

Current Challenges towards Tendering Process



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A Prediction of Urban India Scenario 2030



- ❑ 590 Million Urban Population – Twice the Present Population of USA
- ❑ 91 Million Urban Households – rising from Present 22 Million
- ❑ 68 Cities will be 1 Million + [Europe has presently 35]

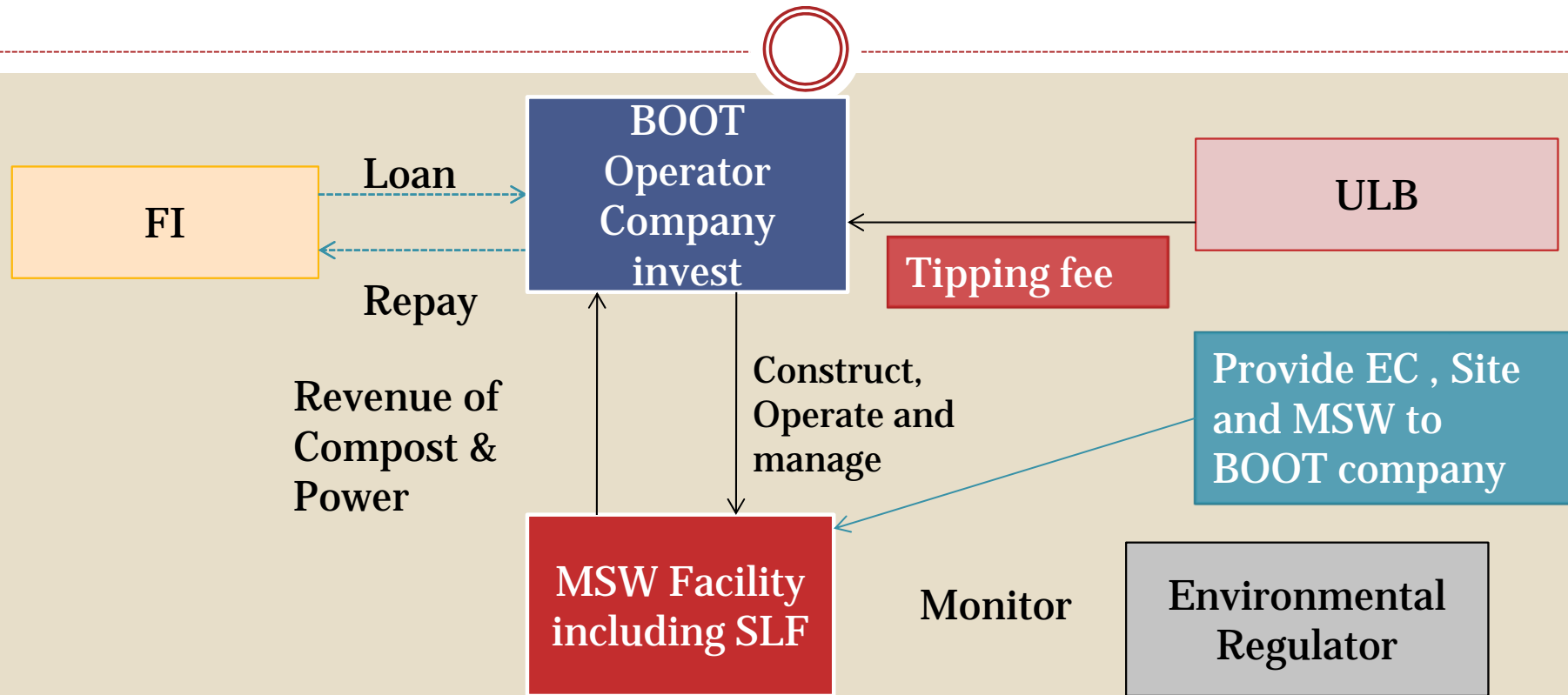
Source : India's Urban Awakening : Building inclusive cities, sustaining economic growth : April 2010 – By McKinsey Global Institute

Stakeholders for a SWM Project



- Urban Local Body - Responsibility of SWM is allocated
- PPP Operator - Has technical expertise and financial resources
- SPCB - Environment Regulator
- DISCOM - RE Power Purchasing Entity
- Fin. Institutions - Lenders & Co –owners & Provide W/capital
- SERC - Determines Tariff for electricity
- Independent Engineer - Mentor for both ULB and PPP Developer
- NGO & Waste Recycler - Social Stakeholder

Private Public Partnership



Case Study – AP Projects



- Andhra Pradesh (post bifurcation) carried out WTE Project bids on a cluster based approach.
- It followed the tariff based tender model . Selected bidder with lowest tariff will sign the Power Purchase Agreement with DISCOM
- The Concession Agreement is executed between the selected bidder and the Lead ULB of the cluster backed by a Performance Guarantee
- There is a disconnect between the Sale arrangement and Waste intake arrangement with two different entities.
- This is an ill conceived model without laying any emphasis on POLLUTER TO PAY concept which is the corner stone for any Waste management activity.
- There are two separate contracts – one for Waste disposal and the other for sale of energy . One contractual dispute can throw the other out of gear.
- The implementation of the AP Projects – Visakhapatnam , Vijayawada and Tirupati in the course of time – will be a case study.

Case Study of Ahmadabad



- There are sincere endeavors from the Corporation
- However, industry experts felt that there is need for fine tuning the financial format and to keep it simple
- The current format of Financial format of the tender is highly complicated and does not provide any level playing field for comparison
- The outcome may be flawed

Case Study of Ahmadabad



- a) If the Concessioner will get Levelised Tariff Rs. per unit (kwh) as per (1) from Gujarat Electricity Regulatory Commission (GERC), then expected Tipping fee Rs. ____ per ton of MSW accepted (with escalation of ____ % on annual basis)
- OR**
- b) If the Concessioner will not get Levelised Tariff Rs. per unit (kwh) as per (1) from Gujarat Electricity Regulatory Commission (GERC), then what is the expected Tipping fee Rs. ____ per ton of MSW accepted (with escalation of ____ % on annual basis)
- OR**
- c) Under Government of India's and / or Government of Gujarat's Policy, if 20% Viability Gap Fund of capital cost received and given to the Concessioner, then what would be the revised Tipping fee Rs. ____ per ton of MSW accepted (with escalation of ____ % on annual basis), in the situation where the Concessioner **will get** Levelised Tariff Rs. per unit (kwh) as per (1) from Gujarat Electricity Regulatory Commission (GERC)
- d) Under Government of India's and / or Government of Gujarat's Policy, if 20% Viability Gap Fund of capital cost received and given to the Concessioner, then what would be the revised Tipping fee Rs. ____ per ton of MSW accepted (with escalation of ____ % on annual basis), in the situation where the Concessioner **will not get** Levelised Tariff Rs. per unit (kwh) as per (1) from Gujarat Electricity Regulatory Commission (GERC)

Case Study of Chennai



- ❖ Two prominent dump yards in the city { Perungudi & Kodungaiyur} receiving about 4000 TPD MSW
- ❖ Efforts to install a WTE facility dates back to 2002/2003
- ❖ Bidding carried out in 2008. Royalty based agreements were entered into.
- ❖ The agreements were cancelled in 2010 as project work did not take off.
- ❖ EOI - again called for in end of 2011. Two newer sites identified. Bidders are to get the EC for these sites.
- ❖ National Green Tribunal (NGT) restrained the ULB from making use of one of the newer sites.
- ❖ Recent news suggest that Chennai is being courted by technology providers to make Garbage turn to Aviation Fuel !!!!

Perungudi & Kodangaiyur



MMRDA – Aborted Tender Process



- 7.1.1 Financial Offer shall comprise of quoting two parts of the Tipping Fee/ton of MSW:
- (a) Variable portion of the Tipping Fee linked to the actual quantum of waste delivered to the processing and disposal facility (the “Part A of the Tipping Fee”)
 - (b) Fixed portion of the Tipping Fee to be paid irrespective of quantity delivered to the processing and disposal facility (the “Part B of the Tipping Fee”)
- 7.1.2 The quote for both Part A and Part B of the Tipping Fee shall be provided in INR/Ton of waste delivered to the processing and disposal facility. The payment of Part B of the Tipping Fee shall be for a fixed quantity of 1800 TPD, irrespective of the quantity received and processed.
- 7.1.3 Part B of the Tipping Fee shall be capped to 60% of the sum of Part A and Part B of the Tipping Fee quoted in the Financial Offer, else the financial Offer shall be rejected.
- 7.1.6 Tipping Fee quoted in the Financial Offer shall be the payable Tipping Fee in the first year of operation of plant and in the subsequent years, Part A of the Tipping Fee shall be escalated.
- 7.1.7 Part A of the Tipping Fee shall be escalated based on Wholesale Price Index (WPI) published by Reserve Bank of India, the base value of WPI shall be that occurring in the first month after COD and the revision shall be done annually on April 1 of each year to reflect the variation in WPI.
- 7.1.8 There shall be no escalation in Part B of the Tipping Fee.

MMRDA – Aborted Tender Process



- MMRDA conceives a 2500 TPD project for peripheral ULBs of Mumbai city
- EC was obtained
- Tender PQ was stringent and process was transparent
- Tender process was successfully completed and Letter of Award was issued
- Discussions were held with project proponent and set for executing the Agreement – putting an end to a lengthy process of tendering spanning over 2 years
- LOA was withdrawn

Case Study MCGM Kanjur & Deonar

The processing technology for initial waste processing capacity of 4000 TPD is required to be composting or its variants. Thereafter for MSW processing (incoming waste) or at any point of time of concession to reduce the process residues to landfill the bidder is free to adopt any waste processing technology. A minimum allocation of 40 ha of land area for landfill is mandatory. The actual utilization of this area for construction of landfill cells however is left to the bidder's decision. It is pertinent to note that MCGM has received a letter dated 9 January, 2007 from Zuani Industries Limited indicating their willingness to off-take compost from the facility at the tentative price of Rs. 2000 per MT of compost.

Case study- Kochi



WTERT-India

27-01-2014

After eighteen months of issuing a Government Order, allowing Suchitwa Mission (SM) to establish a municipal solid waste (MSW) treatment facility, the Government of Kerala (GOK) is back to where it started. In the process, it spent 18 months of time and public money to create a tendering process which could not stand the test of its own financial and technical committee.

Solid waste management (SWM) is widely perceived to be on the top of the agenda for successive governments of Kerala. But, various state agencies entrusted with the responsibility to enhance solid waste management seem to have little experience in waste-to-energy to conduct a proper tendering process to choose private partners.

Waste-to-Energy project at Brahmapuram: The Government of Kerala goes full circle on waste – with no solutions or answers.

Waste-to-Energy Research and Technology Council – India (WTERT-India)

Request for Qualification Process

February, 2012

GOK issues a Government Order allowing SM to invite proposals to establish a MSW processing plant at Brahmapuram.

March - April, 2012

SM issues a Request for Qualification for establishing a 300 tonnes per day waste treatment plant. GOK approved ICICI-KINFRA to be the Transaction Advisor.

July, 2012

Out of 29 agencies which responded to the RFQ, 15 participated. Based on the submissions, ICICI-KINFRA and its technical consultant Paradigm Consultants submitted their evaluation report to SM and GOK.

17th August, 2012

Secretary to GOK, Local Self Government department directed SM to complete the tendering process on a top priority basis by September 30th, 2012.

Tender Process and Cancellation

November, 2012

In response to an RFP issued by SM, 4 agencies submitted proposals on time. One bidder got disqualified for not submitting the Earnest Money Deposit, leaving only 3 qualified bidders.

December, 2012

In its evaluation report to SM, ICICI-KINFRA concluded that all the 3 submitted proposals are technically qualified and recommended them for further evaluation.

February - May, 2013

A technical and financial committee concluded that two bidders quoted extreme and "unrealistic" values for the bid variable - power generation. In response to clarifications sought, the bidders changed their bid values from 14 kwh/tonne and 1152 kwh/tonne to 336 kwh/ton and 720 kwh/tonne of solid waste respectively.

Owing to the large deviation in the bid variable, the committee recommended that the tender process may be cancelled. This was confirmed by Secretary to GOK on 18th May, 2013.

Case Study of NDMC



2009-2012

- Erstwhile Municipal Corporation of Delhi – conducted the Bid process
- Was part of the team to represent to MOEF for grant of EC
- Certified Layout and facilitated statutory approvals
- Construction of Waste to Energy plant commences

2012-till date

- MCD was trifurcated . NDMC Came into being
- The ULB grapples with the Dilemma “ Whether WTE is a Change of Technology? And not permissible under the Contract ?” Objects that Waste to Energy project is not part of agreement. Solicits opinion of NEERI

Case Study of NDMC



- Article 6.12 of the CA

The Concessionaire shall be free to sell or otherwise dispose of the recyclables, compost or organic manure, energy (power) and /or other material recovered after Processing the Municipal Solid Waste

Getting adequate land in Delhi for appropriate disposal of municipal solid waste has been extremely difficult . At the same time, efficient management (of municipal solid waste in compliance of the MSW (M&H) Rules 2000) is mandatory . Therefore, MCD intends to develop optimal measures through combination of mechanical, biological and thermal/chemical processes to minimize the waste material going to sanitary landfill. The proposed system should be sustainable technically and financially and also socially acceptable

NEERI's Technical Opinion



As far as the issue of utilization/disposal of RDF generated by DMSWL is concerned, NEERI is of the opinion that presently there is no readily available market for sale/utilization of RDF in the vicinity of Narela Bawana MSW processing site except for few brick kiln operators and few other small scale industries.

NEERI is of the Opinion that this plant does not fall in the purview of the “Change of Technology Clause”. The Waste to Energy power plant is an extension of the existing RDF Plant and essential for environmentally safe utilization of RDF

Paradigm Shift in Perception



- Waste to Wealth /Cash for Trash – is a wrong perception. Polluter to Pay principle to be followed. Tipping Fee/Gate fee concept is to be the lone bid parameter . Preferential Tariff for Waste to Energy is already recommended by CERC..
- Zero Landfill is a myth . Waste is a liability . ULBs to look upon the task of SWM as to provide hygienic environment to its citizens
- Strengthening the ULBs financially - to meet the expenditure on SWM.
- Dispute resolution mechanism to be strengthened . International Best practices to be imbibed. Proven successful models of International SWM – a combination of tipping fee & preferential tariff – to be a guiding principle
- Judicious technology selection based on widely proven processes & pro-active approach to obtain prior environment clearance



Thank You!



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