Price Proposal	☒ must be exclusive of VAT and other applicable indirect taxes
Validity Period of Proposals *(Counting for the last day of submission of quotes)*	☒ 90 days In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.
Partial Quotes	☒ Not permitted
Payment Terms	

Deliverables	% of payment
Submission of Inception Report	10%
Submission of Interim Report	40%
Submission of Final Report	50%

Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	UNCDF's Country Focal Point and Programme Specialist
Type of Contract to be Signed	☒ Contract for Professional Services
Criteria for Contract Award	☒ Highest Combined Score (based on the 70% technical offer and 30% price weight distribution) ☒ Full acceptance of the UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal.
Criteria for the Assessment of Proposal	Bidder must have adequate technical ability, resources, human resources and processes. As such, following are defined as minimum eligibility criteria: **<u>Minimum Eligibility Criteria for the Firm:</u>** • Business Licenses – valid trade license, TIN Certificate, VAT Registration Certificate, Certificate of Incorporation (if applicable) and latest income tax return certificate; • Company Profile, which should not exceed fifteen (15) pages including any printed brochure relevant to the services being procured; • Audit report with Proven financial strength, income statement and balance sheet to indicate financial stability of the organization; • Minimum 08 (Eight) years of operational experience to conduct study on waste to value/energy; • Proven experience of legal aspects review, social, environmental and public health related issues on similar project; • Experience of working with Bangladesh Power Development Board (BPDB)/Independent Power Producer (IPP)/private companies; • Experience of conducting minimum two similar study in the field of waste to energy in last 5 years; • Successful completion of at least two projects feasibility study of similar nature; **<u>Minimum Eligibility Criteria for the Key personnel:</u>** CVs of the Team leader and key team members containing their experiences on relevant issues must be submitted with detailed proposal. Beside that the evaluation team is expected to fulfil the following qualifications:

	Team Leader (1) **(1)** Must be a waste to value expert with at least 08 years of professional experience in the design, implementation and monitoring of WTV projects; **(2)** Must be a licensed engineer, with a degree in electrical, civil, chemical, mechanical, energy or environmental engineering; **Senior Solid Waste Management Specialist (1)** (1) Must have at least five (5) years of professional experience in planning, designing, evaluating, implementing and upscaling technologies and approaches on municipal solid waste management as well as in SWM monitoring; (2) Must have at least a bachelor's degree in engineering, sciences or any related discipline; **Senior WTE Specialist (1)** (1) Must have at least five (5) years of professional experience in planning, designing, evaluating, implementing and monitoring WTE projects; (2) Must have at least a bachelor's degree in engineering, sciences or any related discipline; **Finance Specialist (1)** (1) Must have at least three (3) years of experience in the financial analysis of urban infrastructure projects, with a background on the financial analysis of SWM and/or WTE projects; (2) Must have at least a bachelor's degree in finance, accountancy or any related discipline; **Legal specialist (1)** (1) Must have at least three (3) years of experience on private sector investment laws, IPP, power and energy sector laws, land use law, municipal law etc. of Bangladesh. (2) Must have at least bachelor's degree in law. Note: Necessary document must be submitted to substantiate the above eligibility criteria. Consultancy firm that do not meet the above eligibility criteria shall not be considerate for further evaluation. The firm must provide CV's of all proposed personnel for the assignment, stating name, highest academic qualification, professional certification, length of experience, role/function or other related information. **<u>Technical Proposal (70%)</u>** ☒ Expertise of the Firm ☒ Methodology, Its Appropriateness to the Condition and Timeliness of the Implementation Plan

☒ Qualification of Key Personnel

Basis of Technical evaluation:

Summary of Technical Proposal Evaluation Forms		**Points Obtainable**
1.	Bidder's qualification, capacity and experience	300
2.	Proposed Methodology, Approach and Implementation Plan	400
3.	Management Structure and Key Personnel	300
	Total	**1000**

Section 1. Bidder's qualification, capacity and experience		**Points obtainable**
1.1	General Organizational Capability which is likely to affect implementation - Financial stability - loose consortium, holding company or one firm - age/size of the firm - project financing capacity - project management controls	140
1.2	Relevance of: - Specialized Knowledge on digital finance - Experience on Similar Programme / Projects - Experience on Projects in the Region work for UN agencies/ major multilateral/ or bilateral Programmes	130
1.3	Organizational Commitment to Sustainability (mandatory weight) -Organization is compliant with ISO 14001 or ISO 14064 or equivalent – 20 points -Organization is a member of the UN Global Compact -5 points -Organization demonstrates significant commitment to sustainability through some other means- 5 points, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues	30
Total Section 1		**300**

Section 2. Proposed Methodology, Approach and Implementation Plan		**Points obtainable**
2.1	To what degree does the Proposer understand the task?	30
2.2	Have the important aspects of the task been addressed in sufficient detail?	25
2.3	Are the different components of the project adequately weighted relative to one another?	20
2.4	Is the proposal based on a survey of the project environment and was this data input properly used in the preparation of the proposal?	55
2.5	Is the conceptual framework adopted appropriate for the task?	65
2.6	Is the scope of task well defined and does it correspond to the TOR?	120
2.7	Is the presentation clear and is the sequence of activities and the planning logical, realistic and promise efficient implementation to the project?	85
Total Section 2		**400**

Section 3. Management Structure and Key Personnel				**Points obtainable**
3.1	Qualifications of key personnel proposed			140
3.1 a	Team Leader		120	
	- International/national Experience	25		
	- Training Experience	20		
	- Professional Experience in the area of specialization	45		
	- Knowledge of the region	30		
	- Language Qualifications		20	
3.2 b	Senior Solid Waste Management Specialist			120
	- International/national Experience	15		
	- Training Experience	15		
	- Professional Experience in the area of specialization	45		
	- Knowledge of the region	25		
	- Language Qualifications		20	

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<tr><td></td><td>
<table>
<tr><td>3.2 c</td><td>Senior WTE specialist</td><td></td><td>40</td></tr>
<tr><td></td><td>- International/national Experience</td><td>5</td><td></td></tr>
<tr><td></td><td>- Training Experience</td><td>5</td><td></td></tr>
<tr><td></td><td>- Professional Experience in the area of specialization</td><td>10</td><td></td></tr>
<tr><td></td><td>- Knowledge of the region</td><td>10</td><td></td></tr>
<tr><td></td><td>- Language Qualifications</td><td></td><td>10</td></tr>
<tr><td colspan="3">Total Section 3</td><td>300</td></tr>
</table>

<u>Financial Proposal (30%)</u>
To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.
</td></tr>
<tr><td>UNDP will award the contract to:</td><td>☒ One and only one Service Provider</td></tr>
<tr><td>Contract General Terms and Conditions</td><td>☒ General Terms and Conditions for contracts (goods and/or services)

Applicable Terms and Conditions are available at:
http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</td></tr>
<tr><td>Annexes to this RFP</td><td>☒ Form for Submission of Proposal (Annex 2)
☒ Detailed TOR (Annex-3)
☒ Written Self Declaration (Annex-4)</td></tr>
<tr><td>Contact Person for Inquiries (Written inquiries only)</td><td>bd.procurement@undp.org
Please mention the following in the subject while sending any query to UNDP <u>regarding this RFP on or before 26 April 2021.</u>
<u>"Queries on RFP-BD-2021-011"</u>
Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.</td></tr>
<tr><td>Other Information [pls. specify]</td><td>A pre-bid meeting will be held Online for the clarification on the bidding document and ToR <u>on 26 April 2021 at 11:00am using the following link:</u>

https://undp.zoom.us/j/87162453913?from=addon;
Join Zoom Meeting</td></tr>
</table>

Annex 2

FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL[1]

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery[2])

[insert: *Location*].
[insert: *Date]*

To: [*insert: Name and Address of UNDP focal point]*

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated *[specify date]* , and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions:

A. Qualifications of the Service Provider

The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following :

a) Profile – describing the nature of business, field of expertise, licenses, certifications, accreditations;
b) Business Licenses – Registration Papers, Tax Payment Certification, etc.
c) Latest Audited Financial Statement – income statement and balance sheet to indicate Its financial stability, liquidity, credit standing, and market reputation, etc. ;
d) Track Record – list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references;
e) Certificates and Accreditation – including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.
f) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

B. Proposed Methodology for the Completion of Services

The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology will be appropriate to the local conditions and context of the work.

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[1] *This serves as a guide to the Service Provider in preparing the Proposal.*
[2] *Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes*

C. **Qualifications of Key Personnel**

If required by the RFP, the Service Provider must provide :

a) Names and qualifications of the key personnel that will perform the services indicating who is Team Leader, who are supporting, etc.;
b) CVs demonstrating qualifications must be submitted if required by the RFP; and
c) Written confirmation from each personnel that they are available for the entire duration of the contract.

D. **Cost Breakdown per Deliverable* (Financial proposal must be password protected)**

	Deliverables ***[list them as referred to in the RFP]***	**Percentage of Total Price** ***(Weight for payment)***	**Price** ***(Lump Sum, All Inclusive)***
1	Deliverable 1		
2	Deliverable 2		
3	….		
	Total	100%	

**This shall be the basis of the payment tranches*

E. **Cost Breakdown by Cost Component** ***[This is only an Example]*****: (Financial proposal must be password protected)**

Description of Activity	**Remuneration per Unit of Time**	**Total Period of Engagement**	**No. of Personnel**	**Total Rate**
I. Personnel Services				
1. Services from Home Office				
a. Expertise 1				
b. Expertise 2				
2. Services from Field Offices				
a . Expertise 1				
b. Expertise 2				
3. Services from Overseas				
a. Expertise 1				
b. Expertise 2				
II. Out of Pocket Expenses				
1. Travel Costs				
2. Daily Allowance				
3. Communications				
4. Reproduction				
5. Equipment Lease				
6. Others				
III. Other Related Costs				
Please mention VAT separately with %				

[Name and Signature of the Service Provider's Authorized Person]
[Designation]
[Date]

Annex-3

TERMS OF REFERENCE
For
FEASIBILITY STUDY ON WASTE TO VALUE CONVERSION IN FIVE URBAN LOCAL BODIES IN BANGLADESH

A. Project Title:
Municipal Investment Finance (MIF) Bangladesh Project
B. Project Description:
The UN Capital Development Fund (UNCDF) makes public and private finance work for the poor in the world's 47 least developed countries (LDCs). UNCDF offers "last mile" finance models that unlock public and private resources, especially at the domestic level, to reduce poverty and support local economic development. In Bangladesh, UNCDF has helped local governments with their financing needs since the 1960s, capacitated their development to finance climate resilient infrastructure and is helping municipalities graduate towards self-sufficiency by accessing non-grant financing and capital markets for their service delivery and catalytic role in local economic development. Under UNCDF's Municipal Investment Finance (MIF) Programme in Bangladesh, a set of municipalities received technical assistance to develop their first ever multi-year Capital Investment Plans (CIPs) and were credit rated to expand their non-grant financing capacities. Based on these CIPs, a robust pipeline of critical urban infrastructure projects has emerged that improve local service delivery and revenue collection of municipalities while meeting the Sustainable Development Goals. One of the recurring basic services that are in dire need of transformation is municipal waste management. There are 330 municipalities and 12 city corporation in Bangladesh, which are categorized into A, B and C grades based on their size, population and revenue earning capacity. As governed by the Municipal Act 2009, all municipalities are responsible to manage the waste produced in their premises. According to the BBS, 4.86 million tons of municipal solid waste is generated annually and projected to increase by 17.2 million tons per year by 2025 in urban Bangladesh. Based on the daily production of waste, there is possibility to generate electricity or additional value by treating these wastes with appropriate technology. However, for setting up electricity generating or recycling unit from municipality waste requires detailed feasibility study and plant design and specifications. Dhaka North City Corporation and Narayanganj City Corporation have received approval for Waste to Electricity generation plant projects based on feasibility studies. Private operators are on board and have started the construction work under the agreement with ministry of power energy and mineral resources. Currently Power Development Board is working on Dhaka South City Corporation and Gazipur City Corporation for WTE projects. It follows both competitive process in selecting power producers and accepts unsolicited proposals. UNCDF is planning to support project feasibility, planning, design, financing and implementation for a sizable waste management portfolio as it critical to the improvement of lives of the growing urban population and aligned with Bangladesh's national agenda. Particularly, the Ministry of Local Government,

Ministries of Power, Energy and Mineral Resources & Ministry of Industries are collectively seeking development and technical support from partners such as UNCDF to help them address waste management inefficiencies such as low collection coverage, unavailable logistic services, lack of low-cost technologies and suitable treatment, recycling and disposal methodologies that are increasing risks for the people and environment. Most importantly, the additional value and potential scope for energy generation from waste management is a timely opportunity to address Bangladesh's energy security and adoption of cleaner power agenda. As per Section 89 and 91 of the Municipal Act, municipalities can invest, without elaborating how and in which sectors. Currently, most of the municipalities have leased out their land under Section 46 to private sector and to receive rental income. However, Section 96 has also allowed municipalities to take PPP projects on various PPP modes. Various financing schemes for waste management and waste to value or energy projects are available to blend with concessional funds to bring these projects to closure. These management and financing opportunities need to be vetted through a comprehensive feasibility study as well.

Other enabling aspects of WTE power plants also need to be explored. For instance, according to the existing IPP policy, commercial power plant includes power from solar, water, air, organic substances, municipal waste as alternative sources. However, there is no specific policy on waste to energy from municipal solid waste. The role, function and criteria of commercial private energy producers are included in the IPP policy, but role of municipal waste owner (Municipality/LGI) is not clear in the IPP policy. The Ministry of Power, Energy and Mineral Resources (MPEMR), BPDB, BERC, PGCB (Power Greed Companies of Bangladesh), Ministry of Environment and Forest, Private sector commercial power operators, financiers, national level research agencies are not familiar with the role of municipalities on waste management issues. Therefore, engagement with PGEB (Power Greed Companies of Bangladesh) is essential for evacuation of power from waste to energy plant. However, due to the lengthy process, this results in loss of interest of municipality and relevant actors. Furthermore, absence of harmonized level of understanding among LGIs, PDB and private operators and absence of institutional memory on WTE sector are responsible for not developing this potential renewable energy source.

On the other hand, municipal waste department does not have capacity to partner and monitor private-sector power plant. Power Development Board does not have adequate understanding about municipalities' roles and function. There is the need to improve combined waste supply capacity. Inadequate manpower, lack of modern vehicle and instrument have caused weak monitoring capacity of municipal waste. Additional municipal budget is required for consistent waste collection and supply to commercial power plant. Technically, there is no entity at domestic level for WTV for trouble shooting of technical problem and proper maintenance of machineries and equipment. Community understanding of development at municipality level about WTV plant is important at the initial stage of WTV project. The above challenges need to be addressed through additional capacity building support.

UNCDF is building local and international partnerships to develop a holistic approach to tackle the policy, capacity and project development, implementation and financing challenges of Waste To Value (WTV) supply chain in municipalities in Bangladesh. Currently, UNCDF is seeking a consulting firm to develop UN standard feasibility studies of WTV solution for five municipalities in Bangladesh. UNCDF will advance feasible projects by collaborating with technical and financing partners to unlock financing for potential projects. Though its specialized commercial, technical, legal and financial facilitation, UNCDF will work with

international and local technical and financial partner agencies to establish the capacity building, policy advocacy and investments to champion scale up of WTV portfolio for the Government and other regulatory stakeholders.

C. Objective of the Assignment:

The consulting firm/organization/research institute is required to conduct a comprehensive feasibility study on value conversion possibilities (especially energy generation) from municipality wastes. This would entail the assessment of quantity and quality of municipal waste, capacity of the municipality to collect, sort and deliver waste for processing, identification of suitable value conversion technology, evaluation the existing legal framework, social context, engagement of relevant stakeholders to set up optimal waste to value / energy plant(s), and propose detailed design and plant specifications in these areas. The focus of the study is for five urban local bodies: four (4) municipalities, namely Cox's Bazaar, Habiganj, Brahmanbaria, Dinajpur and one City Corporation Mymensingh.

Technical analysis	Commercial analysis	Financial analysis	Legal analysis	ESIA
Cost forecasts, timing, technologies, different options and specifications, solutions, outline etc.	Demand analysis, forecast of revenues and sensitivities, possible sources of revenue, stakeholder consultation plan etc.	Value for money (VfM), cost of finance, levels of profitability and affordability, project and equity IRRs and sensitivities etc.	Confirming compliance with existing laws and regulations, identifying any specific legal waivers or required changes to regulations or ordinances	Identifying risks, mitigation options, cost estimates and proposed allocation

D. Scope of Works

The Scope of Works of the **consultancy firm/organization/research institute** for each of the selected municipality shall be:

Technical

- Needs assessment: Desk review of most up to date secondary data sources to discuss present status of waste management services in the targeted areas including existing municipal WTE projects such as electricity generation, coal or compost production etc. Review the existing regulatory framework and Ministry engagement and find the policy gaps. This situation analysis includes institutional, legal and financial, (how the current waste management services are financed by the municipalities i.e. LG annual budget and actual expenditure, payments made by households and commercial entities, billed & actual), as well as technical (current service quality and efficiency) and environmental aspects for all value from waste options in light of conditions in the target areas. Compare the findings with best practices in solid waste operations and identify areas for improvements.
  - Primary data collection from the mentioned municipalities directly (sampling, surveys, focus groups, interviews, lab testing, etc) of relevant waste substrates (annual production, seasonal variety, composition and characteristics, sources, collection, transportation and disposal system,

regional distribution and coverage, contamination, etc.,) and data on value or energy sector (local demand for energy or recycled products, grid development, regulatory issues, etc.);

- Analysis of data: testing and estimation of importance of waste streams (annual amount of waste production, waste characteristics (e.g. organic, plastic, paper, glass etc), calorific value, moisture contain, regional variance and other aspects, feasibility of constant supply), potential of waste streams as feedstock for different energy production possibilities (incineration, thermal treatment, non-thermal treatment, co-processing, etc) and possible scope of plants (utility size, off grid etc.) OR for additional value production possibilities (sorting, treatment, packaging, selling rates and volumes). Laboratory test to know calorific value and moisture content.
- Assess and recommend potential waste separation mechanism (include appropriate methodology if sorting is advised to be done at source) and waste routing options to transport waste to relevant station. Define specification of the transportation trucks and their expected life.
- Based on the above information, forecast waste volumes and characteristics for at least the project duration (to be used in financial projections). A low, medium, and high scenario should be reflected.
- Develop possible proposal with appropriate options and technologies on energy/value from waste of these five municipalities suited to the Bangladesh conditions discussing the following issues:
- Suitability and recommendation of most feasible technology and appropriate options (detailed justification on proposed solution) along with relevant environmental, social and public health impact
- Possible energy output and use of products (kW, gas, heat, steam, integration in energy grid etc.) OR possible valuable by-product outputs and use of products (fertilizer, building materials, etc) under consultation with PDB and Power Grid Companies of Bangladesh
- Possible energy demand and market rate from sale of electricity OR demand for additional value products and market rate from sale of by-products under consultation with relevant private sectors who buy the bi product
- If sale of energy is the suggested product, detail the tariff approval process and the methodology and identify any room for improvements
- Design and BOQ of technical specification of proposed plant
- Suitability of the proposed site from a technical, environmental, geographical and social point of view (connectivity, restrictions specific to plant development, other requirements)
- Provide a list and specifications of all necessary technical equipment required as per the proposed project (type, quantity, capacity etc.)
- References for suggested scenarios, technology providers. EPC contractors etc.
- Identification of potential project risks, mitigation measures and proposed allocation or responsible entity

Social, ecological and logistical

- Social aspects (impacts on waste fees, employment, alternative uses/users of feed stock e.g. informal waste sector, acceptability issues etc.) and roles of Municipalities and elected representative and concern waste management department of the Municipality
- Ecological aspects (effect on greenhouse gas emissions, treatment and disposal of residues, air pollution control etc.) under consultation with Ministry of Environment and Ministry of Health.
- Estimation of GHG potential
- Logistical aspects (feed stock supply, transportation, storage, location, costs, etc.), municipality's capacity assessment and required support for procurement of improved waste management

equipment and capacity building support. Identify how municipality raises finance from this WTV project, profit sharing mechanism with the private commercial energy producers.

- Assess the potential for private sector engagement in waste collection & transportation; and/or other waste management components and outline potential transaction structures for such participation and an overall project governance structure

Financial feasibility

- Financial aspects (estimation of investment costs related to waste collection (stations, necessary containers etc), waste transportation (e.g transfer stations if relevant, trucks), supporting infrastructure, technology and plant development, operation & maintenance costs of municipal waste management services and implementation of WTV plant). Based on the proposed WTV scenario, recommend potential financing mechanism and financing strategy, including waste collection fee, feed-in tariff rates for energy and/or revenue from sale of by-products, gate fee etc.) The proposed tariff structure should be accompanied with a user's affordability and willingness to pay assessment.
- Suggestion of a business model for operation

Legal feasibility

- Regulatory aspects (permissions or licensing, monitoring of plant security, compliance with environmental laws, etc.)
- Necessary conditions/steps to be taken to facilitate the implement the process This should include all tasks required for project implementation and timeline.
- Legal issues on foreign investment including loan provision

Process/institutional feasibility

- Identification of relevant project stakeholders with their potential concerns/interest, engagement activities undertaken during the study, action plan or suggestion for further consultations around the project cycle etc.
- Policy workshops/dialogues/seminars as appropriate with relevant government departments and ministries including Power Development Board and/or Power Grid Company of Bangladesh Ltd.
- Consultative workshop with Development partners interested in waste to value investment (e.g. EU, GIZ, World Bank, ADB, FCDO)

The **consultancy firm/organization/research institute** will be responsible for delivering the outputs and will be accountable to UNCDF Country Focal Point and Programme Specialist.

E. Expected outputs	**No. of months required (estimated)**
The **consultancy firm/organization/research institute** will be responsible for delivering the following services: The **consultancy firm/organization/research institute** will submit Inception, Interim and Final Report as per TOR with specific conclusions and recommendations. The **consultancy firm/organization/research institute** will also participate at stakeholder workshops in consultation with Municipality and supervision of LGD/BPDB/BERC/PGCB/MOE/Municipality level – firstly, for sharing approach and	6 months

methodology mentioned in the Inception Report and initial findings and secondly, for evaluation of study findings before submission of final report.	

F. Impact of Results

The key results have an impact on GHG reduction by using waste to energy or value. Full project proposal and development initiative from waste to energy will be commenced from this study.

G. Institutional Arrangement

The **consultancy firm/organization/research institute** will work under the overall guidance of UNCDF's Country Focal Point and Programme Specialist. The consultant (firm) will be responsible for delivering the tasks mentioned. UNCDF Bangladesh country staff will provide backstopping support and guidance to the consultant (firm) during the assignment.

H. Duration of the Work and Duty Station

Tentative Timeline for consultancy firm/organization/research institute's Deliverables

As per RFP Document

Reporting Station – UNCDF CO, IDB, Bhaban (7th floor), Sher-e-Bangla Nagar, Agargaon, Dhaka-1207.

I. Final Products/Services

- Described in the Expected Output section above.

J. Qualification of the Successful Contractor

As per RFP Document

K. Scope of Bid Price and Schedule of Payments

UNCDF shall make payments, by bank transfer to the **consultancy firm/organization/research institute's** bank account, upon acceptance by UNCDF of the deliverables specified in the ToR.

As per RFP Document

L. Recommended Presentation of Proposal

Interested **consultancy firm/organization/research institute** must submit the following a detailed proposal made up of documentation to demonstrate the qualifications to enable appraisal of competing bids. This should include technical and financial proposals, details of which are listed below.

1. Technical Proposal

i) Name of **consultancy firm/organization/research institute** address and bank account;
(ii) Description of experience in projects of a comparable nature, with specific description of technical specialization of the Firm in the required area;
(iii) List of current and past assignments of the **consultancy firm/organization/research institute.**
(iv) Methods and approaches to be adopted in delivering this assignment, including implementation timelines;
(v) CVs of the Consultants to be engaged.

2. Financial Proposal (including fee, travel cost, DSA, and other relevant expenses)

(i) The financial proposal shall specify a total delivery amount (in USD or BDT) including consultancy fees and all associated costs) i.e. travel cost, subsistence per Diems, printing costs, consultation workshop costs and overhead recharges.

(ii) In order to assist UNCDF in the comparison of financial proposals, the financial proposal will include a breakdown of this amount, disclosing the key assumption employed in costing the working. This must at least specify: the daily rates and number of anticipated working days (for each professional team member), any travel costs and overhead recharges. Payments will be based upon output, i.e. upon delivery of the services specified in the ToR (as per schedule of the payments).

The cost of preparing a proposal and of negotiating a contract, including any related travel, is not reimbursable as a direct cost of the assignment.

BASIS FOR EVALUATION

Consultancy firm/organization/research institute will be evaluated based on the weighted scoring method, the award of the contract will be made once offer has been evaluated and determined as:

a) responsive/compliant/acceptable, and

b) Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

Only **consultancy firm/organization/research institute** obtaining a minimum of 70% would be considered for the Financial Evaluation

As per RFP Document

Annex-4

Declaration

Date:

United Nations Development Programme
UNDP Registry, IDB Bhaban, Agargaon
Sher-E-Bangla Nagar, Dhaka, Bangladesh

Assignment _____

Reference: RFP-BD-2021-011

Dear Sir,
I declare that ……. is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

Yours Sincerely,