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Service Delivery Options Analysis

Feasibility study for an Advanced Integrated Solid Waste Management
System for Rustenburg Local Municipality (RLM)









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Service Delivery Options Analysis Report

TABLE OF CONTENTS

1	Introduction and Background	4
2	Service Delivery Options	5
2.1	Legal Options Available	5
2.1.1	Internal Options	5
2.1.2	External Options	9
2.1.2.	1 Broad Evaluation of the External Options	12
2.1.2.	2 Possible External Options	14
2.1.2.	3 Evaluation of Possible External Options	21
LIST	OF TABLES	
Table	Comparison of Internal Service Delivery Mechanism (Organisational Structuring) Options	8
Table	2 Preliminary risk assessment	31
TABL	E OF FIGURES	
Figure	e 1 External Service Delivery Options	10
Figure	2 Characteristics of Service Delivery Options	11
Figure	e 3 Characteristics of the JV structure	16
Figure	e 4 Characteristics of a PPP structure	19

ABBREVIATIONS

AISWMS Advanced Integrated Solid Waste Management System

BBBEE Broad-Based Black Economic Empowerment

COGTA Department of Cooperative Governance and Traditional Affairs

DEA South African Department of Environmental Affairs

DEDECT Department of Economic Development, Environment, Conservation and

Tourism

EPC Engineering-Procurement-Construction

FS Feasibility study

IWMP Integrated Waste Management Plan

KfW Entwicklungsbank (German Development Bank)

IU INFRASTRUKTUR & UMWELT

MBT Mechanical biological treatment

MIG Municipal Infrastructure Grant

MPPP Municipal Service Delivery and PPP Guidelines

MRF Material recovery facility

MSA Municipal Systems Act 32 of 2000

NERSA National Energy Regulator of South Africa

MSW Municipal solid waste

NWMS National Waste Management Strategy

O&M Operation and Maintenance

PA Purchase Agreement

PPP Public Private Partnership

PSC Public Sector Comparator

RDF Refuse derived fuel

RLM Rustenburg Local Municipality

SACE South African Council for Educators

SDA Service Delivery Agreement

SMMEs Small, Medium and Micro Enterprises

SPV Special Purpose Vehicle

Advanced Solid Waste Management for RLM Implementation Consultant for MBT Facility

SWMU Solid Waste Management Unit of RLM

TA Technical assistance

TRV Treasury Views and Recommendations

UAWEC Urban Agricultural and Waste Education Centre

WTE Waste to Energy

1 Introduction and Background

As part of South African-German co-operation, Rustenburg Local Municipality (RLM) and KfW Entwicklungsbank (KfW) agreed to explore the feasibility of an Advanced Integrated Solid Waste Management System (AISWMS) for RLM. The main aims of the AISWMS are:

- Adoption of the South African National Waste Policies with regard to utilization of waste as a resource (recyclables, energy recovery) by applying innovative waste treatment technologies
- Increasing the quality and efficiency of waste management services in RLM

A KfW Entwicklungsbank-funded Feasibility Study Report for an AISWMS for RLM dated August 2009 developed and evaluated different waste treatment options from fairly simple technologies up to very sophisticated state of the art technologies. The Feasibility Study assessed various options of waste treatment. Digestion of waste turned out to be a principally feasible option, thereby additionally generating biogas which could be used to generate electricity.

A verification and update of the results of the above feasibility study was also done and culminated in an AISWMS Feasibility Study Mission Report dated February 2012. As a result of these assessments a waste treatment facility, comprising the following two components has been identified as the most favourable technology solution for RLM:

- Material Recovery Facility (MRF) for reclamation of recyclables (which is already included in the present plans for construction of the new Waterval Landfill), and
- MBT with biological drying to produce refuse derived fuel (RDF).

This delivery options analysis report focuses on the possible service delivery options for the implementation of the technology option and should be read in conjunction with the mentioned feasibility assessments.

2 Service Delivery Options

Implementation Consultant for MBT Facility

2.1 Legal Options Available

The baseline option always available to the Municipality is to maintain the status quo of the relevant service or function in respect of which a project is considered and thus deciding not to pursue the identified project based on reasons substantiated by a feasibility study.

However, section 76 of the Municipal Systems Act, No. 32 of 2000 (the "MSA") provides for various mechanisms that municipalities can utilise to ensure sustainable and affordable municipal services delivery. These are broadly categorised as internal and external options.

Although it has been ascertained through the previous feasibility studies undertaken in 2009 and 2012 that the MBT project needs external funding and external expertise and capacity, a discussion of internal organisational mechanisms are included given the applicability thereof to effective service delivery including the management and monitoring of any external service delivery mechanisms.

2.1.1 Internal Options

The internal mechanisms allowed for in the MSA are:

- 1. department or other administrative unit within the Municipality's structures;
- 2. business unit operating within the administration and under Council's control;
- 3. another component of the administration.

These mechanisms are in essence different organisational structures financially dependent on the Municipality that must ensure effective service delivery if a project linked to the solid waste service is located, i.e. funded, designed, build, operated and maintained internally. However, the effectiveness of these organisational structures is also important if a project is internally managed but externally funded, designed, build, operated and maintained.

Alternative 1 refers to a directorate, department or other administrative unit. According to the institutional arrangements within a municipality the responsibility for the delivery of a particular service is carried out by more than one department as integral components within the administration of the Municipality and depending on the mandate of the

Options Analysis Report

departments, the functions will be executed by a number of sub-structures under each department. Thus this organisational structure has core inter-directorate and inter-departmental dependencies, the effectiveness or lack thereof which impacts on the particular services rendered by the Municipality. E.g. the Solid Waste Management Unit is located within the Community Services Directorate but is dependent on the effectiveness of various other divisions within other directorates or departments including treasury, human resources, legal and the mechanical workshop to name but a few.

Alternative 2 refers to a business unit operating within the Municipality's administration and under the control of the municipality in accordance with operational and performance criteria determined by the municipal council.

In contrast with a department, a business unit must have a "business" purpose (i.e. a potential income source from sale of services), and the need to be ring-fenced as a unit (i.e. undertaking only that business function).

Like a directorate or department, the business unit is part of the administration of the municipality and does not have a separate legal personality, but it is distinguished in that it functions at an arm's length from the municipality's departmental structures although complementary thereto and subject to the planning and policy directives of the Municipality.

Ideally a business unit would undertake all core functions to give effect to its business purpose. All income and expenditure would be ring-fenced. Transactions with other directorates/departments would be undertaken on an arm's length basis. A business unit may or may not but ideally should have its' own internal support functions. If these were "purchased" from other directorates or 'shared' within the broader municipal context, it would typically be in terms of a service level agreement (SLA) to give effect to the business principles or specifically determined finances, functions and outputs.

The benefit of a business unit is that service delivery can be managed and accounted for separately, i.e. the costs of providing the service are known and, the level of cross-subsidisation to, or from the Municipality is known. It has the benefit of creating a service organisation that provides a total, one point service to its contractors and customers and is focused on delivery of a specific municipal service. This leads to a unit that is able to adapt and respond quicker to the changing needs and challenges of service delivery and that will also have a greater incentive to do so, as a result of the greater accountability for the core business function that will vest in such a unit.



Service Delivery Options Analysis Report

The benefits of a business unit are more relevant where a specific function requires direct access to senior management structures to expedite decision-making, and where there is an argument for ring-fencing revenue and expenditure, and for having core and focused skills and expertise. The business unit approach creates a completely customer focused services provider whose performance measurement is the optimum utilisation of available funding to provide the highest level of service possible to the communities of the area within the framework agreed between the Municipal Council and the senior business unit management. Ideally then, such a business unit should also have its own customer/call centre.

Alternative 3 refers to "another component of the municipal administration". It would appear that the term is used to reserve the possibility of having any organisational form, which is still internal, and which is neither a department nor a business unit. Any such other component of the Municipality's administration will operate in a similar function as the options stated above or a hybrid thereof.

Feasibility and Suitability of Internal Mechanisms

The MSA provides certain criteria in terms of which the implications of an internal mechanism in respect of services must be assessed. The primary consideration is whether the Municipality can commit and has budgeted for adequate human and financial resources to implement and sustainably manage and operate the service components and facilities forming part of the project and in accordance with the MSA. This includes formulating and implementing the prescribed policies, e.g. performance management, tariffs, credit management, etc. and, of necessity, that this must be done within the timeframe applicable to the project and as dictated by the needs to be addressed.

Irrespective of which of these mechanisms or organisational structures is selected, if an internal option is chosen by a Municipality, the project concerned is done through the traditional public sector procurement, whereby the municipality directly procures and finances the design and build as well as operate and maintain the required Waste Management facilities and is obliged to have the right capacity and expertise on-board. This option is referred to as the Public Sector Comparator (PSC) option.



Organisational Option	Advantages	Disadvantages	Risk Transfer	Possible Delivery Option for MBT
Department or Administrative Unit	For If can restructure then in-house capacity strengthened	 Lack of capacity Financially dependent on Municipality and no fundraising ability 	> No risk transfer	No – the municipality does not have the funding, the creditworthiness to obtain funding, HR capacity, technical or operational capacity or skills
Business Unit	 Ring-fenced with cost centres One-point service with required expertise and capacity on-board (or contracted from Municipality if such exists) Can align the income and expenditure nature of the service Can allow for a more devolved decision-making process Above allows for accountability and more effective performance management 	 Could lead to a duplication of certain functions and the reduction of responsibilities of other departments Limited capacity if not specifically empowered with correct skills Financially dependent on Municipality and no fundraising ability 	> No risk transfer	Mo – the municipality does not have the funding, the creditworthiness to obtain funding, HR capacity, technical or operational capacity or skills NOTE: A business unit will assist with the implementation of the MBT in a successful manner

Table 1 Comparison of Internal Service Delivery Mechanism (Organisational Structuring) Options

The above brief discussion and comparative analysis indicate the possible advantages of having an internal ring-fenced business unit for solid waste management vis-à-vis other organisational structures.

A feasibility study done for solid waste in 2008 thus prior to the KfW Entwicklungsbankfunded Feasibility Studies also emphasized the advantages of a ring-fenced business unit for solid waste management.

In conclusion, the MBT project is not possible through an internal option.

2.1.2 External Options

External mechanisms allowed for in the MSA consist of service delivery agreements with any of the following:

- a municipal entity including a private company, service utility or multi-jurisdictional service utility;
- another municipality, i.e. a public-public partnership through non-competitive bidding and a service delivery agreement;
- a national or provincial organ of state, i.e. a public-public partnership through noncompetitive bidding and a service delivery agreement;
- a private institution, entity or person with relevant skills and experience, i.e. a
 public-private partnership through a competitive bidding process and a service
 delivery agreement or whichever legal contractual arrangement is necessary.

These external service delivery options are outlined in the following diagram.

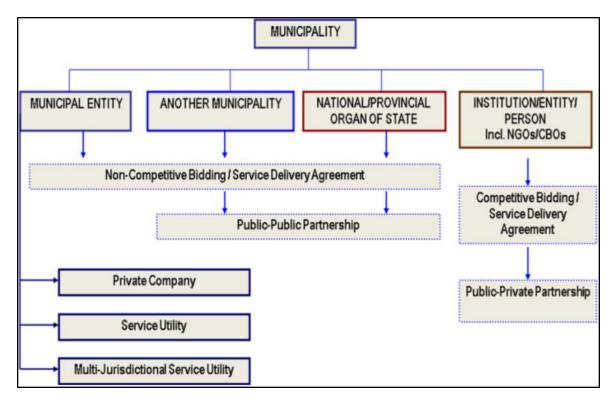


Figure 1 External Service Delivery Options

The main legislative prescriptions and differences between these external service delivery options are dealt with in the following diagram.

	CHARACTE	ERISTICS OF	THE SERVICE DELIV	ERY OPTIONS		
	M	JNICIPAL ENTITY		NATIONAL / PROVINCIAL	OTHER INSTITUTION	
	PRIVATE COMPANY	SERVICE UTILITY	MULTI-JURISDICTIONAL SERVICE UTILITY	ORGAN OF STATE	ENTITY/PERSON	
PARTIES	Single municipality – full ownership + interests Municipality share of ship with other municipality, municipalities or National / Provincial organ of state Municipality/municipalities + Investor BUT	Single municipality	Two or more municipalities	Municipality and organ of state, e.g. ito. water it could be a Water Board in a public- public partnership	Municipality and private partner	
CONTROL	Effective control in Municipality or municipalities or both not in investor Effective Control = May appoint / remove majority of Bloar of of Directors + Control majority of voting rights at general meeting	Sole control of establishing municipality	Shared control of municipalities	Municipality exercises control through SDA, e.g. performance as well as applicable by- laws, policies Municipality exercises control the contract which must be in compliance with and cover elegislation - naflon elegisla		
LEGAL STATUS	Juristic person Must be established ito, and complywith Companies Act BUT not a 521 Company or a trust or any other corporate body	Juristic person Bylawfor establishment and governance Not a S21 or a trust	Jui stic person /Not a 521 or a trust Legal agreement for establishment, governance, regulating shared ownership, responsibilities, duties, obligations, etc.	Each partner is a juristic person – no new juristic body	Each patrier is a juristic person – no newjuit stic body, unless private partner establishes such with community	
POWERS & FUNCTIONS	Only for powers and functions applicable to parent municipalityftes and specifical ythose for which this company is established	Only for powers and functions applicable to parent municipality and solely for purpose which utility is established	Only for powers and functions applicable to parent municipalities and for specific purpose for which utility is established Must indicate area of service delivery	Only for powers and functions applicable to municipality and solely for purpose which partnership is established. Organ of state must have capacity and expertise ito. specific function and be in area	Only for powers and functions applicable to municipality and solely for purpose which partnership is established. Org an of state must have capacity and expertise ito. specific function	
MANAGE- MENT & MUNICIPAL REPRESEN- TIVITY	Board of Directors No councillor or official on Board of Directors Board appointed by Municipal Councills from a list – w Councillor or official or both as representatives of muni Non-participating observers at meetings of Board		tors (3-15)	SDA regulates all matters Functional management vests in partner No municipal representatives on partner's board Could perhaps accommodate observer status	Contract regulates all matters No municipal representatives on partner's board	
RATIONALE / REASONS	Must be to perform specific power / function Demonstrate need business principles to achieve strate Demonstrate will benefit the local community	egic objectives (if more than o	ne municipality – all must comply with these)	In compliance with and as a result of S78 process	In compliance with and as a result of \$78 process	
CRITERIA	Value for money Needs of the poor catered for Affordability Risk transfer Impact on staff, assets, liabilities, Impact on IDP Impact on revenue, expenditure, borrowing, budget, debts, tariffs			As laid down for S78 process	As laid down for S78 process	
RESOURCES/ CAPACITY	ES/ Hybrid of municipal (state) and private resources Own municipal Shares and capacity Expert		Shared municipal resources and capacity Expertise of Board of Directors	Mostly of public partner since tack of municipal resources and capacity led to the partnership Government funding	Mostly of private partner since lack of municipal resources and capacity led to the partnership Private funding and channelling of government grants applicable to function	

Figure 2 Characteristics of Service Delivery Options

2.1.2.1 Broad Evaluation of the External Options

Output Specification:

The possible external options must be evaluated against the background of the main output specification of the project as addressed in previous reports, this being the financing, design, construction, operation and maintenance of the proposed new MBT facility for the conversion of solid waste to energy through the private sector.

National or Provincial Organ of State:

Within the above context it is possible to rule out that a national or provincial organ of state acting on behalf of the RLM takes on the financing, design, construction, operation and maintenance of the proposed new MBT facility for the conversion of solid waste to energy given that no such organ of state exists that has the financial, human resources or technical capacity to do this project nor does it fall within the ambit of the concurrent functions of any such organs to embark on this project.

Multi-jurisdictional Service Utility:

A multi-jurisdictional service utility would, in the context of RLM, apply if the RLM wished to establish an entity responsible for the solid waste treatment and disposal (even perhaps including the collection of solid waste) of all the municipalities in the district and such an entity also taking on the responsibility for financing, design, construction, operation and maintenance of the proposed new MBT facility for the conversion of solid waste to energy with the municipalities equally sharing in the mentioned responsibilities as detailed in a SDA. The option would always be available to the RLM but is not a possible external option if such an option has as its specific goal the enablement of the new MBT facility since none of the other smaller municipalities in the Bojanala District have the financial, human resources or technical capacity to execute this project.

Should the Waterfall Landfill become a regional site receiving the solid waste of the other municipalities within the Bojanala District it would be feasible for the RLM to enter into separate agreements with these municipalities to govern such arrangements. The latter is highly advisable for the MBT as well as the MRF project (as referred to) enabling these facilities to include the feedstock received from the adjacent municipalities into its waste stream calculations in a structured and calculated manner inter alia to determine the capacity of the facilities and to do more informed financial modelling of avoided costs and the revenue to be derived from RDF.



Service Utility:

A service utility owned by a single municipality, in this case the RLM, is a suitable (albeit not necessarily a feasible) external option should the RLM wish to establish an entity to take over its entire solid waste function including all assets, liabilities and staff as was done by the City of Johannesburg in respect of Pikitup. Such a Municipal Owned Entity ("MOE") would be 100% owned by the RLM, established in terms of a by-law, financially dependent on its parent municipality but with a board of director not including any councillors or officials. It may not enter into any external agreements without its parent municipality being a party thereto.

The Needs Analysis Report has in confirmation of the previously done and mentioned feasibility studies found that only relying on itself the RLM does not have the funds or the financial creditworthiness to obtain funds for the financing of the MBT project.

Without external financial, human resources, technical and operational capacity obtainable from the private sector, the MOE will not be able to take on the financing, design, construction, operation and maintenance of the proposed new MBT facility for the conversion of solid waste to energy.

Therefore get such capacity and expertise, the MOE would <u>in any event have to enter into an external contractual arrangement with the private sector, i.e. a PPP</u> with its parent company being the party to initiate, procure and enter into the PPP and the MOE only being a party thereto. This completely refutes any motivation for the establishment of a MOE for the purposes of the MBT.

In essence, without the MOE offering any alternative, added or enhanced capability or capacity other than the current organisational structure, it possible advantages could be equal to a properly structured and managed ring-fenced business unit, with the latter then preferable given the MOE's hugely inflated operational costs that could have a definitive detrimental impact on the cost-effectiveness of the service – refer to discussion below.

Factors to be taken in account i.r.o. a Service Utility (MOE) as opposed to another internal organisational structure for Solid Waste Management:

The ME structure would need to take over all assets, liabilities and staff currently part of the SWM Unit and have the same divisions as the current unit with a stronger contract management component in order to manage and monitor the current outsourced contracts as well as the MBT contract as well as a capacitated safety, health and environment component;

- In accordance with both the local government and the Companies Act, legal requirements and due to the extensive financial management and reporting, the structure will include an Internal Audit Unit consisting of at least a professional person and a middle management assistant and the financial management directorate will have a separate Supply Chain Management Unit and a Budget Control Unit again with relatively senior staff;
- ➤ There would need to be a Corporate Services Unit including a fully-fledged Human Resources function with a HR Manager and personnel assistants as well as a legal section;
- Also included will be a performance management unit and a company secretary – both senior positions with the necessary junior staff;
- There would be a marketing and communications unit would be more expanded with a public relations officer best positioned in the CEO's office;
- The CEO's span of control will be extensive due to both the performance management unit and the internal audit unit having to report directly to the CEO;
- ➤ Of considerable expense would be the appointment of a Board of Directors with at least 6 to 9 directors one executive director and the others with non-executive status.

Having ruled out all other options, the possible service delivery options to be further investigated in this section are:

- a municipal entity in the form of a private company with the legal status allowed for in the MSA; and
- > a public private partnership (a "PPP").

2.1.2.2 Possible External Options

Irrespective of which external option is selected, the following criteria must be met:

- The project should be affordable to the municipality;
- There must be risk transfer from the municipality to the private party;



> The project should provide value for money.

JOINT VENTURE (JV):

A Municipality is legally entitled to:

- hold all the shares in a private company or
- > share ownership with other municipalities or organs of state or
- share ownership with a private sector company

provided the Municipality has on its own or with other municipalities/organs of state the effective control of the private company delivering the waste service or activity.

It is the sharing of ownership with a private company in which the Municipality has (as legally required) the majority ownership that is further investigated as a **JV** option. This company will then take on the responsibility for the financing, design, construction, operation and maintenance of the proposed new MBT facility.

Legal requirements would further include the following:

- The JV must be a juristic person established in terms of and compliant to the Companies Act but not a section 21 company or a trust or any other corporate body;
- ➤ The powers and functions could only include those applicable to the Municipality and specifically with respect to solid waste management;
- > No councillor or official will be allowed to serve on the board of directors;
- The board of directors will be appointed by the Municipal Council from a widely solicited list

Important factors applicable to a JV would include:

- Each party would need to contribute its proportionate share to the funding and other commercial considerations of the project, therefore financial constraints of the Municipality could delay the project implementation, and once implemented, the effectiveness of the project;
- > The private sector will only accept risk equal to its shareholding;

- Private investors are profit-orientated;
- It would be a challenge to create cohesion among multi-shareholders with fundamentally different focuses.

The following diagram illustrates the characteristics of the JV structure:

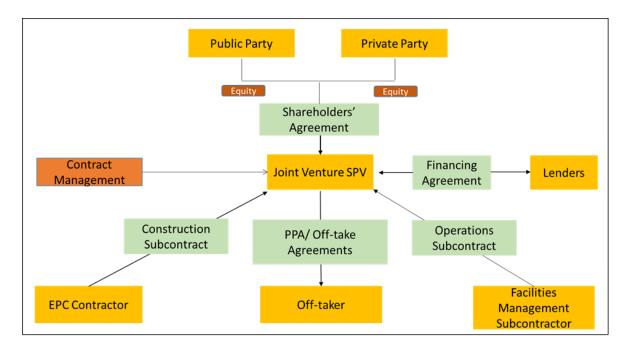


Figure 3 Characteristics of the JV structure

The characteristics illustrated in the above diagram indicate that:

- ➤ As owner and developer, the JV company (municipal entity) will hire the resources required to develop the project;
- Equity funding will need to be provided by both parties pro-rata to shareholding;
- > The JV may seek debt funding for the project from various funding sources as required;
- > The JV will contract a company (EPC contractor) to construct the Waste Management System facility;
- ➤ The JV may either carry out O&M in-house or contract a company to carry out O&M on the plant and ensure optimal production of energy;

- ➤ The JV will need to sign RDF Purchase Agreement ("RDF-PA") with credible off-takers; and
- > The JV owns the infrastructure.

The following are advantages of a JV structure:

- The MBT project is fully ring-fenced and with a successful MRF up to 80% of waste can be diverted from landfill;
- The Municipality will participate in the economic returns generated by the project;
- > The project will attract investment from the private sector;
- Financing risks are shared with the private partner;
- Operating risks are shared with the private party;
- ➤ The Municipality will be able to benefit from the private party's experience and expertise; and
- > The Municipality will be able to facilitate the development and rollout and participation of BBBEE initiatives.

The following are disadvantages of a JV structure:

- ➤ The Municipality will need to make a significant investment for their equivalent equity portion of the JV; (note that grant funding that the DLM obtains for solid waste could be used to offset its capital contribution to the ring-fenced infrastructure)
- Risk transfer to the private sector will not be optimal;
- The contracts will be complex and the tendering processes could take very long;
- ➤ A change management system together with contract management and performance monitoring systems are required;
- ➤ There could be increased costs since the private party prices for all risks that it bears:

- There is potential for lack of efficiency in decision-making due to the interface between the JV and the municipality, and resulting potential conflicts of interest between service delivery mandates and profit maximisation;
- > There is a risk of the private party and the municipality not being able to work together in the JV due to conflicting business ideas etc.; and
- ➤ It may prove difficult to find an acceptable third party to purchase equity upon exit of one party.

PUBLIC-PRIVATE PARTNERSHIP (PPP):

Using a PPP as an external option, the municipality will procure the MBT facility through a private party, whereby the private sector party is awarded a contract to design, finance, build, operate and maintain the MBT facility for a period of time suitable to render a return on investment (ROI), after which the infrastructure is handed back to the municipality. The Municipality will provide the land for the site to enable the project to be undertaken.

Depending on the circumstances at the time of hand back, the municipality may bring the project in-house to the extent that it has sufficient capacity and skill to manage the project going forward, or alternatively it may consider further outsourced contracts through new procurement processes.

PPP Qualifying Criteria:

There is often confusion in respect of when an external arrangement would constitute a PPP and when not. In this regard it is useful to refer to the definition of a PPP as extracted from the PPP Regulations – refer to Section 1. The MBT project would be a PPP because it answers to the criteria of the PPP definition, namely:

- the external service provider would both perform a municipal services and/or function on behalf of the Municipality and in the process acquire the management and use of municipal property, for its own commercial purposes;
- > the service provider would assume substantial financial, technical and operational risks; and
- the service provider would receive a benefit from performing the municipal service and/or function and from utilizing the municipal property.

The following diagram illustrates the characteristics of a PPP structure:

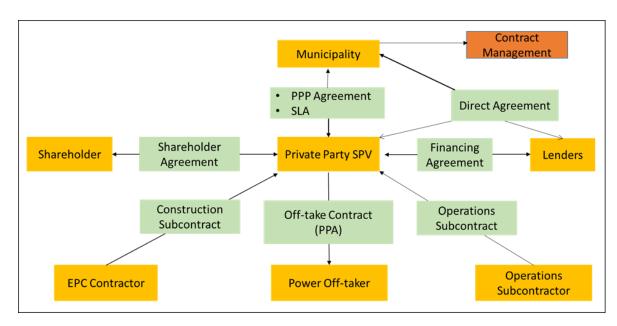


Figure 4 Characteristics of a PPP structure

Based on this diagram some of the factors applicable to a PPP would include:

- A SPV is set up for the MBT project, which is owned by the private sector party;
- > The SPV will typically fund the MBT project through a combination of debt and equity;
- ➤ The SPV will enter into financing agreements with lenders to fund the MBT project;
- > The SPV will be responsible for the construction of the MBT facility;
- Production of RDF to be used as a secondary fuel in cement plant or similar facilities;
- The SPV will be responsible for the operations and maintenance on the MBT facility and ensure optimal production of energy;
- ➤ The SPV will also enter into RDF purchase agreements with credible offtakers; and

> The SPV will hand the MBT facility back to the municipality when the contract period expires.

Advantages

The following are advantages of a PPP structure:

- The MBT project is fully ring-fenced and with a successful MRF up to 80% of waste can be diverted from landfill;
- > The Municipality contracts with one entity;
- Attracts investment from the private sector;
- > Financing risks lie with the private partner;
- Operating risks rest with the private party;
- Technology risks rest with the private party;
- Maintenance risks rests with the private party;
- > Higher efficiencies;
- Increased flexibility for procurement;
- Clear allocation of risk to the party best able to handle it;
- Ability to benefit from the private party's experience and expertise;
- The most appropriate technology implemented;
- The private party has the know-how and the expertise as well as the human resource capacity;
- Time reduction in project implementation;
- Asset is transferred to and owned by the municipality at the end of the contract period; and
- > Facilitates the development, rollout and participation of BBBEE initiatives.

Disadvantages / requirements

The following are disadvantages or requirements of a PPP structure:

- Perceived lack of control by the municipalities;
- Contracts are complex and the tendering process can take very long and the conditions and terms of a PPP contract have to be clearly defined since changes to the requirements can lead to a re-negotiation of the contract. Albeit, it is not always possible to tightly package the project and often, especially where complex technical solutions are sought, it could be beneficial to leave the tender open-ended for those issues where innovative thinking and solutions would be a determining factor of tender award. However, to review contract stipulations on a three year basis is a legal requirement.
- ➤ The Municipality must have a good contract management and performance monitoring system to ensure its own legislative requirements are met and a sustainable partnership with the private sector developed.
- > Foreign exchange requirements, if such are applicable.

2.1.2.3 Evaluation of Possible External Options

In the following discussion the possible external option as selected are evaluated in terms of the following criteria:

- Governance and management
- Financial including impact, funding and affordability
- BBBEE and Socio-Economic impacts
- Legal considerations
- > Human Resources
- Capability and appetite

Criteria		Option 1: ME (JV)	Option 2: PPP	
Governance	Legal Status	 Separate juristic entity establish ito Companies Act and MFMA 	 Juristic entity established ito Companies Act 	

		compliant	
		Compilant	
	Ownership	 Co-owned with private party with shareholders agreement 	> Fully owned by private party
	Control	 Relationship with shareholders (Municipality & private party) regulated via a service delivery agreement 	 Relationship with Municipality regulated via a PPP contract
Management	Board of Directors	 Municipal appointed BOD, with no councillors or officials on the BOD only as non-participating observers Could include community representative/s as non-executive directors. Municipality may recall, remove a director Private party will wish to make sure the BOD is effective and competent Fiduciary duties ito Companies Act and MFMA 	 BOD appointed by and accountable to private party. The BOD could include community representatives as non-executive directors Fiduciary duties ito Companies Act
Financial Analysis & Impact	Governance	➤ Subject to MFMA iro bank accounts, budget, asset and liability management, revenue and expenditure control — contract to regulate and reconcile MFMA with Companies Act responsibilities (All revenue should be credited to the ME and costs debited to the ME. Money collected by the ME in the ordinary course of operations should not need to be paid into the revenue fund, i.e. revenue security — in some municipalities this does not apply to MEs).	 Subject to Companies Act and related financial legislation Financial reporting could take account of MFMA stipulations
	Management	> Subject to MFMA & Companies	> Subject to Companies Act

T		
	Act	and accepted corporate governance accounting practices
SCM (procurement)	> Subject to MFMA	 Subject to accepted corporate governance procurement procedures
Funding	 Municipality must contribute major share of funding commensurate with shareholding to finance project development and capital cost Since the Municipality can only budget for its equity contribution in the next MTEF cycle, project commencement may be delayed Third party debt funding to be sought from sources open to ME Allocation of Council counter funding throughout project to ME will be subject to Council approval 	 Project development fully funded by private company thus taking full financial risk - typical 70/30 debt (third party) to equity (sponsor provided) ratio Once funds in place, processes in place for possible fast tracking iro capex needs More aggressive funding structures may be required to facilitate BEE participation
Financial Impact	 Budget for upfront equity capital contribution or borrow it, having to service the interest Combined credit rating of both parties important but creditworthiness of municipality will be a main risk criteria for any investors / parties Could share in surpluses via dividends as per shareholder agreement 	 Upfront equity capital contribution is anticipated to be a requirement - transferring the responsibility for raising these funds to the private party Municipality need only to budget for unitary payments which are regular and consistent amounts and easy to accommodate within the budget structure
Revenue (incl. payment mechanism)	 From Municipality - rate per ton diverted from the landfill provides incentivised 	 From Municipality - rate per ton diverted from the landfill provides incentivised

	T	
		mechanism (avoided cost for mechanism (avoided cost
		municipality) for municipality)
		➤ From RDF off-takers ito Nersa ➤ From RDF off-takers ito
		determined tariff Nersa determined tariff
		determined tariii
		 Responsible for share of Responsible for operation
		operation and maintenance and maintenance costs
	Expenditure	costs either through in-house or either through in-house or
		contracted resources contracted resources
		 Ring-fenced for MBT and Ring-fenced for MBT and
		related RLM solid waste related RLM solid waste
		activities, no unrelated or activities
		commercial activities allowed
		> Streamlined structure with
		> Structure to comply with MFMA direct accountability
		and traditional municipal
		structuring and the perceived
	Structure	level of recourse of lenders to
		the JV partners could have a
		negative impact on the cost of
		debt funding.
		Complexity of structure might
		render it more expensive than
		other option and hence less affordable.
		anordable.
		> Registration of project with > Registration of project with
		National Treasury PPP Unit National Treasury PPP Unit
		➤ Ito s84(2) of MFMA Treasury
		Views and Recommendations Recommendations (TVR) I,
		(TVR) from PPP Unit and from PPP Unit for Feasibility
		MFMA Unit iro ME (JV) Study as per s120(6) of
	Ct-tut	Feasibility Study MFMA
Legal	Statutory	Provincial Traceum 9 COCTA
	Requirements	 Provincial Treasury & COGTA Provincial Treasury & COGTA and other relevant
		s84(2) recommendations ito s120(6)
		Council approval of Feasibility
		Study ito s84(2) Council approval of s120(6)
		Feasibility Study
		Council approval of
	l	





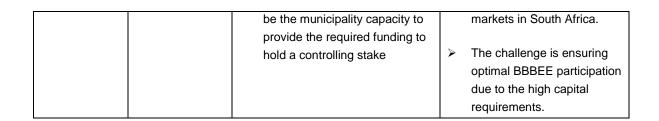
	shareholders agreement TVR from PPP Unit and MFMA Unit ito s33 of the MFMA iro SDA/ contract Provincial Treasury & COGTA and other relevant departments' views and recommendations ito s33 Council approval of s33 SDA/Contract The Executive Mayor, as the accounting officer in terms of the MFMA, authorized to sign agreements/contract.	 TVR IIA and IIB from PPP Unit ito PPP Regulations iro tender process to get private partner TVR111 from PPP Unit and MFMA Unit ito s33 of the MFMA iro PPP contract Provincial Treasury & COGTA and other relevant departments' views and recommendations ito s33 Council approval ito s33 of PPP Contract The Executive Mayor, as the accounting officer in terms of the MFMA, authorized to sign the PPP Agreement The Minister of Energy acting with the concurrence of the Minister of Finance will need to sign off on any guarantees or indemnities (typically found in
Contractual	 Well drafted shareholders agreement necessary to regulate functioning and control of the JV to ensure: respective obligations and responsibilities are spelled out; disputes can be amicably resolved; recourse of parties if failure to perform of any one of them; etc. Service delivery agreement (SDA) between shareholders 	PPP Agreements).?? A comprehensive PPP Agreement will need to be concluded with the Private Party that details, inter alia: Service level specifications signed off by the relevant municipality; Consequences of failure to meet service levels, and any incentives for exceeding service levels; The payment mechanism and how and when

		and delivery vehicle detailing the service level specifications, standards, incentives, penalties, payment mechanism, risk transfer, etc. similar to those in the PPP agreement.	penalties will be applied; and Risk transfer to the private party, taking into consideration key value for money drivers such as skills availability, operational efficiency, funding capacity, experience developing a MBT, etc.
	Consultation - Community	 Needs to be consulted / asked for comments in accordance with s21 of the MSA. Should receive all reports to comment on ito s84(2) of the MFMA (note no municipal services involved) Receive SDA to comment on ito s33 of the MFMA 	 Needs to be consulted / asked for comments in accordance with s21 of the MSA. Should receive all reports to comment on ito s120(6) of MFMA Receive PPP contract to comment on ito s33 of the MFMA
	Consultation - Organised Labour	 Should receive reports to comment on ito s84(2) of the MFMA (note no municipal services involved) Receive SDA to comment on ito s33 of the MFMA 	 Needs to be consulted if any current staff affected – not any known Invited as IAP to comment on report ito s120(6) of MFMA Invited as IAP to comment on PPP Contract ito s33 of the MFMA
BEE & Socio- economic Impact		The Municipality controls the entity and should therefore be in a position to drive BBBEE outcomes in the same way it ordinarily does.	The municipality sets its BBBEE targets and the private party commits to the BEE obligations. A competitive bidding process typically improves the quantum and quality of BBBEE initiatives for



				projects;
			>	The BBBEE obligations in the PPP agreement should provide for monitoring and evaluating over the period of the concession.
			>	BEE and socio-economic benefits of the project can be optimized through an external partner option. The nature and scale of the project facilitates the enhancement of BEE and the delivery of significant socio-economic benefits to the local community.
			A	The project will create a significant number of work opportunities during the initial construction stage.
			>	Training and mentoring in a range of construction industry related skills areas can be effectively implemented.
			>	During the operational lifecycle of the project long term BEE opportunities can be created in the technical, administrative and managerial functional areas which are required to operate and maintain the project.
Human	Recruitment,	 Joint recruitment responsibility subject to Municipal policies 	>	Legally compliant and quick recruitment practices
Resources	Skills & Training	(Current municipal recruitment policies has caused an overstaffing	>	Better able to attract and retain the right skills
		and under-skilling of the solid waste management unit)	>	Known for effective,

		T	continuous training
		 Inadequate contract management skills in municipality has a detrimental impact 	continuous training Inadequate contract management skills in municipality has a detrimental impact on partnership
	Remuneration	 Subject to or influenced by Municipal policy changes and developments, guidelines, etc. 	 Legally compliant policies and wage structures, consistent implementation, industry related scales
		 No existing staff will be affected due to no requisite skills for the MBT currently existing within RLM 	No existing staff will be affected due to no requisite skills for the MBT currently existing within RLM
	Staff	If however, there are staff to be transferred to the ME, the application of s197 of the LRA will apply and could delay the project	
	Labour Relations	> Preferred option	 Contentious structure but given that it does not affect a current municipal service, labour resistance should not play a role
Market		 ME/JV will have no trading history – reliance on trading history of JV partners, negative impact on risk costing The issue of ownership control of the municipal entity is the 	 Selection of preferred partner with good reputation and trading history – important for contractors, positive impact on risk costing
Capability & Appetite		main potential drawback of the JV Option. Finding a private party willing to enter into a JV with a	There are numerous role players within the private sector who have the capacity to develop, operate and maintain such a project.
		municipality and not have control of the vehicle would be the main challenge. The other challenge is likely to	 Funding models for the PPP model are available and there is sufficient funding capacity in the financial



PRELIMINARY RISK ANALYSIS:

In simplified terms, risk relates to uncertain outcomes that would have an impact on 1) the provision of services, and/or 2) the financial viability of the project. The first goal in respect of risk is to minimise the overall risk of a project irrespective of who would take ownership of it. The optimum allocation of risks imply that risks be allocated to the party best placed to manage and minimise the relevant risk/s over the project timespan.

The RLM will not establish a MBT Facility on its own. It simply does not have the financial, technical or operational ability to do so. However, the private party has the means to do so and the appetite and capability to take on and manage the concomitant risks (including financing, design, construction, operation and maintenance as well as refurbishment to the extent determined by a PPP contract) provided the payment mechanism and the contract term incentivise taking on these risks and enable good risk management.

The following is a summarised risk analysis of the two options given the information known and with the keys being:

Red – high risk (and less desirable)

Orange – moderate risk (can be managed through adequate agreements)

Green – low risk (and most desirable)

Primary Risks	Primary Risks				
Governance	Shareholding instability	h	1		
	Composition of Board of Directors				
	h	T			
	Political changes		m		
	Effective decision-making	m	1		



Planning &	Time delays iro implementation of project, e.g. due to	h	1
Timeline	financial planning, slow decision-making		
Financial	Financial instability	h	1
	Access to funding	h	T
	Sponsor risks	h	1
	Credit risks, i.e. keeping capital costs low	m	1
	Financially viable project	h	m
	Legal compliance costs	h	m
	Cost control and financial discipline	m	1
	Revenue risk	h	m
	Cost of insurance	m	1
	Transfer of financial risk	h	1
Institutional	Cost-effective organisational structure	h	1
	Recruitment of suitably skilled staff	h	1
	BBBEE and optimal socio-economic impact	h	1
	Time delays in implementation of project	h	1
	Labour instability	h	1
Legal	Contractual risk	h	1
	Statutory compliance	m	m
Project Cycle	Design risk	m	1
	Construction risk	m	1
	Operation risk	h	1
	Maintenance risk	h	1
	Transfer of technical and operational risk	m	1
Project /	Experienced, qualified project / plant management	h	1
Plant Management			
	Contract management – financial, technical, operational	h	T
	Performance risk – failure to meet standards	h	1
	SHE management	m	1

Options Analysis Report

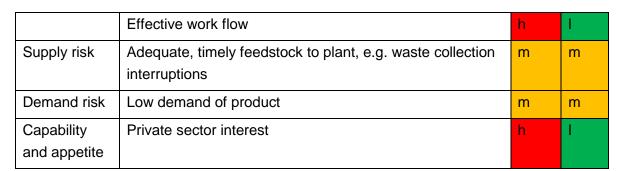


Table 2 Preliminary risk assessment

SUMMARY OF EVALUATION:

The evaluation pointed out that while there is an element of risk transfer through the ME/JV option it is not optimal and significantly risk is associated with the fact that the Municipality must be the majority shareholder and effectively in control of the JV.

On the other hand, significant risk transfer to the benefit of the Municipality will occur through the PPP option and the option is further supported by the following factors:

- ➤ It will mobilise private funding for the delivery of a municipal activity that would have a significant impact on the lifespan of an important asset, i.e. the landfill;
- ➤ It will assist to accomplish strategic national, provincial and municipal solid waste targets and contribute to the development of solid waste cost centres and the ring-fencing of the function;
- ➤ It requires no upfront financial outlay from the municipality and the landfill avoided costs will support the financial viability of the project while having a potentially beneficial impact on solid waste tariffs;
- ➤ The PPP model is the most optimal vehicle for delivery on the Government's BBBEE objectives;
- This model is likely to be quicker to implement due to the fact that the private sector is assumed to already have the human resource capacity required to deliver on the projects;
- ➤ The SLAs to be signed with the PPP agreements will ensure the optimal operation and maintenance of the plant.



Given the above analysis and specifically the significant risk transfer a PPP option is recommended for the delivery of the MBT project.