

Business Plan

Recycling Project

Prepared by

Sustainable Environmental Technologies

For

Makana Municipality

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A. Introduction

This business plan has been drawn up as a basis for starting a process of creating or restructuring a recycling company in the Makana district. This business plan has been drawn up for an operation that would form a public private partnership with the Makana Municipality. It is intended to guide the planning phase of such a business. This document is by no means final and still requires approval by the municipality and any potential investors or funding agencies.

The municipal involvement in this project is at this stage being assumed. The municipality has shown interest in the project via the Director: Community and Social Development Mr. Ramie Xonxa as well as the Local Environmental Action Plan steering committee. This committee has raised the issue that the municipality currently provides no support to recycling businesses in Makana district. Currently the committee has asked consultants to investigate ways in which the municipality can support recycling.

B. Background

Recycling has been undertaken for the past four years in Grahamstown by Grahamstown Recycling. This business has a single owner and employs about 11 people. This business is currently in the process closing down largely due to high costs of maintenance and increasing debt.

The closing of the current recycling company has placed the municipality in a situation where there is a possibility that the burden of recycling will be borne by the municipality. This may be felt via the creation of further stresses on the already overburdened municipal waste collection system. Further more 11 jobs will be lost in a district where jobs are much needed. Another longer term problem is that the existing landfill site will fill a lot faster without recycling and thus the ultimate cost (environmental and fiscal) will be higher.

C. Rationale and description of proposed venture

The proposed venture will involve the establishment of a recyclables recovery and sorting operation at the Grahamstown municipal dump site. This has been the outcome of the investigations and discussion with Mr. Sean Haydock (owner Grahamstown Recycling).

His business spends a large amount of money on transportation and collecting of recyclable material. Mr. Haydock has stated that a sorting operation on the dump would allow the recycling of 75% of the incoming refuse and at lower cost than the current operation. Though this will address the issue of the burden on municipal collection system, this will secure jobs and minimise landfilling.

Potentially a sorting operation on the dump could separate more than just the current recycled materials as cost of handling and separation would be much reduced. The exact dimensions of the unit and specifications cannot be determined until further investigations around feasibility have been made.

D. Objectives

1. To form a recycling company in partnership with Makana municipality.
2. To develop a business centred around sound business practice
3. To ensure that recycling is sustainable in Makana
4. To minimise landfilling
5. To create jobs
6. To investigate options for processing and value adding to recycled products.

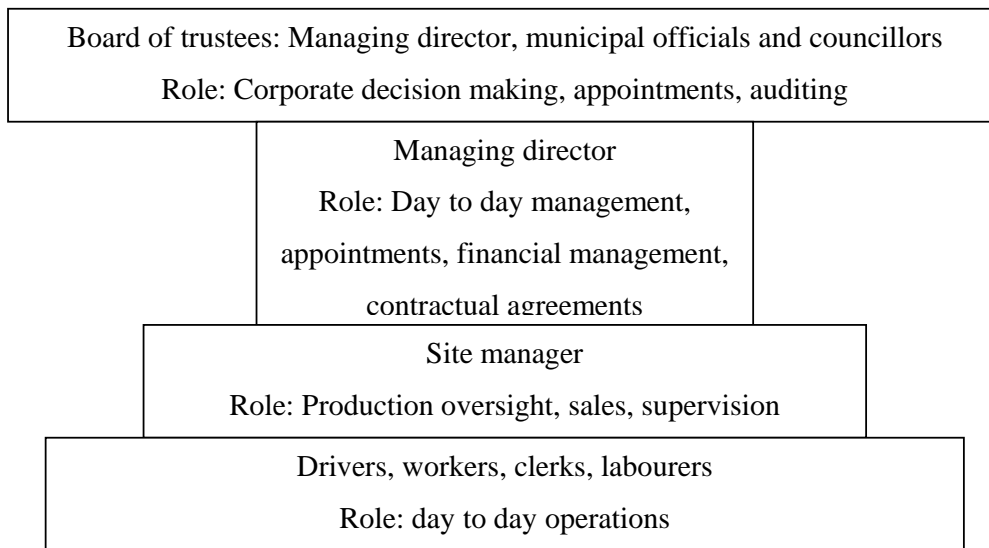
E. Products

Many different products are recycled in South Africa and around the world, some of which are already being recycled in Grahamstown. Not all recycling is, however, financially viable. The list below consists of the materials currently recycled by Grahamstown Recycling as well as other items that could be recycled should this business plan be implemented.

Product	Price	Estimated Annual Income
Paper	R 700 / tonne	300 tonnes
Cardboard	R 360 / tonne	900 tonnes
PET bottles	Unknown	Unknown
Plastic packaging	R 200 / tonne	100 tonnes
Tins	R 17 per thousand tins	Unknown

F. Proposed Ownership and Management Plan

The ownership of the company will not reside purely with the proposed recycling company to be formed, but also with the Makana Municipality. Although only preliminary discussions have been had with councillors, at this stage it is envisaged that their involvement is critical to the project. The company should be run by a board of trustees which will include members of the recycling company as well as municipal officials and councillors. The diagram below shows the proposed management structure:



F.1. Municipal involvement

Municipal involvement is critical to the creation of a successful recycling enterprise in Makana. At this stage the proposed involvement is in no way finalised but could be done in numerous ways:

1. Municipality could own and run the entire business using contractors to undertake a large proportion of the work
2. A recycling company could do the recycling on municipal land (dump site) with assistance from the municipality via the refuse collection trucks.
3. Municipality could have limited supervisory involvement but pay a fee for every tonne or cubic metre of material recycled.

4. Municipality does not get involved at all in recycling but implements plans to secure sustainability of recycling enterprises through source separation initiatives, by-laws, fines and general recycling awareness campaigns.

There may be other options, but at this stage the actual municipal involvement must be negotiated and the council must take a stand on what the involvement will be. This business plan is intended to be starter document for that process to begin.

This business plan and the figures shown below have been based on the assumption that a sorting centre will be created on the Grahamstown landfill site and that the business will be created which will be sustainable only with municipal involvement. This is the safest option at this stage due to the fact that the current recycling company could potentially become sustainable with this framework. For the purposes of this business plan it has been assumed that most of the capital equipment must be purchased and that very little can be carried over from the existing business.

G. Operational plan

The plan created has been developed by interviewing the current owner of Grahamstown recycling and from looking at successful recycling operations countrywide.

Two sorting centres are proposed for recycling general refuse. The first would be started with this funding and the second is proposed to come from natural expansion.

It is proposed that a sorting centre be created at the existing municipal dump site, where the general refuse will be separated into different streams. This site will consist of a dumping platform where the municipal trucks will dump the general refuse. The refuse will be dumped into a bag breaking area where bags will be broken open to allow contents to move onto a conveyor belt, where pickers will remove recyclable items into bins. These bins will then be removed by a forklift and the recyclable products will be taken to different areas where they will be packaged or processed for sale to agents or other buyers such as Mondi, Collect-a-Can, Consul etc.

Two sites are being proposed: the first at the dump, as described above, and the second located in the Grahamstown East area. This second site will not form part of this proposal but

is included here so as to develop understanding of an expansion strategy. This second site will function as a transfer waste and sorting station. Removal of the recycled material from the general refuse will be done here by waste pickers and then as far as possible, only the non-recyclable products will be taken to the dump by the municipality. The rest will be packed for transportation to agents or buyers (Mondi, Sappi etc).

G.1. Infrastructure required for operation

The following infrastructure, machinery or equipment will be required to undertake such an operation:

1. One light delivery vehicle (purchased by vehicle finance)
2. One conveyor belt
3. Two or three balers (two could be rented from agent as happens currently)
4. One forklift
5. One tractor or front end loader
6. One large tractor trailer
7. One shed
8. One office
9. One comprehensive set of tools
10. One computer

G.2. Non-infrastructure requirements

The following list contains various activities or administrative tasks that must be undertaken to get such an operation running.

1. Business training for recycling company management
2. Computer training for one or more employees
3. Extensive consultation with the Makana municipality on the private-public partnership approach.
4. Investigations and site visits of similar recycling and composting operations in other parts of the country.
5. Community involvement in recycling
6. Contacting markets and development of agreements with buyers

G.3. Human resource requirements

The recycling company members could be employees, but other people may have to be brought in as labourers to fulfil certain tasks. The list of possible jobs and the number of employees will be as follows:

Job Title	Number of people
Managing Director	1
Dump site Manager	1
LDV Driver	1
Forklift Driver	1
Tractor Driver	1
Administration Clerks	1
Sorters	10
General labour/cleaners	2
Total human resources	18

H. Financial Plan

H.1. Capital expenses required

The capital expenses have been estimated according to the current recycling operations assets as well as projecting requirements for the sorting operation on the dump site. The assumptions are that the equipment will have to be purchased from scratch, although they may be second hand, and that the balers will not be purchased, but will be hired in a similar fashion to the current recycling operation. It is also assumed that a light delivery vehicle will be purchased through vehicle finance and that this loan will be on a monthly basis. The purchase value of these items has been estimated and may vary, most of the machinery would be sought second hand as the prices of many of these items new would exceed the projects capability for repayment.

Item	Cost
Conveyor belt + associated construction	R 60 000
One forklift	R 60 000
One tractor or front end loader	R 30 000
One tractor trailer	R 10 000

One shed	R 40 000
Office construction	R 25 000
One comprehensive set of tools	R 5 000
One computer	R 10 000
Total	R 240 000

H.2. Monthly income

The expected monthly income has been calculated assuming that the use of the dump site as a sorting centre is possible and that this will increase sales by 50%. It is also assumed that previously non-recycled materials such as tins, will be feasible to recycle and that this will contribute to income without incurring excessive cost. It is also assumed that the municipality will contribute an amount of money, possibly for the first 5 years towards the business sustainability of approximately R5 000 per month or R 60 000/ annum.

Item	Amount
Paper and card board sales	R 45 000
Tin sales	R 5 000
Plastic sales	R 10 000
Recycling fee from municipality	R 5 000
Total monthly income	R 65 000

H.3. Monthly running costs

Item	Cost
Managing director/ general manager	R 10 000
1 Site manager	R 4 000
3 Drivers	R 6 000
Admin. Clerk/ Bookkeeper	R 5 000
12 General labour	R 12 000
Fuel	R 2 000
Maintenance for all vehicles	R 5 000
Insurance	R 1 000
Baling wire	R 1 000
Security	R 600

Office admin, bank charges etc.	R 2 000
Rent and utilities	R 2 000
Vehicle finance	R 2 000 (for a loan of about R80 000)
Bond repayments	R 13 000 (calculated at 14%)
Total monthly expenses	R 63 600

I. Funding

The funding for the project would be could be sought from the Department of Trade and Industry or ECDC or other donors related to job creation and development, on condition that the ultimate owners or shareholders of the enterprise are previously disadvantaged persons. The funding would be repaid monthly from production, failure to do this would jeopardise the sustainability of the project.

The municipality could potentially source funding for the municipal involvement for example preparations, training, public participation, workshops and where necessary feasibility studies.

The municipality should however regard this venture as an external service provider and as such the recycling company should be paid a fee for the services. Ultimately this fee should be reduced as time passes and once sustainability of the recycling business is established.

The funding that should be sought for this venture could be done in a number of ways:

1. The potential beneficiaries could bring R 80 to R 100 000 to the business and thus approximately R 340 000 would be needed.
2. The potential beneficiaries would bring nothing initially but ultimately as the project proceeds they would be required to bring R 100 000 or else face the possibility that they do not get equity

The second option is preferred due the fact that the beneficiaries could then come from impoverished backgrounds and will not be given equity but will be required to raise finance of about R 100 000 amongst all beneficiaries before the end of the project.