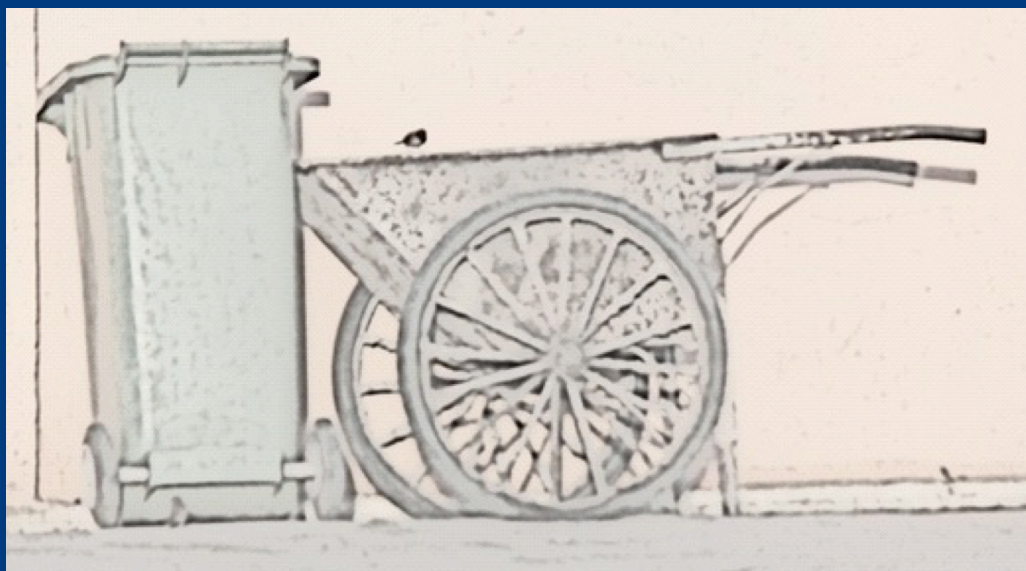


**TA-8566 REG: Mainstreaming Integrated Solid Waste Management in Asia -  
Solid Waste Management Team (46248-001)**

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# **Solid Waste Action Plan (Terms Sheet and Bid Parameters) Buriram, Thailand**

**November 2016**

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# 1. Scope of Action Plan

This section provides some introductory remarks to the Terms Sheet and Bid Parameters which form Sections 2 and 3 respectively

## 1.1. Terms of Reference

- a) The Terms of Reference for RETA 8566 require the submission of several reports that outline strategic objectives and milestones. The completed Integrated Solid Waste Management Plan presents a broad series of proposed Buriram municipality actions for the solid waste sector as a whole.

The plan nominates a Refuse Derived Fuel (RDF) plant located in Buriram's existing landfill as the specific project of focus that could be financed by ADB and which is therefore the subject of this Action Plan and a Prefeasibility Study to be developed separately. Given the relatively modest amount of investment needed for a concession of this type, an ADB limited recourse loan would not be viable. Instead, ADB finance might be via a Thai financial intermediary or part of broader multi-purpose corporate loan or equity stake with an infrastructure company.

- b) This report follows the definition of a detailed action plan under Output 3(i) of the RETA 8566 Terms of Reference (TOR) for a project that takes a PPP form. In the case of a PPP, the TOR states that the action plan shall include a term-sheet describing the key parties, respective rights and obligations, commercial terms, and risk allocation in sufficient details to form the basis for the actual project contracts.

The TOR further states that "if the award of the concession will be through a competitive process, the Action Plan will include broad parameters of the bidding process including the basic qualification of bidders and activities to be completed before award of concession". Buriram municipality may choose to run a competitive selection process for contracting a Concessionaire for this project and, as such, bid parameters are included in the Action Plan

The approach herein provides the Municipality with a detailed project description and scope of services under the presumption that this could ultimately lead to a draft detailed contract form being included the bidding documents.

- c) In the case of Buriram, preparation of the Solid Waste Action Plan is running concurrently with the Policy and Regulatory Reform Paper and the Technical and Commercial Prefeasibility study under RETA 8566 so these other reports are cross-referenced when necessary.
- d) The subject Action Plan is intended to be short and focused -- not only to meet the objectives of the RETA 8566 Terms of Reference and ensure it can easily be read but to avoid persistent replication of information between different reports in the assignment. It will be the function of the Final Report to bring important conclusions of the different reports for this assignment together.

## **1.2. Consultant Perspective for the Assignment**

This report is provided as a submission of consultant views on likely terms needed to reach financial close and operational start-up for a project of this type. No Buriram Municipality agreement to any terms sheet component is assumed as the report is advisory in nature.

## **1.3. Capacity vs. Tonnage**

For the purposes of this Action Plan, the RDF project capacity is assumed to be 100 tpd of fresh waste and 100 tpd of landfill mining (for the dry season). Each project proponent would commit to build capacity up to the level stated in its proposal (proposals would need to be above a minimum threshold). There would then be a periodic check on maintenance and/or tested capacity.

To ensure that the Concessionaire has access to a floor amount of fresh waste, Buriram Municipality would be required to pay compensation for a fresh waste amount below a minimum put or pay level of 40 tons per day (tpd). Assumed all-Equity Project Financing

The report assumes that given the modest nature of project investment requirements and high risks associated with RDF prices, prospective investors would fund costs on a 100% equity basis. So lenders would have no direct stake in the terms sheet provisions.

## **1.4. Municipal Revenues to pay monthly Waste Removal Fees**

The waste removal fee is equal to the tipping fee received from outside municipalities and large scale users. As this rate is above the solid waste user fee paid by residential customers, general fund revenues would be needed to make up the differential.

## 2. Terms Sheet

This terms sheet sets out the key terms and principles governing the proposed Build Operate Transfer contract for a Refuse Derived Fuel facility in Buriram Municipality, Thailand. More detailed and definitive terms would need to be set out in the Project Documents.

	Principles/Terms
<b>Procurement</b>	<ul style="list-style-type: none"> <li>Project shall be procured on a PPP basis or other Municipal procurement process via competitive tender process.</li> <li>Pre-qualification of bidders.</li> </ul>
<b>Parties</b>	<ul style="list-style-type: none"> <li>Buriram Municipality (BM) and Concessionaire.</li> </ul>
<b>Project Features</b> <b>Key</b>	<ul style="list-style-type: none"> <li>Concessionaire shall own 100% of the RDF facility and shall be responsible for the design, construction, financing and operation of a Refuse Derived Fuel (<b>RDF</b>) facility in Buriram Municipality.</li> <li>The RDF facility shall produce RDF from (a) new waste delivered to the Buriram landfill and (b) mining existing waste from that landfill.</li> <li>BM shall pay Concessionaire a removal fee for RDF hauled from the landfill based on tonnage for RDF derived from fresh waste delivered to the landfill site as well as old waste mined from the landfill.</li> <li>Concessionaire shall be entitled to sell the RDF to third parties as well as monetize recovered recycling materials.</li> </ul>
<b>Contract Term</b>	<ul style="list-style-type: none"> <li>10 years</li> <li>Parties may mutually agree to extend Term.</li> </ul>
<b>Project Requirements</b>	<ul style="list-style-type: none"> <li>Concessionaire shall design, construct, own, finance and operate the RDF facility for the entire Term.</li> <li>Concessionaire shall operate the RDF facility in accordance with the Performance and Service Standards, good industry practice and applicable laws and standards.</li> </ul>
<b>Minimum Technical Requirements</b>	<ul style="list-style-type: none"> <li>Minimum capacity of 200 tons per day</li> <li>RDF facility design shall conform to international best practices.</li> <li>Machinery and equipment must have a proven international track record to demonstrate likelihood of an average life longer than the 10-year operating period when operated within design parameters.</li> </ul>
<b>Environmental Requirements</b>	<ul style="list-style-type: none"> <li>Concessionaire shall undertake the Project in accordance with applicable laws including environmental laws and standards.</li> </ul>

	Principles/Terms
<b>Target Commercial Operation Date</b>	<ul style="list-style-type: none"> <li>2 years from signing of Contract.</li> </ul>
<b>Construction Delay, Extension of Time and Liquidated Damages</b>	<ul style="list-style-type: none"> <li>If the delay is attributable to BM or Government Force Majeure, Concessionaire is entitled to extension of time at reasonable costs.</li> <li>If the delay is attributable to Non-Governmental Force Majeure, Concessionaire is entitled to extension of time.</li> <li>If the delay is attributable to Concessionaire, liquidated damages will be imposed on a “per day” basis, subject to a maximum cap, payable by Concessionaire.</li> </ul>
<b>Performance and Service Standards</b>	<ul style="list-style-type: none"> <li>Performance and service standards shall be specified.</li> <li>Deduction/penalty regime for failure shall be set in order to meet such standards.</li> </ul>
<b>Site and Access</b>	<ul style="list-style-type: none"> <li>Landfill is located in Phrakroo sub-district, Muang Buriram, Buriram Province, about 12 km away from Buriram city centre.</li> <li>RDF facility to be located in south-east corner of existing landfill.</li> <li>BM will lease site to Concessionaire for nominal amount - THB100 annual rent.</li> <li>BM shall provide Concessionaire access to site.</li> </ul>
<b>Waste Acceptance and Return</b>	<ul style="list-style-type: none"> <li>BM shall ensure all municipality solid waste be delivered to this landfill and not others.</li> <li>BM shall provide compensation for any shortfall below 40 tons per day in fresh waste. The proposed compensation amount per ton will be required as part of each final bid. (see Section 3 Bid Parameters – Bid Evaluation Criteria)</li> <li>Concessionaire shall return residual waste back to landfill in accordance with landfill procedures.</li> </ul>
<b>Title and Risk</b>	<ul style="list-style-type: none"> <li>Concessionaire acquires title and risk in respect of waste extracted for RDF and recyclable materials.</li> <li>Title and risk rests with BM in respect of new and existing waste at landfill and residual waste by Concessionaire.</li> <li>Concessionaire accepts landfill waste on a “as is where is” basis.</li> </ul>
<b>Tariff</b>	<ul style="list-style-type: none"> <li>Tariff based on waste tonnage removed, with indexation for inflation.</li> <li>BM shall not guarantee minimum waste quantity (tonnage) take – no “take or pay” regime</li> </ul>

	Principles/Terms
	<ul style="list-style-type: none"> <li>Tariff shall not take into account Concessionaire's RDF and recyclable materials sales revenue.</li> <li>Weighing of waste removed at RDF facility weighbridge station.</li> </ul>
<b>Sale of RDF and Recyclable Materials</b>	<ul style="list-style-type: none"> <li>Concessionaire is entitled to sell RDF produced from new waste delivered and existing waste mined from the landfill.</li> <li>Concessionaire is entitled to monetize and keep revenue derived from recycling materials extracted from waste.</li> </ul>
<b>Performance Security</b>	<ul style="list-style-type: none"> <li>Concessionaire shall provide performance bond / security of 15% of Project cost upon Contract signing.</li> </ul>
<b>Monitoring, Reporting and Records</b>	<ul style="list-style-type: none"> <li>Concessionaire shall conduct regular monitoring, reporting and keep proper books and records.</li> <li>BM has monitoring and inspection rights.</li> </ul>
<b>No Assignment or Transfer</b>	<ul style="list-style-type: none"> <li>No sale, assignment or transfer of rights and interest in the Contract without prior written consent of the other party, except where required for the financing of the Project.</li> </ul>
<b>Restrictions against Transfer of Equity</b>	<ul style="list-style-type: none"> <li>No sale or transfer of equity by Concessionaire's significant shareholder(s) before Commencement Operation Date plus 2 years without BM's prior written consent.</li> </ul>
<b>Limits of Liability</b>	<ul style="list-style-type: none"> <li>Total limit of liability shall be 100% of entire/aggregate Contract Value</li> <li>Exceptions to liability limit include fraud, wilful misconduct, gross negligence and insurance loss proceeds.</li> <li>No party is liable for special, consequential, or punitive damages or indirect losses.</li> </ul>
<b>Indemnification</b>	<ul style="list-style-type: none"> <li>Usual indemnification provisions including environmental indemnification.</li> </ul>
<b>Insurance</b>	<ul style="list-style-type: none"> <li>Concessionaire shall, at its cost, obtain and maintain minimum insurance policies and coverage as is required by law and financing documents.</li> <li>Usual provisions dealing with application of loss proceeds.</li> </ul>
<b>Force Majeure</b>	<ul style="list-style-type: none"> <li>Usual definitions and exclusions of Force Majeure (including Governmental and Non-Governmental</li> </ul>

	Principles/Terms
	<p>Force Majeure).</p> <ul style="list-style-type: none"> <li>• Force Majeure that continues for 120 days will be deemed Pro-longed Force Majeure</li> <li>• If GFM, BM pays capacity portion of tariff, subject to existing performance deductions.</li> <li>• If Non-GFM, BM pays 50% of capacity portion of tariff subject to existing performance deductions.</li> </ul>
<b>Change in Law</b>	<ul style="list-style-type: none"> <li>• Equitable adjustment to the Tariff if there is a Change in Law that prevents performance of Contract or results in net costs or savings.</li> <li>• Change in Law amounting to a Force Majeure will be deemed a Governmental Force Majeure.</li> </ul>
<b>Events of Default</b>	<ul style="list-style-type: none"> <li>• Concessionaire's default events include: <ul style="list-style-type: none"> <li>○ failure to achieve Commencement Operation Date within 180 days from Target Commercial Operation Date</li> <li>○ abandonment of the Project</li> <li>○ material breach of the Contract</li> <li>○ Concessionaire's insolvency</li> <li>○ non-compliance/breach of law</li> </ul> </li> <li>• BM's default events include: <ul style="list-style-type: none"> <li>○ Material breach of the Contract</li> <li>○ Non-payment of Tariff</li> <li>○ Expropriation or nationalization of the Project</li> <li>○ Usual notice and cure provisions</li> </ul> </li> </ul>
<b>Termination Compensation</b>	<ul style="list-style-type: none"> <li>• If default not remedied within cure period, non-defaulting party shall be entitled to terminate the Contract by giving 30 days written notice to the other party.</li> <li>• In the case of pro-longed Force Majeure, either party may terminate the Contract by giving 30 days written notice to the other party.</li> <li>• Upon termination of the Contract: <ul style="list-style-type: none"> <li>○ In the event of BM's default or GFM, Termination Fee shall cover equity, debt and equity return.</li> <li>○ In the event of Concessionaire's default or insurable Non-GFM, Termination Fee shall cover equity and debt.</li> <li>○ In the event of uninsurable Non-GFM, Termination Fee shall cover debt, equity and 50% of equity return.</li> </ul> </li> </ul>

	Principles/Terms
<b>Expiry of Term</b>	<ul style="list-style-type: none"> <li>Concessionaire, at its cost, shall demolish the RDF facility and restore Site to state and condition as closely approximate to the fullest extent possible to date of initial possession, and in compliance with law (including environmental law).</li> <li>BM shall have option to require RDF facility to be transferred “as is” to it at nominal amount.</li> </ul>
<b>BM Step-in Rights</b>	<ul style="list-style-type: none"> <li>BM entitled to exercise Step-in Rights to perform the services upon: <ul style="list-style-type: none"> <li>Insolvency of the Concessionaire</li> <li>Concessionaire’s default/failure to perform the services in accordance with the Contract resulting in a real and immediate risk to the environment, public health and safety</li> <li>Public emergency, national security or public interest</li> <li>Provisions to address extent of Step-in Rights, obligations and Tariff payable under different Step-in scenarios.</li> </ul> </li> <li>BM Step-in Rights has priority over and can be exercised in parallel with lenders’ step-in rights.</li> </ul>
<b>Governing law</b>	<ul style="list-style-type: none"> <li>The governing law of the Contract shall be the laws of the Republic of Thailand.</li> </ul>
<b>Dispute Resolution</b>	<ul style="list-style-type: none"> <li>Refer to Third Party Expert for resolution of disputes involving certain technical and specified matters.</li> <li>Arbitration in Thailand.</li> </ul>
<b>Financing of Project</b>	<ul style="list-style-type: none"> <li>100% equity funding</li> <li>Unlikely project debt financing can be secured.</li> </ul>
<b>Key Project Documents</b>	<ul style="list-style-type: none"> <li>Fresh Waste acceptance and processing Agreement</li> <li>Old waste mining and residuals management agreement</li> <li>Construction Agreement</li> <li>Operation &amp; Maintenance Agreement</li> <li>Site Lease Agreement</li> <li>Financing and Security Documents (if there is any debt financing and only if such debt financing is secured)</li> <li>RDF and recyclable materials Sale Agreements</li> </ul>

### 3. Bid Parameters

Set out below are the key bid parameters governing the tender for the proposed Build-Operate-Transfer contract for a Refuse Derived Fuel facility in Buriram Municipality, Thailand. These are effective guideposts for the drafting to prequalification and tender documents.

	Parameters
<b>Tender Process</b>	<ul style="list-style-type: none"> <li>Two-stage process: <ul style="list-style-type: none"> <li>Pre-qualification of bidders; and</li> <li>Request for Proposals from pre-qualified bidders</li> </ul> </li> <li>Consistent with international procurement standards</li> </ul>
<b>Pre-qualification of Bidders</b>	<ul style="list-style-type: none"> <li>Objective is to ensure a more efficient tender process as only pre-qualified bidders can bid.</li> <li>Need to set appropriate pre-qualification process and criteria.</li> <li>Pre-qualification period – 1 month</li> <li>Evaluation and Shortlist – 1 month</li> </ul>
<b>Pre-qualification Criteria</b>	<ul style="list-style-type: none"> <li>Pre-qualification criteria typically based on a bidder's: <ul style="list-style-type: none"> <li>Organizational structure</li> <li>Financial strength</li> <li>Relevant Design–Build–Operate experience</li> <li>Technical and operational experience</li> <li>Implementation approach and plan</li> </ul> </li> </ul>
<b>Request Proposal for</b>	<ul style="list-style-type: none"> <li>Single parties/entities or consortia may bid.</li> <li>90 days validity of bids, extendable upon request by BM</li> <li>Alternative bids may be considered provided base bids must first be tender compliant</li> <li>Collusion amongst bidders will lead to disqualification</li> <li>Corruption will lead to disqualification and possible criminal liability.</li> <li>Bid period – 4 months</li> <li>Evaluation – 3 months</li> <li>Contract finalization with preferred bidder and Award – 2 months</li> <li>Financial Close – 6 months</li> </ul>
<b>Bid Evaluation</b>	<ul style="list-style-type: none"> <li>Bidder that submitted the most “value for money”</li> </ul>

	Parameters
<b>Criteria</b>	<p>proposition will be awarded the tender.</p> <ul style="list-style-type: none"> <li>Value for money is determined both qualitatively and quantitatively.</li> <li>Recommended criteria and weightage: <ul style="list-style-type: none"> <li>Project Value/Price Proposition – 55%</li> <li>Technical &amp; Operational Proposition – 15%</li> <li>Compensation per ton per day for amounts below minimum fresh waste guarantee – 10%</li> <li>Commercial and Legal Proposition (i.e. commercial terms and risk allocation deviations from draft DBO Contract) – 10%</li> <li>Financial Strength of Bidder – 10%</li> </ul> </li> </ul>
<b>Bid Security/Bonds</b>	<ul style="list-style-type: none"> <li>Concessionaire to provide bid security, amount to be specified.</li> <li>Issued by recognised bank or insurer domiciled or licensed in Thailand.</li> </ul>
<b>Governing Law/Disputes</b>	<ul style="list-style-type: none"> <li>Governing law of tender process will be the laws of the Republic of Thailand.</li> <li>Disputes will be resolved via Thailand courts.</li> </ul>