



Greater Malé Waste-to-Energy Project

Below are MOE's response to comments for the Market Sounding Information Sheet

Question	Answer
Company A	
Please provide us with the composition data of flammable CDW material in order to consider the WTE plant specifications.	The data are being collected currently.
Please confirm the scope of responsibility for the ELV dismantling unit. It is mentioned in WAMCO (Phase 1) in Section 2.1 (P8).	The ELV dismantling will be operated by WAMCO.
Please provide us with the bottom ash discharge conditions and the ash recycling facility during the WTE operation in order to consider the Bottom ash processing unit.	This information will be provided during the tendering. In general, it has to be noted that the IBA processing unit has to deliver a weathered bottom ash with a grading lower than 3.35 mm.
Please change the scope of responsibility for the ash landfill and the hereto related leachate treatment plant to Government (WAMCO) instead of DBO contractor.	Noted, but scope will remain
Please provide us with the composition data of baled waste in order to consider the WTE plant specifications.	The stoker capacity diagram which will be part of the bidding documents will provide sufficient information.
We are interested in providing the power management system in Thilafushi Island. Please provide us with the existing power generation facilities and future power supply plan.	Noted and appreciated. Bidder will have to liaise with local network operator
We are interested in providing the drinking water using RO and/or RO or multi-effect distillation in Thilafushi Island. Please provide us with the existing water supply facilities and future water supply plan.	Noted and appreciated. Bidder will have to liaise with local water supply company
We are interested in providing the fishing industry facilities including ice-flakes unit. Please provide us with the existing facilities and development plan for fish industry.	Noted and appreciated. Bidder will have to liaise with local supply companies
Please provide us with the composition data of the residues from the CDW and IBA processing plants which are unsuitable for the market and which cannot be incinerated, in order to consider the Landfill specifications.	As per current plans, the CDW residues will be handled by WAMCO
We would like to propose that the scope of responsibility for recycling bottom ash shall be WAMCO.	Noted, but scope will remain
It is an appropriate payment condition to separate the fixed fee and the variable fee. The details shall be discussed based on the contract conditions.	Noted
We would like to propose that the responsibility of DBO contractor shall be limited to plant operation guarantee. All revenue not limited to selling heat, steam, electrical energy and recovered material from IBA shall belong to Employer (Government or WAMCO).	Noted.
With regard to the completion of DBO or BOT projects, we would like to propose the criteria of reference project as follows; Please allow the references project, which were delivered by our 51% wholly owned subsidiary and/or in the bidder's or JV partner's home country. 1) Operation period shall be more than 10 years. 2) The waste treatment capacity shall be more than 150ton/day. 3) Reference project shall be more than 2 project in the last ten years.	Irrespective these requests, criteria were changed
We would like to propose that technical provider of WTE plant shall be included in bidder or JV members, because it is a core components in DBO contract. The criteria of reference project supplied by Technical provider as follows; Please allow the references project, which were delivered by our 51% wholly owned subsidiary and/or in the bidder's or JV partner's home country. In case technical provider is Licensee, it shall be attached the	Noted, as mentioned, the criteria were modified.

Question	Answer
<p>supporting letter issued by Licensor for this project.</p> <p>1) Operation period shall be more than 10 years.</p> <p>2) The waste treatment capacity shall be more than 500ton/day.</p> <p>3) Reference project shall be more than 2 project in 10 years.</p>	
Company B	
<p>A. Is the area (white plot, Figure 1, Pg. 6) dedicated only for WtE facility? Or does it also include area required for facilities like bottom ash processing plant, Leachate storage and treatment facilities? Please confirm.</p> <p>B. Leachate will be generated from Landfill and also from WtE facility. Leachate storage and treatment facility would be in which area? Red or White ? Please confirm</p>	<p>The white plot does also include the area for the residue landfill and the bottom ash processing plant. All new facilities will have to be built in the white area subject to further instructions provided by the bidding documents.</p>
<p>A. Is composition and net calorific value based on actual Maldives's waste analysis? Please confirm.</p> <p>B. Kindly provide following data as it is very important to design WtE: > chemical composition (C, O, N, H, S, Cl) > water/combustible/incombustible ratio in waste analysis</p>	<p>It has been concluded from the given waste analyses. The requested data will be provided during the bidding phase</p>
<p>A. European emission standard is stringent for other countries than Europe. (especially limitation on HCl's emission). With requisite 'Dry system' for Air Pollution Control it may be difficult to achieve HCl limit.</p> <p>B. We request to consider appropriate emission limits considering country's economical point of view and other related factors.</p>	<p>It was meant to say dry or semi-dry system. The European emission standards shall be regarded as set.</p>
<p>Our company has multiple ideas to utilize surplus energy. Ideas required deliberate discussions and hence we wish to discuss those across the table in future.</p>	<p>Noted</p>
<p>We request to modify qualification criteria as below: Successful completion of DBO or BOT projects of similar size, budget and nature, in countries including bidder's or JV partner's home country</p>	<p>Noted</p>
<p>A. We wish to have information regarding under ground condition? (Since sometimes underground cavities exists in calcareous area.)</p> <p>B. May we know bearable load of the reclaimed land ? (kg/m2)</p>	<p>Will be provided during the bidding stage</p>
<p>For the funding, may we understand that this is a co-funding project with ADB and JICA (Japan International Cooperation Agency)?</p>	<p>Funding arrangements will be provided during the bidding stage.</p>
<p>Japan has a JCM agreement with Maldives. Will this scheme applied for this particular project?</p>	<p>Funding arrangements will be provided during the bidding stage.</p>
<p>Who will be the consultant during the bidding and evaluation of the tender? How will it be included in the tender?</p>	<p>The consultant will be hired in due course prior to the tender. A firm to act as Employer's Representative will be hired as counterpart of the DBO Contractor during the DB period and the first year of the O&M period.</p>
<p>Please update us of the tendering schedule when will be the PQ announcement.</p>	<p>PQ will most probably be issued in April</p>
<p>Since we do not have an office in Maldives, is it possible to receive the PQ announcement by email?</p>	<p>PQ documents will be published on ADB and on MoE's website</p>
Company C	
<p>It is clear under DBO scheme that SPC needs to be secured for the revenues after the commercial operation. From this point of view, it is still not so clear if the revenues such as tipping fee, power sales, refrigerated water sales, etc. may make SPC profitable and survive for over 15 years. In addition, an escalation and a security for the revenues need to be cleared at the time of the bid announcement we assume.</p>	<p>Subject to the final Contract, a fixed fee and variable fee will be used to cover the Contractor's expenses.</p> <p>In parallel to awarding the Contract the Employer will secure the financing of the expenses via an appropriate tariff system. A sovereign guarantee will be provided by the Employer.</p>
<p>Soil at site</p> <p>After the reclamation of the ground, the durability of site is very important to sustain the heavy equipment and buildings.</p> <p>The most important point might be the piling plan in terms of schedule and cost.</p>	<p>A detailed geotechnical survey will be provided with the bidding documents to base your design on.</p>
<p>Salty air</p> <p>We still do not know if the plant is going to be covered and built inside the building, however, if it is inside, the building cost gives a significant impact on the cost. On the other hand, if it is in the open air, a precaution against the salty and sandy air must be mandatory to gain</p>	<p>A building envelope shall cover the main facility which shall be aesthetically pleasant and harmonised with the other surroundings.</p> <p>The cost recovery for the Contractor during the Operation Service Period is</p>

Question	Answer
<p>the long term O&M period. But that must also have an influence on the cost to construct.</p> <p>As a whole the overall cost for this plant including O&M is much higher than the one for the other similar size of the plants, which affects the IRR by SPC.</p>	<p>based on the Contractor's experience and knowledge in how to operate and maintain this sort of facilities. Yet replacement of major assets shall be offered which the Employer has to allocate funds for while the ongoing O&M costs shall be covered by the fixed fee the Contractor charges regularly.</p>
Company D	
<p>How is the payment secured (otherwise project hardly bankable for a non-recourse financing): guarantees (Sovereign guarantee, Payment Risk Guarantee etc.) for Capex and Opex?</p>	<p>Payment will be secured via a sovereign guarantee during both the DB and the Operation Service Period. A considerable portion of the CAPEX will be a grant.</p>
<p>Can you also plan to have a ADB guaranty for operating gate fee (opex)?</p>	<p>No, this is not planned</p>
<p>Do you expect to have a reserve account dedicated to the project (at least 6 months)?</p>	<p>Reserve accounts are understood as retention funds for maintenance or withholding funds during the DB period. Both of them are considered.</p>
<p>Will the concession agreement accept the anticipated termination of the contract in case of Client default due to non-payment?</p>	<p>The 'concession agreement' which in fact is part of the DBO Contract reserves the right of the Contractor to terminate the Contract.</p>
<p>Will the concession agreement indicate that the country budget will be adjusted each year?</p>	<p>The country will have to adjust the budget according the then concluded terms and conditions of the OPEX.</p>
<p>Which mechanism will be used to implement the budget (specific taxes)?</p>	<p>The country will set up a specific levy to be implemented subject to the terms and conditions of the Contract</p>
<p>Which range of diversion rate do you expect for this project?</p>	<p>As per current information available, we expect an almost 100% diversion of untreated waste while the diversion rate for bottom ash is difficult to anticipate.</p>
<p>Is it possible to have a contractual minimum tonnage (take or pay mechanism)?</p>	<p>Yes, a fixed fee will be defined which is equivalent to a bring or pay mechanism</p>
Company E	
<p>Waste supply contract (minimum guaranteed tons and Gate Fee)</p>	<p>As per DBO contract, a fixed fee will be defined which is not subject to the delivered amount of waste.</p>
<p>Project Structure (Companies involved in the Project, IF ANY):</p>	<p>Within the Employer's realm, the Employer's Representative (ER) will be a specialised firm taking on the Employer's responsibilities in the course of the DB period and thereafter.</p> <p>Other stakeholders were mentioned in the brochure.</p>
<p>Power purchase agreement (fees and purchase obligation):</p>	<p>The PPA will be concluded between the Employer and the network operator STELCO. For the procurement of power during the operation service period the DBO contractor shall liaise with the parties to either use the PPA or another agreement between STELCO and him.</p>
<p>Licenses and permits needed</p>	<p>Operating license and business license are the main licenses. Besides these, the DBO contractor has to register under the Maldives regulatory system such as VAT, service tax, employment and pension act etc.</p>